COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY

HEARINGS

BEFORE THE

SUBCOMMITTEE ON MONOPOLY

OF THE

SELECT COMMITTEE ON SMALL BUSINESS

UNITED STATES SENATE

NINETY-SECOND CONGRESS

SECOND SESSION

ON

PRESENT STATUS OF COMPETITION IN THE PHARMACEUTICAL INDUSTRY

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COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY

(Present Status of Competition in the Pharmaceutical Industry)

TUESDAY, MAY 9, 1972

U.S. SENATE,
SUBCOMMITTEE ON MONOPOLY OF THE
SELECT COMMITTEE ON SMALL BUSINESS,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:05 a.m., in room 318, Old Senate Office Building, Senator Gaylord Nelson (chairman of the subcommittee) presiding.

Present: Senator Nelson.

Also present: Benjamin Gordon, staff economist; and Elaine C. Dye, clerical assistant.

Senator NELSON. The Subcommittee on Monopoly of the Select Committee on Small Business is today resuming its hearings on the efficiency, economy, and rationality of the Federal agencies and departments in the procurement and use of drugs as well as reimbursement under various programs of the Government.

Our witness today is Dr. Charles C. Edwards, Commissioner of the Food and Drug Administration, who has been invited to discuss:

1. The steps taken to insure that the recommendations of the panels of the National Academy of Sciences-National Research Council have been effectively implemented;
2. The use of New Drug Applications and abbreviated New Drug Applications prior to marketing both new and "me-too" drugs;
3. How the FDA notifies other Government organizations as well as private physicians about the effectiveness and adverse reactions of new drugs;
4. What the FDA is doing to provide information in order to influence the prescribing habits of physicians from both cost and effectiveness viewpoints;
5. FDA's combination policy; and
6. Advertising policy especially with respect to informing the physician about the role of particular drugs in the physician's armamentarium.

We are very pleased to have you here this morning, Dr. Edwards. Your statement will be printed in full in the record and you may present it however you desire.[1]

[1] See Appendix I, p. 8753.

STATEMENT OF DR. CHARLES C. EDWARDS, COMMISSIONER, FOOD AND DRUG ADMINISTRATION; ACCOMPANIED BY DR. HENRY S. SIMMONS, DIRECTOR, BUREAU OF DRUGS; AND PETER BARTON HUTT, GENERAL COUNSEL

Dr. EDWARDS. Thank you, Mr. Chairman.

I would, first of all, like to discuss with the committee today some of the problems in the drugs and drug use in this country.

First of all, I would like to introduce my colleagues. On my left is Dr. Henry S. Simmons, Director of our Bureau of Drugs, and on my right is Peter Barton Hutt, our general counsel.

This morning, as I indicated, we would like to discuss some of the problems in the drugs and drug use in this country. In addition, we would like to review for you the findings of the drug efficacy, and I would like to discuss some of the reasons for the existence of these problems, and to describe for you the progress we have made over the past years toward their resolution.

We will also, as requested, review for you the findings of the drug efficacy study, the impact it has made on therapeutics in this country and the present status of our implementation programs.

Before discussing the drug efficacy study and its effects on therapeutics, it might be helpful to review with you some general aspects of drug use and some current problems we see in therapeutics in this country.

There are currently approximately 35,000 prescription drug products and several hundred thousand OTC drug products on the American market.

Each year a multibillion dollar effort is made to market, promote, and sell these products. In some OTC products approximately 30 percent of receipt of sales is spent in promotion and in the prescription drug area expenditures on promotion approach in magnitude those on research. Despite the contention that advertising and promotion is educational, most of the drug promotion we see is designed primarily to sell, to motivate the physician to prescribe, and the consumer to buy.

In part, due to the influence of such promotional efforts, these drugs are being increasingly prescribed and such use is increasing rapidly. The American public is currently receiving over 2 billion prescriptions per year and it is estimated that within 4 to 5 years this may increase by 50 percent.

In no area is this increase more dramatically evident than in the case of psychotropic drugs where in 1969 over 1 billion doses of amphetamines and 2½ billion doses of barbiturates were used. The magnitude of other psychoactive drug use is reflected by the fact that some 5 to 6 billion doses were distributed in 1969, representing a 65-percent increase in the use of these drugs over a 4-year period.

We have a rapidly growing, frequently troublesome, occasionally tragic, and to a large extent needless and avoidable problem on our hands in the misuse of drugs in America.

Senator NELSON. Doctor, just for clarification, when you talk about the misuse of drugs in America, you are referring to prescription drugs, are you not?

Dr. EDWARDS. That is correct, and we are, of course——

Senator NELSON. We all recognize the other problem of narcotics, but your comments in the above paragraph refers to the misuse of prescription drugs?

Dr. EDWARDS. And primarily, the psychoactive prescription drugs, but, nevertheless, I think it is across the board.

Senator NELSON. Please proceed.

Dr. EDWARDS. Since most physicians want to serve their patients well and do what is best for them, it seems reasonable to assume that where poor therapeutics is being practiced it is at least in part due to poor communication to the physician of the information he needs to do a better job.

If the physician had balanced information, honestly pointing out the limitations and actions of a drug, its beneficial and adverse effects and when it should or should not be given, he would have the information necessary to make the most rational therapeutic decisions. Too often, at present, this needed information is not readily available to him.

Since drugs are being massively prescribed and since there is risk as well as benefit inherent in their use, it is imperative that the profession and the public have available the information necessary for their rational use so that the greatest possible benefit can be attained. Adequate communication of such information, in our judgment, is vital.

A brief review of how physicians currently obtain drug information will help us understand why some of our current problems came about and what must be done to correct them. The practicing physician is currently communicated with in six major ways; through detail men, advertising of the pharmaceutical industry either in journals or through direct mail, medical journal articles, colleagues, medical meetings, and the labeling of the drugs he uses.

A number of recent studies suggest that most of the physicians canvassed had obtained much of their information about a new drug from drug manufacturers and their representatives whose interest understandably is to make the doctor use it. Other recent studies indicate that it is very difficult for detail men, who are salaried and sometimes paid commissions to sell a product, to be sources of truly balanced and objective information on drugs which the practicing physician needs to make intelligent therapeutic decisions on his patient's behalf. It must be stated at this point, however, that a number of firms are engaged in major efforts to improve detailing with balanced presentations.

Senator NELSON. Doctor, may I interrupt at this point. I would like to read a brief statement to you; and ask for your comment on it.

The April 13, 1972, issue of the New England Journal of Medicine, the most distinguished medical journal in this country, carried a scientific report by C. G. Moertel and others that in a double-blind crossover study of marketed painkillers given by the oral route, Darvon in its 65 mg. form, "gave no significant evidence of therapeutic activity, and that each of these agents (Darvon and other analgesics) was significantly inferior to aspirin in analgesic effect." [1]

On April 17, 1972, the Eli Lilly Co. sent out a "Dear Doctor" letter—obviously promotional—to try to counter the findings of the journal's scientific report. In so doing, the Lilly Co. lifted material out of context and failed to present the physician with sufficient information to

[1] See Appendix III, p. 8832.

enable him to prescribe intelligently. This product brings in at least $80 million annually to Lilly, and, as stated in the AMA Journal of August 10, 1970:

"It appears that factors other than intrinsic therapeutic value are responsible for the commercial success of propoxyphene (Darvon)."

Lilly's "Dear Doctor" letter quoted from Dr. Moertel's article that "the therapeutic credentials of propoxyphene—Darvon—must be classified as very equivocal." The letter leaves out some other very important information. In the Journal report the quoted sentence is followed by "In this study, neither (Darvon or Zactane) showed a significant advantage over placebo, and both were significantly inferior to aspirin. The dubious record of propoxyphene in controlled clinical trials has recently been reviewed by Miller et al. *This is the eighth published study in which propoxyphene has not shown any superiority over placebo.*" (Italics added.)

The "Dear Doctor" letter also avoids mention of the main point of the Moertel article that plain aspirin was by far superior to Darvon as an analgesic.

Since the Lilly letter brings up the comparative efficacy and side effects of Darvon and codeine, and also quotes from the NAS/NRC reports when convenient, it may be a good idea to see what this report says on this subject:

"Darvon appears to be less potent than codeine; the best available estimates of the relative potency of the two drugs indicate that dextropropoxyphene (Darvon), is approximately one-half to two-thirds as potent as codeine. The side effects produced by the two drugs are qualitatively similar."

The consumer is again the loser. Aspirin can be purchased in the grocery store for as little as 13 cents per 100 tablets. Darvon, a prescription product, costs $12 to $14 per 100 tablets, or about 100 times the cost of aspirin. Then the cost of Darvon to the consumer in 1970 was about $140 million—in the face of the scientific evidence that Darvon is significantly inferior to aspirin, and is little more effective than a placebo.

This is another classic example of the irresponsible promotion of a questionable, expensive drug when cheaper, more effective products are available.

I would be glad to have you comment on that in general. I also have some specific questions.

Dr. EDWARDS. Mr. Chairman, first, we are aware of the article that appeared in the New England Journal originating from the Mayo Clinic. We are also aware of the position, or the "Dear Doctor" letter that was issued by the Lilly Co. and the lack of balance that this particular communication revealed.

We are currently in the process of doing three things: first of all, preparing for our drug bulletin, which goes to all practicing physicians in the country.

We are preparing an article on the analgesics, trying to put this very difficult subject into proper perspective. In our view, there are very few things that are more difficult in pharmacology than evaluating the effectiveness of the analgesics. We do believe Darvon is an effective analgesic for mild to moderate pain, but no more so than aspirin.

Senator NELSON. May I interrupt you? You say no more so, although this study indicates that it is quite a bit less so.

Dr. EDWARDS. The studies vary considerably. There are others that show that it has an effectiveness that is comparable to that of aspirin.

Dr. Simmons, would you want to say something on that?

Dr. SIMMONS. Mr. Chairman, Darvon is an effective analgesic, but no more effective than two aspirin tablets. There are some situations where it would be inferior to aspirin. To go further in the comparison with codeine, the best available evidence indicates that Darvon is about two-thirds as potent as codeine, and the 32 mg. of Darvon in general has been found to be indistinguishable from placebo.

Senator NELSON. This study used 65 mg. tablets, not the 32 mg.

Dr. SIMMONS. Right.

Senator NELSON. I looked at other studies, but they refer to placebo, that is, Darvon being not much more effective than placebo. All of them, I think, conclude that aspirin is more effective; isn't that correct?

Dr. SIMMONS. Many studies do. I am not aware of studies that show Darvon is superior to aspirin. I think in fairness you have to say that analgesic studies are difficult to perform and evaluate.

Senator NELSON. The "Dear Doctor" letter went out in response to a scientific study. Is that a common practice?

Dr. EDWARDS. No.

Senator NELSON. No?

Dr. EDWARDS. It is not a common practice.

Senator NELSON. Did the letter go out in the same form as the ordinary "Dear Doctor" letter that goes out at the FDA's direction to correct misleading advertising claims?

Dr. EDWARDS. Again, Mr. Chairman, let me say we have not officially received a copy of the letter. We have gotten it elsewhere. We have seen the letter, and it is in the general format of a "Dear Doctor" letter that would have been issued by a company at the request of the Food and Drug Administration.

Senator NELSON. Well, isn't it probable, if not almost inevitable, that the physician who is used to receiving "Dear Doctor" letters that are sent at the direction of the FDA, likely to interpret this as a correction in advertising and, therefore, is an accurate statement of what Darvon is and its effectiveness?

Dr. EDWARDS. I think that is a fair statement, yes. And as I mentioned a little earlier, the "Dear Doctor" letter does not present any reasonable degree of balance, in our judgment, and as a result we are taking this action to require that a corrective letter be sent by the company to physicians.

We think it is generally a bad policy, that any time a critical article comes out in major accredited journals, for a company immediately to send out a "Dear Doctor" letter. I don't think this is a good practice.

Senator NELSON. Well——

Dr. EDWARDS. Then the third action, if I might, will be a letter sent by the Food and Drug Administration stating that the Food and Drug Administration will not allow the use of unapproved labeling that deviates from approved labeling in any significant respect.

These three actions we are taking in an attempt to avoid similar repeats of this particular happening.

Mr. GORDON. Does that letter violate the law or any FDA regulations?

Dr. EDWARDS. Mr. Hutt, do you wish to answer that?

Mr. HUTT. I think it is clear that the letter does constitute labeling as defined in our regulations and specifically 21 CFR 1.105(e)(2). As to whether it violates our requirements for a supplemental drug application, I would simply tell you two of our regulations, 21 CFR 130.9 (a)(3) and 21 CFR 1.106(b)(4)(i) require a supplemental NDA unless the labeling involved is the same in language and emphasis as labeling already approved, and consistent with and not contrary to such approved labeling. As already indicated, we do regard this as lacking fair balance and not properly putting forth all the facts. Accordingly, it would be in violation of those two sections.

Mr. GORDON. Wouldn't it be a good idea to inform the medical community of the labeling, and the relative value of Darvon as an analgesic?

Dr. EDWARDS. This, of course, gets into the whole subject of relative effectiveness. As Dr. Simmons and I pointed out, it is extremely difficult, using the current methodology to fully evaluate the analgesics. Within broad parameters, we think we can very definitely say that Darvon is no better than aspirin. To get much more accurate than that with the information that we have at this particular point, it would be rather difficult.

Senator NELSON. In this study codeine appears to be less effective than aspirin.

Dr. EDWARDS. Again, I think that Dr. Simmons pointed out that that is very indicative of the problem generally. Codeine is recognized as one of the better analgesics. It is a very potent analgesic.

Senator NELSON. You stated that Darvon is less effective than codeine—but this study said that codeine was less effective than aspirin, and Darvon is less effective than aspirin.

Dr. EDWARDS. From this particular study, that statement would be accurate. As Dr. Simmons pointed out, we do have other studies showing it is the equivalent, and less effective in general, to aspirin.

Dr. SIMMONS. There is a lot of literature in this area, Mr. Chairman. You have to put them all together and come up with the soundest judgment you can. I think it would be a mistake to rely on only one study, and that is one of the difficulties.

Senator NELSON. Do any of the studies say that they are equivalent?

Dr. SIMMONS. Aspirin and Darvon?

Senator NELSON. Do any of the studies assert that they are equivalent?

Dr. SIMMONS. One of the problems is that there aren't too many studies that directly compare the two drugs in the same patient. Considering all the available evidence, we simply come out with the assessment that says they are about equal. Some good studies suggest Darvon is a little less effective than aspirin.

Senator NELSON. In this well-controlled study, aspirin is stated to be superior.

Dr. EDWARDS. Right.

Senator NELSON. And 65 mg. of Darvon is a little better than placebo.

Dr. EDWARDS. Right.

Senator NELSON. Are there any studies that say Darvon is superior to aspirin?

Dr. SIMMONS. No, I don't know of any that show that Darvon is superior to aspirin.

Senator NELSON. Is it not correct that the studies that are most favorable to Darvon say—at the most—that it may be equivalent to aspirin. Other studies say that it is a little better than placebo.

Dr. SIMMONS. Right.

Senator NELSON. Let me raise the question about its relationship to methadone.

Do you think that doctors in the country are aware of the abuse potential of this drug. Let me read something I know you are familiar with, from the Maronde Study. This was done at the request of HEW, and on page 17 of that study which I will submit for the record, Dr. Maronde says:

"The addicting properties and the potential abuse of diazepam (Valium), chlordiazepoxide (Librium) and phenobartial have long been commonly recognized. Until recently, the potential hazards of propoxyphene (Darvon) have been less widely known, but the problem of propoxyphene toxicity is now a mattern of concern. In the Los Angeles area, and perhaps elsewhere, propoxyphene is now being used by heroin addicts and other drug abusers, who remove the material from the capsules, and put it in solution, and inject it intravenously for its psychopharmacological effects." (Trade names added.)

In addition, in the National Academy of Sciences-National Research Council report on Darvon which was released in 1969, it is stated that:

"An obvious effort has been made to avoid pointing out that dextropropoxyphene (Darvon) is structurally closely related to the narcotic analgesics methadone and isomethadone, that its general pharmacologic properties are those of the narcotics as a group, that poisoning produced by dextropropoxyphene is essentially typical of narcotic overdose (complicated by convulsions), and should be treated as such, and that the distinction is dependence-producing properties and abuse liability between dextropropoxyphene and various other narcotics is essentially quantitative rather than qualitative. That this effort, unfortunately, appears to have been successful, is attested to by the fact that the majority of house staff and attending physicians who make liberal use of Darvon assume that its pharmacology is basically similar to that of aspirin or phenacetin, rather than to that of the narcotics." (Trade name added.)

Does this concern you?

Dr. SIMMONS. Well, yes it does, Mr. Chairman. An abuse of any drug certainly concerns us. We are aware of the studies that you have quoted, showing evidence of some abuse of this drug. We are looking into that as well as the abuse of some others, and other action may be necessary in that respect.

Further action may be necessary as to the scheduling. I don't know how widely the abuse information is known by the practicing practitioner. Darvon is related to methadone and related to the narcotics. It is labeled as such. Whether that is available to the physician or transmitted to them, we have no way of knowing.

Senator NELSON. The labeling is in the package insert?

Dr. SIMMONS. Right.

Senator NELSON. The doctor doesn't even necessarily see the package.

Dr. SIMMONS. No, sir, but he sees the Physicians' Desk Reference, which is based on the package insert.

Senator NELSON. Well, here is what concerns me: this study indicates that Darvon is being used by drug abusers and nobody knows how widely it is being used. It is purchased in the marketplace. It has been placed there as an analgesic. Is there any reason why we ought to leave it in the marketplace at all when you consider that we have other analgesics that are at least as good and very likely better, and when it is so easily subject to abuse, when it can be put in solution and injected intravenously? Why should we allow it to remain in the marketplace?

Dr. EDWARDS. It is not quite fair to say it is so easily abused. It is quite difficult to abuse. Nevertheless, Dr. Simmons said at this time we don't know the extent of that abuse, and I think we are studying this along with the whole methadone program. If we find it is a significant problem, we will have to take certain steps, appropriate steps, to further control it, or schedule the drugs.

Senator NELSON. Dr. Maronde further states in the study: "In the case of multiple prescriptions providing excessive quantities in the possession of a patient, it is clear that the same four drugs—diazepam [Valium], chlordiazepoxide [Librium], phenobarbital and propoxyphene [Darvon]—figure most prominently, being involved in 272 of the 312 patients concerned in the study."

Why at least, shouldn't it be put on the controlled list?

Dr. EDWARDS. This is under very active study by the agency, along with Dr. Jaffe's office right now, and in the Bureau of Narcotics.

Senator NELSON. Do you have any idea when you will complete your evaluation of the problem?

Dr. SIMMONS. As soon as we can, Mr. Chairman. We are mostly tied up with methadone and the amphetamines. As soon as we bring that into order, we will move on down to the next one.

Senator NELSON. I should think that this would stay right along with methadone, since there is a chemical relation.

Dr. SIMMONS. The problem with methadone is of much greater priority.

Dr. EDWARDS. The amphetamines and the barbiturates also are high on the priority list. I think this all indicates, Mr. Chairman, the basic magnitude of the drug problem in this country and, of course, with the resources that are obviously limited, we have to take the more serious problems first.

I think we are making significant progress. The Bureau of Drugs is likely to come forth with some very meaningful new developments in the amphetamines area.

Senator NELSON. Are there any studies at all which could indicate that Darvon would be the drug of choice as an analgesic in any case except possibly a case of any allergy or an allergic reaction to aspirin?

Dr. SIMMONS. No; none.

Senator NELSON. There are none?

Dr. EDWARDS. There are none.

Senator NELSON. Shouldn't the doctors be informed that it is not the drug of choice except in a very limited number of cases, where the user may be allergic to aspirin?

Dr. SIMMONS. That is one possible approach to it. I think an equally balanced approach is to tell the doctor what the facts are, that there are two choices for mild analgesics, aspirin and Darvon.

Senator NELSON. What is the status of the study on Darvon that you are now making?

Dr. EDWARDS. The drug efficacy study?

Senator NELSON. Yes.

Dr. SIMMONS. It was rated as an effective analgesic. This was, at 5 mg. propoxyphene, usually but not always, shown better and superior to placebo, and even aspirin.

Senator NELSON. Usually, but not always superior to placebo?

Dr. SIMMONS. Correct. In some studies aspirin is not found superior to placebo.

Senator NELSON. So they concluded that it met the 1962 statute for efficacy.

Dr. SIMMONS. Yes, sir.

Senator NELSON. You may proceed.

Dr. EDWARDS. Approximately $500 million a year are spent in prescription drug promotion. The large number of drugs marketed, the conflicting claims that each one is better than the others, the emphasis on brand names, the rapid introduction of new products that are always said to be better than the old ones, extensive detailing and the sheer bulk of advertisements in the mails, the media and in the medical journals—all combine to give the doctor and the public a sense of frustration and confusion.

Other sources of drug information which are made available to the physician can also be improved. These include the scientific evidence for drug efficacy and the labeling information on the drugs he uses. Drug labeling is especially important since it sets the legal limits for drug promotion and advertising.

The final report of the Drug Efficacy Study, page 162, addresses itself to an appraisal of both, and here I quote from the report:

"The Drug Efficacy Panels expressed concern and surprise about the generally poor quality of the evidence of efficacy of the drugs reviewed and the poor quality also of the labeling of those drugs."

The panels found that there was little convincing scientific evidence to support many of the cited indications for use of drugs that are currently in good standing in medical practice and criticized the labeling of about two-thirds of the drugs they evaluated as failing in their primary purpose of providing the physician and the pharmacist with balanced authoritative and objective guides to prescribing or dispensing the drugs in question.

Thus, too much of the "communication" currently being beamed to the physician is either scientifically inadequate, lacks fair balance, is incomplete, inaccurate, and occasionally misleading. Physicians are the target of an over $500 million effort to sell them something. This amounts to an expenditure of approximately $4,000 per physician per year for drug promotion.

Over 35,000 prescription drug products, most with different trade names, are clamoring for his attention. How can the physician be expected to know these drugs or to know that the several hundred antihistamines, the many coronary vasodilators, adreno-corticoids, tetracyclines, anticholinergics, and thiazide diuretics, are basically the

same with little or no significant advantage one over the other? After all, no one manufacturer could reasonably be expected to tell him this.

This present "communication overkill" of today with its resultant confusion is exactly what the already overburdened physician does not need and it certainly does not serve the public.

Senator NELSON. May I interrupt you at this point?

You mentioned the drug efficacy panel's conclusion expressing concern and surprise about the generally poor quality of the evidence to support the efficacy of the drugs reviewed and the poor quality also of the labeling of those drugs.

Recently the Medical Tribune has attacked the Food and Drug Administration and the Kefauver amendment to the Food, Drug and Cosmetic Act. In articles and editorials the Medical Tribune quoted "experts" that:

One, "FDA policies since 1962 have brought about a 'stifling' of scientific creativity, escalation of research costs, and a 'continuing decline in the number of new drugs entering the market in this country.'"

Two, "Drug regulatory policies may be 'depriving the practicing physician of agents beneficial to patient care';" and, three, "American medicine currently faces a 'paradox' in which the drug industry's research capacity is getting better, the FDA is working harder, but there is 'decreasing productivity.'"

This is from the Medical Tribune.

The chairman of this particular protesting group is reported by the Medical Tribune to be Dr. Robert D. Dripps, vice president for medical affairs, the University of Pennsylvania.

Do you know anything about the background of the Dripps Committee and will you also comment on the allegations made in these editorials? The ones that I have quoted from the Dripps committee.

Dr. EDWARDS. Yes, Mr. Chairman.

First of all, let me say the Medical Tribune has been running a series of articles on the Food and Drug Administration, and, very frankly, it has continued up until today. So their attacks upon the Food and Drug Administration are not unexpected, nor uncommon.

As regarding Dr. Dripps and his group, I don't know the origin of this group. I have heard rumors. I do know Dr. Dripps and his colleagues have never taken sufficient interest to have communicated with me or with Dr. Simmons to try to really come to grips with some of these problems, or at least try to hear the other side of the problem.

Senator NELSON. Has any one of the signers of the issued statement reported in the Medical Tribune, contacted the FDA?

Dr. EDWARDS. None.

I am sending each one of the signers, today or tomorrow, a letter to invite them, if they would be willing to come to the Food and Drug Administration and discuss the problems as they visualize them. But I am certain there are people that signed that particular letter that have very little knowledge of what the Food and Drug Administration is doing, and how we balance our activities.

Senator NELSON. I didn't see all the names or all the signers. I noticed that among the signers were Dr. Modell, a distinguished and

very reputable scientist, pharmacologist; and Dr. Freis. I have not seen the actual document. All we have seen is what the Tribune says. Is it based on any study? Do they document any of their conclusions?

I don't quite understand what they are saying when they assert that FDA policy since 1962 has brought about a "stifling" of scientific creativity, escalation of research costs, and a "continuing decline in the number of new drugs entering the market in this country."

You could endorse all that if you interpreted it correctly. If unnecessary scientific work and duplication have been stifled by the 1962 act, fine. If costs are escalated in order to improve the safety and efficacy of the product, that is good. If there has been a decline, a continuing decline, in new drugs entering the market as a consequence of higher scientific standards, that is also good.

I wonder if that is the impression that the Dripps Committee is trying to create! If, however, it is an attack on the requirement that efficacy be proved, and if they are critical of the distinguished panel that handled this problem for the National Academy of Sciences-National Research Council, then, it seems to me, their charges ought to be documented.

Do you have any notion as to what they are talking about?

Dr. EDWARDS. This is one of the disturbing things. An individual, Dr. Dripps, in his position, you would have thought that at least he would have communicated with me in regard to these charges. But the fact of the matter is about all I have heard is what I have read from the Medical Tribune.

Senator NELSON. Have you seen any documents on which their claims may be based?

Dr. SIMMONS. We have some specific answers to the allegations.

Dr. EDWARDS. I do have a statement I would like to read at the appropriate time, that relates to this whole subject. We have recognized that we have some problems in the Food and Drug Administration, and we recognize there are some issues that need to be looked at very hard, and we are attempting to do that right now, but again, going back to the discrepancies, they were never discussed with us.

Senator NELSON. By any of the signers?

Dr. EDWARDS. By any of the signers.

May I read, Mr. Chairman, the short statement that I would like to have included in the record?

Senator NELSON. Go ahead.

Dr. EDWARDS. If there are problems with the system of the drug evaluation and drug regulation, then we are most interested, more interested than anyone, in seeing them corrected for the public interest, where it is involved.

However, we feel that existing laws and regulations governing these areas are scientifically sound and can allow necessary research and development while still adequately protecting the public. We are ready to do everything possible to help create a program for drug research and development, and we encourage it, but I would say for the past 2 years we have worked constantly to bring this about; with the help of outside consultants, we have reviewed all of our requirements, and in virtually all instances they have been sound and consistent with sound science.

We are working to streamline for maximum efficiency. We have added first-rate scientists to our internal organization. We have built

and used expert groups and advisory committees. We have some of the best minds in the country to help us make the wisest decisions possible in the interest of all of the American people.

There have been some problems in the past, and many of these have been resolved. Much progress has been made, and more is in store, and many countries of the world are adopting our system.

Any agency making the difficult decisions we are called upon to make—all of it is from the critics, and the critics have never taken the time to adequately inform themselves about what is going on. They have been making unfounded charges, and they are often urged on by those few in the industry who could be better served through a weak Food and Drug Administration.

We welcome any constructive recommendations, and we want the American system to be the best in the world.

Senator NELSON. You are asking the signers of the statement for the basis of their complaints?

Dr. EDWARDS Since we have never received any documentation from them, we have never communicated with any of them. I am sending each of them a letter to ask them, or welcome them, if they would be willing to come in and sit down and let them discuss their problems, let us discuss our problems with them. And I hope they will accept our invitation.

Dr. SIMMONS. Mr. Chairman, we have some of the specific questions that you have asked the Commissioner to state, in his statement, and we can go into that at this time if you would like, or go into them later, about the charges made by the Dripps Committee.

Senator NELSON. Yes, we did give you some questions to respond to.

Do you agree with the Medical Tribune that the decline on the number of drugs put on the market is due to FDA policy?

Dr. EDWARDS. I think, without any question, that the decrease in the number of "new drugs" has been due to FDA policy. This doesn't mean that this is necessarily bad, as you pointed out a little earlier.

Dr. SIMMONS. The decline of new drugs is falling worldwide. This is not a new or unusual phenomenon. It is due to a lot less combination of drugs being marketed here and overeseas.

As to the charge that research has been stifled, that is somewhat hard to believe.

If you consider that we have in the Bureau of Drugs approximately 1,500 New Drug Applications. There is a lot of research going on in this country. There have been a lot of drugs approved in the past few years, but there is a reduction in new drugs which is a worldwide phenomenon.

As far as this country being deprived of useful drugs, I think we can honestly state we know of no instances—or maybe a rare isolated instance—where this country does not at least have one, and usually more, of the same kind of drugs on the market that are available overseas. There is at least one kind of every drug available in this country that is available overseas. I would say that the statement that we are depriving the public of useful drugs is unfounded.

We do have drugs under study in which we found them lacking something, and they are being marketed overseas. That is the negative aspect to that whole picture.

You might be interested to know that one of the members of the Dripps Committee did come into the Food and Drug Administration to bring to our attention what he considered a problem with the approval of a particular drug. We invited him to review the data with us, and, after reviewing all the data and so forth, he was surprised at the poor quality of the evidence. He agreed with our judgment that it could not be approved until the deficiences had been corrected.

Another member of that committee was protesting because he thought we were going to remove another drug from the market. That drug actually was not going to be removed from the market. We were carrying out the efficacy study, and requiring further study, and until it was proven effective, the drug would be left on the market.

This kind of misinformation is what we face so very, very frequently. We would like to alleviate this as much as possible.

Mr. GORDON. Dr. Simmons, is the continuing marketing of new drugs necessarily a boon to the physicians or to the patient?

Dr. SIMMONS. Mr. Gordon, let's put it this way. Any useful drug should be available to the American people. Now, that doesn't always mean that the drug is better. We realize that, and maybe the man who put it into perspective, best of all, was Dr. Modell when he was testifying back in the early days of the Kefauver bill. Let me read specifically from his statement. He was asked the same question, and he stated officially, "Occasionally, molecular manipulation does bring about a significant advance, but usually a far more substantial change is needed for a real improvement. But simply because a drug is new, it is not necessarily better than those already available, safer or even just as good. Often, it is even less effective and sometimes more hazardous than the parent drug. But they also do harm by their very existence in the drug market. I take the stand that as a general principle everything that adds to the difficulty in dealing with and understanding drugs also makes drugs more dangerous. Thus, the excessive number of needless drugs constitutes a present danger. We can make the useful drugs both less dangerous and more efficient by weeding out the useless, the ineffective and the duplicates, and by so doing, make it possible for the physician to learn in depth about the potent drugs he will prescribe for his patients. We must add only those new drugs that really add something more than their mere presence."

As an example of that, we have about 100 new tranquilizers under development in this country, and at least 22 tranquilizers are on the market at present.

Senator NELSON. Twenty-two?

Dr. SIMMONS. Twenty-two; yes, sir.

Senator NELSON. You said you have 22 tranquilizers on the market?

Dr. SIMMONS. Approximately.

Senator NELSON. And about 100 pending NDA's?

Dr. SIMMONS. Under study.

Senator NELSON. Under study. Of that 22, how many are different compounds?

Dr. SIMMONS. There are a number of different chemicals represented.

Senator NELSON. Under the law, even though they aren't as effective as those already in use, and even though they might have more side effects, they still can be marketed as long as they are more effective than a placebo. Isn't that correct?

You don't have any relative efficacy requirements, do you?

Mr. HUTT. Under the statute, relative efficacy is not to be used in deciding whether the drug is approved or not. Relative safety is to be used in making that decision. An increase in side effects would definitely be taken into account in determining whether to allow the product to be marketed.

Senator NELSON. How does the statute read on safety, so that you interpret it to mean relative safety when that is a fact?

Mr. HUTT. The statute merely states that the evidence in the New Drug Application must show safety by all reasonable applicable tests. We are then required, and have been, since 1938, to then make a judgment balancing the benefits against the risks, to determine whether the product should be marketed.

If there is an increase in risk and no added benefits, then the Food and Drug Administration would conclude that it was unsafe for the indicated purpose.

Senator NELSON. Under that standard, it would seem to me you couldn't market Darvon.

I think it is clear that a safety question does exist with respect to that drug—the fact that it is related to methadone and is being used by drug abusers. It isn't superior by any tests. It is not superior from the standpoint of efficacy, and handicapped from the standpoint of safety, so why should Darvon be permitted to stay on the market?

Mr. HUTT. Well, this is a medical point, not a legal issue.

Dr. EDWARDS. I think, Mr. Chairman, one should point out that when Darvon was first approved by the Food and Drug Administration, the approvers were not aware of the abuse potential. While we are aware of the abuse potential, I think it is only fair to point out that we must also acknowledge the fact that there are side effects to aspirin, as well.

So I think that it is a matter of equating the side effects of one with the other at this point in time. We have to look at aspirin in that regard also.

Senator NELSON. Well, if I understood Dr. Simmon's answer of a few minutes ago—maybe I am mistaken—there is no indicated use of Darvon in the place of aspirin; except in cases where the user might be allergic, or suffer side effects from aspirin, especially since it is not more effective than aspirin.

Dr. EDWARDS. That is, to a degree, true. Some people respond to one product differently than another, and some can take Darvon more effectively than aspirin. We have tried to point this out on several occasions—this is the whole problem of an analgesic. There is no question in my mind that the practitioner should have a number of analgesics available from which he can choose.

Dr. SIMMONS. I didn't mean that they shouldn't have an alternative to choose from. Some people will respond to one and not to another.

Senator NELSON. How does a physician know when to prescribe Darvon unless there has been some specific reaction to the aspirin?

Dr. EDWARDS. Probably by the "trial and error" method. He gives aspirin and the aspirin isn't effective, and then he has to give another analgesic, and we have to try another one. It is not a scientific decision in the normal vast majority of the cases. The pain itself is limiting, anyway, in how the doctor is going to determine that.

Senator NELSON. In other words, if you need a mild analgesic, isn't the drug of choice aspirin, unless there is some reason for selecting another analgesic?

Dr. EDWARDS. That would be my analysis. I am sure that there are those who would say Darvon is necessary.

Senator NELSON. Oh, good heavens. Wholesale sales amount to $80 million worth or about $140 million in the retail marketplace. Apparently doctors prescribe it day-in and day-out with no indication that you ought to have Darvon instead of aspirin. I think that is what the promotion is all about. How they make a decision to prescribe something that costs the patient 100 times as much as aspirin is another example of the power of promotion and advertising.

Is there any reason that you know for routinely prescribing Darvon as a mild analgesic?

Dr. EDWARDS. No. I think it is exactly why we are taking these various steps to better educate the physician. In this regard, although the cost of the medication is not the direct responsibility of FDA, nevertheless, we have to take it into consideration.

Mr. GORDON. In the articles which appeared in the Medical Tribune on April 19 Dr. Edward Freis said: "There are excellent new antihypertensive agents available to clinicians in Europe but not in the United States. The Bethanidine, for example, can be prescribed for patients in Great Britain and the Scandinavian countries, but not here."

Dr. Lasagna in the same issue of the Medical Tribune cited the availability of carbenoxalone "the drug of choice in gastric ulcer management in Great Britain, and in a recent poll of United Kingdom experts," Dr. Lasagna said, "this was rated as their therapeutic maneuver number one. If that is so, that means that our patients are being deprived of an important drug."

"We have one beta-blocker in the United States," Dr. Lasagna noted. "There are several in the United Kingdom. And even the one that we have is not approved for use in high blood pressure or angina, although the evidence suggests that it could be of benefit for those indications."

I wonder if you could comment on those statements?

Dr. SIMMONS. Yes, Mr. Gordon. I think that if you examine carefully the charges that have been made, you will find that they are unfounded. The drug to which Dr. Lasagna referred is available in England.

Senator NELSON. What kind of a drug is it?

Dr. SIMMONS. It is an ulcer drug that is available in England. There have been recent reports of a high incidence of side effects from this drug, including hypertension and heart failure. For this and other reasons we and other experts in this country feel further studies are necessary. We think it warrants carefully conducted trials. Nobody has given us the judgment that this drug should be generally available for use in this country before these trials are completed.

Senator NELSON. There has been no application submitted to FDA to market it in this country?

Dr. SIMMONS. To the best of my knowledge; no. As to the beta-blocker problem, we have run into adverse effects produced by several of these experimental drugs in animal systems. Because of this and with the advice of our advisory committee, we are limiting studies

with these agents until the questions raised can be resolved. Limited human trials are continuing.

Our advisory committee has also agreed with our decision not to approve beta-blockers for use in angina because the evidence presently available in our files is inadequate to conclude that they are safe and effective for this use. Further studies are currently underway in this area.

One of the anti-hypertensive drugs mentioned by Dr. Freis has been under review by the agency and has not been approved because of the very poor quality of the data in the submission. In this instance we invited Dr. Freis in to review this data with us and he agreed that the deficiencies in the submission would have to be corrected with better data before approval should be considered.

These and other instances are examples of misinformation or incomplete information which sometimes is used to criticize the agency unjustly.

Senator NELSON. What controlled clinical studies were done in England or elsewhere in Europe that qualified it for the marketplace there?

Dr. EDWARDS. We don't know. We don't have that information. We have been in touch with experts in this field who are familiar with that data. Then, on the basis of their evaluation, they say it needs further trial, and they feel very uncomfortable with the general availability. There are side effects, and that should produce investigations at this time.

Senator NELSON. Do you have to prove efficacy to market a drug in England?

Dr. EDWARDS. I am not completely sure. It is changing now. I believe that their requirement is only for safety at the present time, but I am not certain.

Mr. GORDON. Have there been any previous occasions when committees have been established to attack FDA's regulations, which have been reported exclusively in the Medical Tribune?

Dr. EDWARDS. Many hundreds of lines have been printed on the UGDP study.

Senator NELSON. Which?

Dr. EDWARDS. The University Group Diabetic Program study.

Senator NELSON. The tolbutamide study?

Dr. EDWARDS. The tolbutamide study was done by the University Group. The Medical Tribune has been extremely critical of our position in this regard and we have received a petition. Mr. Hutt could speak better to that point.

Mr. HUTT. The petition was filed last year, October 7, 1971.

Senator NELSON. Petition filed by whom?

Mr. HUTT. By an attorney representing the Coordinating Committee of the Committee on the Care of the Diabetic, I believe is the name of it. It was submitted late last year and supplemented on January 10 of this year.

The request was for Food and Drug to withdraw its earlier announced policy with respect to proper and improper labeling of tolbutamide. The petition is still under consideration. The draft reply has been formulated and should be sent forward very soon. I would

request, Mr. Chairman, to submit a copy of the reply probably within the next week, when it will be going out, for the record.[1]

Senator NELSON. What is the current legal status of tolbutamide?

Mr. HUTT. It is an approved new drug. The question is whether the labeling needs clarification in light of the UGDP studies. This is the controversy in issue at the moment.

Senator NELSON. Has the labeling been changed, or is it just an issue?

Mr. HUTT. We announced a proposed labeling policy and the petition asked us to delay that until we gave consideration to the information that the committee supplied. Our reply will announce the new labeling that will be required in the future.

Mr. GORDON. I read quite a few medical publications, and I notice that announcements of the establishment of these committees, as well as articles attacking the FDA, seem to originate in the Medical Tribune. What kind of a publication is the Medical Tribune?

Dr. EDWARDS. Well, again, I don't know whether it is by coincidence or what, or how these committees get the announcement in the Medical Tribune at the time of the founding. I think that I won't exactly categorize the Medical Tribune any more than a publication which I know is given to all practicing physicians free of charge.

Mr. GORDON. How does this publication subsist?

Dr. EDWARDS. I imagine on the advertising, on the drug advertising.

Mr. GORDON. Do you know whether it is completely dependent on drug advertising?

Dr. EDWARDS. No, I wouldn't have any idea as to that.

Senator NELSON. Please continue.

Dr. EDWARDS. Mr. Chairman, excuse me.

Senator NELSON. Go ahead.

Dr. EDWARDS. Mr. Chairman, I would like, with your permission, to submit for the record beginning at the bottom of my prepared statement at page 5 over to the second paragraph on page 11. This is merely an added thought—or thoughts—on this whole problem of communications and I think it would be sufficient to have it placed in the record.

Senator NELSON. The whole statement will be printed in the record.

Dr. EDWARDS. I would like though, with your permission, to go ahead with page 11, which we conclude, with the present status of drug efficacy study which you have requested.

Senator NELSON. Yes.

Dr. EDWARDS. By July 1 of this year, we will have completed and published in the *Federal Register* our evaluation of all 3,000 drugs which were in the drug efficacy study. During 1971, 142 drugs named in the *Federal Register* announcements as "lacking substantial evidence of effectiveness," and 367 "related" drugs were effectively removed from trade channels 64 by recall.

To date 452 ineffective drugs specifically covered by the publication of 102 final orders in the *Federal Register* are off the market. This has resulted in the removal from the market of 1,473 additional related drugs. Of the 452 ineffective drugs specifically mentioned in the *Fed-*

[1] See Appendix I, p. 8793.

eral Register statements, 338 were fixed combinations, and of the 1,473 related drugs removed from the market, 1,345 were fixed combinations.

Senator NELSON. Are over-the-counter drugs included?

Dr. EDWARDS. No. There are a few OTC's but the majority are prescription drugs. There are 422 OTC prescription drugs reviewed by the National Academy. Although they have been published in the *Federal Register*, no action has been taken specifically. They are being reviewed as part of the over-the-counter drug review.

Senator NELSON. These drugs were reviewed by various classes?

Dr. EDWARDS. These are the over-the-counter drugs that are being reviewed class-by-class; yes.

In the months ahead, the drug industry will be carrying out, and the FDA will be assessing, the studies necessary on drugs which currently lack adequate evidence of efficacy. Drugs for which there is not adequate evidence of effectiveness will, as required by law, be removed from the market.

This has already been done on many fixed-dose combinations. In the months ahead, as the results of this study reach more elements of our society, there will be a major impact on the public, the medical profession, the drug industry, and Government. In the end, much that is good will come from this study to the ultimate benefit of the medical profession and the public. The panels of the NAS/NRC have clearly and objectively pointed out the problem that faces us in the drug area. One of the great strengths of the study is that it has been a constructive joint effort of the medical profession and the Federal Government.

Procedures set up by this administration will allow a fair and equitable resolution of these problems in the months ahead. No precipitant actions will be taken and whatever actions are taken will be guided by detailed and fair analysis of adequate scientific data.

A new and high standard has been established for establishing proof of drug efficacy and for the evaluation of combination drugs through our new regulations on adequate and well-controlled studies and our combination drug policy. This alone should be a major factor in improving therapeutics in this country. In time, ineffective drugs and irrational formulations will be removed from the market.

The effective drugs remaining will be clearly and accurately labeled so that physicians will have available to them the balanced information they need for rational drug use. Where possible, this information will be derived from adequate and well-controlled clinical studies.

To fulfill our obligation to keep physicans fully informed about drug efficacy, we will require all drug labeling and advertising to disclose the efficacy ratings of the products involved while required studies are being done to determine their efficacy. We have also taken appropriate steps to keep other Federal and State agencies informed of our actions in the Drug Efficacy Study Implementation.

In the months ahead, a number of drugs will fall by the wayside and many others will establish the evidence of efficacy required by law. A massive project such as this cannot be completed without arousing some emotions. Our policy in this and all matters facing the agency is clear—

We do have an emotional commitment, a simple one; this is to take the emotion out of our work. We are not interested in any kind of confrontation, in political or bureaucratic victories; we are moving very swiftly toward relationships based not on crusades or rhetoric but on matters of equity and justice and effectiveness.

With the great deal of critically important work which lies ahead of this agency in the drug area, we recognize our responsibility to take all steps necessary to assure the soundness of our scientific judgments and the efficiency of our operations. To accomplish this, we have taken the following steps:

1. In the past 2 years, we have not only strengthened our own internal staff, but we have called upon the expertise of the medical and scientific community to assist us in strengthening our scientific reviews.

2. Today, a total of 260 experts serve on 26 advisory committees, and another 200 advisers will be added to this total as the over-the-counter (OTC) expert review panels are organized. In addition, the Bureau of Drugs expects to add five new advisory groups in the coming fiscal year. Just this past week, the first meeting of the National Drug Advisory Committee was held in Washington. This newly formed group is intended to serve as the top policy drug advisory committee to the Food and Drug Administration.

3. We are taking a number of steps to eliminate the time, cost, and delay that may affect New Drug Applications. First, we have set up a Task Force to help detect any faults in our internal procedures; we have matched this in recent weeks with a major contract to conduct an extensive study of these same internal FDA procedures.

With industry and with academic help, we are developing guidelines of clinical research. These guidelines will, we hope, assist individual investigators as well as industry to more clearly understand what FDA expects—and to gain this understanding during the work-up of a New Drug Application.

We have this year established a pilot plan for joint Industry-FDA conferences at designated points, points during the investigational stage of new drugs and again prior to submission of New Drug Applications. The purpose is to speed the overall process by earlier understanding, better information, and, hopefully, fewer signal changes in mid-stream, and also to improve the overall quality of the scientific information generated about a drug.

4. We are planning new strategy for sorting out IND's to differentiate between individual physician research and complex commercial investigations. Both should benefit. We are tightening internal quality controls through mandatory 90-day review of all working NDA's. We are soliciting new ideas from industry, from academia, from professional societies, and from within FDA through conferences such as that recently concluded at Airlie House near Washington.

5. We are asking major FDA Advisory Committees for ideas and review of criteria for judging efficacy; for example, the amphetamines. We have now completed the assignment of a statistician to every NDA review team to insure the statistical quality and completeness of every submission. This has major implications because it means still another specific check and balance for data quality. We are taking necessary steps to simplify as much as possible the approval of "me-too" drugs through the abbreviated NDA procedures.

So, in summing up: We now have 10 years of invaluable experience under Kefauver-Harris. It is no exaggeration to say that this has been the most dramatic period of progress in the drug area in FDA's 66-year history. It has been a tough but useful period of on-the-job

training for FDA and industry alike. Many problems remain but much progress has been made toward the goal of better drugs and better therapeutics for the American people.

Thank you.

Senator NELSON. Thank you, Dr. Edwards.

You obviously feel quite strongly that the FDA had done a very effective job under the mandate of the 1962 Kefauver Act concerning efficacy. I would like to read to you an excerpt from an article that appeared in the National Journal in late 1971, commenting on the fixed-ratio combination drugs. The National Journal apparently took the position that the drug industry won the battle in respect to the combination drugs.

"Fresh from a victory with the administration over the regulation of combination drugs, the prescription drug industry is ready for any new challenges the Federal Government may send its way.

"The multi-billion-dollar industry, represented in Washington by the Pharmaceutical Manufacturers Association, has significantly strengthened its position with the Food and Drug Administration in the past year. The FDA backed away last summer from strict new requirements for combination drugs after the industry protested vehemently and cultivated extensive support among doctors and Members of Congress."

Skipping to another paragraph, "The agency was using powers it had received from the 1962 Drug Amendment to review drug efficacy. Its proposed guidelines were strict, following the advice of those academic medical experts who believe that reliance on fixed-combination drugs is more dangerous than prescribing custom dosages of each drug to best suit a patient's needs.

"But combination drugs are easier to prescribe, and they are very popular among doctors. The drug industry relied on this popularity in soliciting support from practicing doctors, who wrote letters of protest directly to the FDA and also to Members of Congress, who then sent inquiries to the agency.

"Besieged by this opposition, the FDA modified its guidelines before publishing a final version on October 15. Four major changes were made in deference to opposition from medical and drug interests. Over-the-counter drugs were removed from the guidelines and handled separately; suggestions that combination drugs are less desirable than individual dosages were eliminated; a requirement that the combination be effective for the duration of dosage was removed; and a requirement that the combination be advantageous for 'most' patients was changed to require that combinations be 'safe and effective for a significant patient population.'"

"'We won the fight on combination drugs,' said William C. Cray, PMA's vice president for public relations. 'The final guidelines were quite reasonable.'"

What is your comment on that?

Dr. EDWARDS. I would say, Mr. Chairman, if they won the fight, I would like to lose more like it. I think we do, in fact, have a combination policy at this particular point that is perfectly acceptable to Dr. Simmons and his Bureau. There is no question about the fact that there was considerable interest in this original combination policy. Some of it was justifiable and some of it wasn't justified.

What we did, in fact, was to clarify our position. In retrospect, I should say it was badly in need of clarification. There was a tremendous number of inquiries by practicing physicians, unfortunately, and others that had received misinformation because of misinformation that had been provided to them by others.

I think that our record speaks for itself. I doubt if any other administration that I know of in the Food and Drug Administration has ever acted as vigorously as we have in regards to the drug industry. We have got other things to do, things that I wish we could have acted more rapidly on, but nevertheless our record shows that we have been very vigorous, but we certainly—I think any statements like that are inaccurate and not founded. I don't think they bothered to look in the record.

Dr. SIMMONS. Mr. Chairman, we have a sound combination drug policy but unfortunately some people still misunderstand it. I suspect this may be the case with the author of the articles which you just discussed. I think our policy makes eminent good sense, and a number of fine scientists of this country helped us develop it.

Our basic position is that since all active drugs have a potential for harm as well as benefit, no patient should be exposed to or have to pay for a drug he does not need. Each drug in the combination must contribute to the therapeutic effect. It must make sense to use the drugs together, that is, the combination should provide rational concurrent therapy for a significant proportion of the target population. Neither drug should decrease the safety or effectiveness of the other drugs in the combination.

Senator NELSON. The requirement is that the producers of the drug demonstrate by adequate and scientifically controlled investigations conducted by qualified experts, that each drug in the combination makes a contribution, and, in effect, that the drugs in combination are at least additive. Is that correct?

Dr. EDWARDS. That is correct.

Dr. SIMMONS. That is right.

Senator NELSON. And under this policy, the panels selected by the National Academy of Sciences-National Research Council recommended removal of all fixed combination anti-infectives; is that correct?

Dr. EDWARDS. No; not all of them. There are still several—Dr. Simmons?

Dr. SIMMONS. No, they didn't. They spoke most strongly about penicillin combinations, which had to be removed from the market, but there is a combination drug for tuberculosis, which we are going to leave on the market.

Senator NELSON. Is that an anti-infective drug?

Dr. SIMMONS. Yes, sir. In general, they ruled against a fixed combination for a variety of drugs.

Mr. GORDON. I would like to ask you about your "freedom of information" proposal. I note on page 9135 of the May 5 *Federal Register* the following statement:

(d) Unless otherwise publicly disclosed, no safety and effectiveness data and information submitted with or incorporated by reference in an NDA file are available for public disclosure until the Food and Drug Administration withdraws approval of the NDA or determines that the drug is not a new drug or may be marketed pursuant to an abbreviated NDA. All such data and in-

formation are available for public disclosure when the Food and Drug Administration withdraws approval of the NDA or determines that the drug is not a new drug or may be marketed pursuant to an abbreviated NDA unless extraordinary circumstances are shown.

(e) A protocol for a test or study is available for public disclosure unless an adequate showing is made that it constitutes a trade secret or confidential information because it is unique, has not previously been disclosed in an authorized manner to anyone other than a company employee or a paid consultant, has been developed at significant cost, and provides a competitive advantage.

Now, isn't it correct that most drugs on the market today are considered new drugs?

Mr. HUTT. Are you talking about new prescription drugs?

Mr. GORDON. Yes, sir.

Mr. HUTT. I am not certain that that is true.

Dr. SIMMONS. Most are qualified as new drugs.

Mr. GORDON. This characterization is applicable, no matter how long a drug has been on the market. Is that right?

Dr. SIMMONS. Well, that is generally true now, but I think it will be less true in the future.

Mr. HUTT. There is an increasing number, for example, that are subject to abbreviated New Drug Applications. My understanding is that today there are only roughly 2,000 to 2,500 active New Drug Applications and I am uncertain whether that includes abbreviated New Drug Applications or not.

Mr. GORDON. Do you have any idea how many old drugs there are on the market?

Dr. SIMMONS. I would——

Mr. GORDON. How many drugs are on the market today that are considered old drugs?

Mr. HUTT. Well, there have been a number that have been marketed without New Drug Applications. We do not have a list and will not have one until the Drug Listing Act is enacted, which will provide us with that information. I have been told there is a substantial number of prescription drugs marketed without an NDA, that still remain on the market.

Mr. GORDON. Why are drugs considered new drugs indefinitely?

Mr. HUTT. Some are not, and some have been subjected to abbreviated New Drug Applications. If I recall correctly, there have been approximately 17,500 New Drug Applications since 1938. I am informed that roughly 15,000 of those are now obsolete or inactive. Either the drug has become an old drug or has gone off the market completely.

Mr. GORDON. Now, what is the justification for keeping data on safety and efficacy from the public, as provided by those sections in the *Federal Register* which I read.

Mr. HUTT. This was probably, Mr. Gordon, the most difficult area which we had had to face in formulating this proposal. I would first emphasize that it is a proposal. If we receive comment which would help in changing this in any respect, we will do so.

With regard specifically to this issue, it was our conclusion that the safety and efficacy developed for a New Drug Application, which may cost literally millions of dollars, $6 million to $15 million in terms of economic investment by the company, it represents the type of confidential and trade secret information that Congress requires us to keep confidential because it does provide a very important competitive advantage over another corporation that does not have the data.

Under the definitions of the American Law Institute in the Restatement of Torts and the case law, as we analyzed it, this type of data, and it is a very narrow category, would represent a trade secret because no competitor in the market can have the same drug approved without duplicating the data. This is unlike the situation where a drug becomes an old drug or becomes subject to an abbreviated New Drug Application. It is unlike an antibiotic drug which, instead of private licenses, have public regulations in the form of a monograph so once the drug is approved anyone can make the drug.

Mr. GORDON. Well, are you going to require proof that they spent $6 million and that it actually did cost the companies this $6 million? Are you going to require proof of that cost?

Mr. HUTT. No, we would not. It would make no difference in our cost whether it cost $6 million or $1 million or $16 million or $200,000.

Mr. GORDON. Doesn't the patent give sufficient protection for 17 years? Then once it expires, why shouldn't that information be available to the public in order to bring about competition?

Mr. HUTT. Mr. Gordon, we are, of course, limited in what we can do by the laws passed by the Congress of the United States. Congress has said in several statutes that trade secrets and commercial information may not be released by the Food and Drug Administration. Since 1955, every Commissioner has raised this issue in hearings before Congress, requesting that the Congress investigate the confidentiality of new drug information on safety and effectiveness and to provide us with guidance that permits us a different interpretation that I have already set out to you.

Thus far, the Congress has not changed the law or given any new guidance than is what we have followed since 1938. Therefore, it has been our conclusion to retain that policy in the way in which it was set out, somewhat more limited—and I believe it has been somewhat more limited. It has now been made more precise than it has been in the past.

For example, in the past, we had across-the-board rules that everything in a New Drug Application is automatically confidential. We have now substantially withdrawn from that position, to state that, for example, the raw data that lies behind public studies will be made available. The protocols will be made available unless there is a justification for failing to do so. We have said an assay method may be available under certain circumstances.

Mr. GORDON. If, as you say, the raw data will be available and the protocols will be available, what actually will not be available?

Mr. HUTT. Perhaps I should have made it clear that the protocols will be made available without the result. The raw data will be available or the study itself, once the study has been published.

Mr. GORDON. Are most of the studies, the results of the studies, in the NDA concerning safety and efficacy published?

Mr. HUTT. A great many are, and some are not.

Dr. SIMMONS. What the proposal also spells out is that the summary and basis for the judgment of safety and effectiveness will be prepared by the drug sponsor and modified appropriately by the FDA, and ultimately become a public document, so any interested person, lay or professional, will be able to know why the judgment was made.

Mr. HUTT. In short, Mr. Gordon, what we are trying to do is to make as much information available to the public as we conceivably can, consistent with the laws of Congress, which they have enacted. We believe that the Congress has made it clear that the information is not to be available. The alternatives we have taken is to inform the public and the medical profession and other interested scientists the bases for our decisions.

Senator NELSON. I would like to clear up a few points before closing today. We would like to have in the record whatever basis there may be for the assertions in the Medical Tribune, and so-called Dripps Committee assertions about FDA. Perhaps we can conduct some hearings at a later date on the specific claims made by the Medical Tribune articles, editorials, and the Dripps Committee, as well as their claims and the responses to them by the FDA. That is, if you would be willing to come at a later date.

Dr. EDWARDS. We certainly will be, Mr. Chairman.

(The documents follow:)

UNIVERSITY OF PENNSYLVANIA,
Philadelphia, Pa., February 29, 1972.

Hon. PAUL G. ROGERS,
House of Representatives,
Washington, D.C.

DEAR MR. ROGERS: We, the undersigned are or have been engaged in medical practice or medical research and are therefore deeply interested in the advancement of human therapeutics. For this reason, we are increasingly concerned with the present drug regulatory system and its effect on the practice of medicine and the development of new drug therapy.

We have concluded that the procedures by which new drugs are evaluated and approved for use in this country is causing us to fall behind in this important area of medical science.

We recognize the difficult task which confronts FDA. Many of us have worked with FDA and have deep appreciation of the efforts being made by its leaders and staff. At the same time, we have watched the research efforts of the pharmaceutical industry over the past few years grow in competence and depth. We are struck by the paradox of increasing excellence on both sides and decreasing productivity.

The system of drug regulation, which has evolved as a result of the 1962 Drug Act and Regulations, exposes the agency to a variety of pressures which make it difficult for rational decision-making to take place. In a recent speech before the National Institute of Medicine, FDA Commissioner Edwards put his finger on the problem: "It's a particularly difficult environment for the Food and Drug Administration because, in a sense, we're in the middle. We are, on the one hand, criticized for being 'soft' on industry and, on the other called repressive, an enemy of free enterprise: on *every* major decision we are accused by some of acting too fast without sufficient evidence, and by others of acting too slowly and too timidly to prevent unnecessary harm."

The FDA has long been the subject of study and investigation. In fact, there have been at least three Executive Branch studies of FDA in the past five years. The last, ordered by Commissioner Edwards, was a review and evaluation of the total scientific effort of FDA by an outside committee headed by Dr. Ritts. These reviews and reports, while critical of many aspects of FDA, have been useful and helpful, we are sure. But they have focused primarily on the internal structure and workings of FDA. As important as it is to improve the efficiency and scientific procedures and capabilities of the agency itself, there still remains the crucial question as to the effect the agency's administration of the 1962 Drug Act has had in actual practice on drug research, innovation, and therapy.

New pressures are now forming to add even more regulatory responsibilities to an already overburdened agency. Moreover, the Administration has proposed legislation which would consolidate all consumer protection activities of HEW in a new Consumer Safety Administration of which FDA would be a member; Senator Magnuson and others are supporting draft legislation which would abolish FDA and set up an entirely new and independent Consumer Safety Agency;

and Senator Ribicoff stated late last year that he plans to hold hearings on FDA operations early in this year.

We believe a change in the drug regulatory system is badly needed. The system too often stifles creativity and escalates costs of research; perpetuates a continuing decline in the number of new drugs entering the market in this country; and may be depriving the practicing physician of agents beneficial to patient care. The reasons for all this are not clear, are undoubtedly complex, and requires thorough investigation and study. The House Interstate and Foreign Commerce Committee and its Subcommittee on Public Health and Environment, of which you are Chairman, have appropriate jurisdiction, as we understand it, over the operations of FDA. Your Subcommittee, it appears to us, would be the proper body to direct a full-scale review of the effect of the 1962 Drug Act and Regulations on the practice of medicine and the conduct of academic and industrial drug research.

We believe that this review should be undertaken as promptly as possible, since the welfare of patients may be at stake. If it would be helpful to you to confer with us on this subject, we are most willing to do so.

Respectfully,

Robert D. Dripps, M.D. (Chairman), Vice President for medical Affairs, and Chairman, Department of Anesthesiology, University of Pennsylvania; Robert F. Bradley, M.D., Medical Director, Joslin Clinic, Boston, Mass.; Eguene Braunwald, M.D., Professor and Chairman, Department of Medicine, University of California School of Medicine, La Jolla; Julius H. Comroe, Jr., M.D., Professor of Physiology and Director, Cardiovascular Research Institute, San Francisco Medical Center; Michael E. DeBakey, M.D., President, Baylor College of Medicine, Houston, Texas (Albert Lasker Award, 1963); James E. Eckenhoff, M.D., Dean, Northwestern University Medical School, Chicago, Illinois; Edward D. Freis, M.D., Professor of Medicine, Georgetown University School of Medicine, Chief, Cardiovascular Research Laboratories, Georgetown University Hospital, and Senior Medical Investigator, Veterans' Administration Hospital, Washington (Albert Lasker Award, 1971): Alfred Gilman, Ph. D., Chairman, Department of Pharmacology, Albert Einstein College of Medicine, Bronx, N.Y.; Nathan S. Kline, M.D., Director of Research, Rockland State Hospital, Orangeburg, N.Y. (Albert Lasker Award 1957, 1964; Louis Lasagna, M.D., Chairman, Department of Pharmacology and Toxicology, University of Rochester, School of Medicine and Dentistry, Rochester, N.Y.; Sherman M. Mellinkoff, M.D., Dean, University of California, School of Medicine, Los Angeles, Calif.; Walter Modell, M.D., Chairman, Department of Pharmacology, Cornell University Medical College, New York, and Editor of Clinical Pharmacology & Therapeutics; John A. Oates, M.D., Professor of Medicine and Pharmacology, Vanderbilt University, Nashville, Tenn.; Irvine H. Page, M.D., Senior Consultant, Research Division, Cleveland Clinic, Editor-in-Chief of Modern Medicine, Past President of the American Heart Association (Albert Lasker Award, 1958); E. M. Papper, M.D., Vice President for Medical Affairs, and Dean, University of Miami School of Medicine, Florida; Dickinson W. Richards, M.D., Lambert Professor of Medicine Emeritus, College of Physicians and Surgeons, Columbia University, New York (Nobel Laureate, 1956): Burtrum C. Schiele, M.D., Professor of Psychiatry, and Principal Investigator, Clinical Psychopharmacology, University of Minnesota, Minneapolis, Minn.; George W. Thorn, M.D., Physician-in-Chief, Peter Bent Brigham Hospital, Boston, Mass.; and Hersey Professor of the Theory and Practice of Physics, Harvard Medical School; Robert W. Wilkins, M.D., Chairman and Director, Division of Medicine, Boston University Medical Center (Albert Lasker Award, 1958); William R. Wilson, M.D., Chairman, Department of Clinical Pharmacology, University of Iowa College of Medicine, Iowa City, Iowa: Robert I. Wise, M.D., Ph. D., Magee Professor of Medicine, and Chairman of the Department, Jefferson Medical College, Philadelphia, Pa.; George D. Zuidema, M.D., Professor and Director, Department of Surgery, the Johns Hopkins University, School of Medicine, Baltimore, Md.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
FOOD AND DRUG ADMINISTRATION,
Rockville, Md., May 19, 1972.

DEAR ——— ———: Congressman Paul G. Rogers has made available to me the letter of February 29, 1972, signed by you and 21 colleagues calling for a Congressional review of the Nation's drug regulatory system and the role of the Food and Drug Administration.

We are not strangers to the Congress and we do not shrink from Congressional review. The policies and activities of this Administration are based on a deep and sensitive understanding of our obligations under the laws placed in our charge and we are properly accountable for our stewardship.

We do question, however, the bases for your recommended review. Some of the assertions and implications in your letter (repeated and expanded in a follow-up letter dated March 22, 1972) are particularly disturbing to me—

that "the procedures by which new drugs are evaluated and approved for use in this country is causing us to fall behind in this important area of medical science";

that our drug regulatory system deprives physicians of agents beneficial to patient care and hampers the practice of medicine; and

that the 1962 efficacy requirements have stifled creativity and have perpetuated a continuing decline in the number of new drugs entering the market.

I am surprised that a committee of distinguished scientists and clinicans could make such assertions and publicize them through "exclusive interviews" in the medical press without first communicating with us about their basis in fact.

The publisher of "Medicine Tribune", the circular in which most of the interviews have appeared, has commented: "We do not need a new 'generation' of hysterical drug headlines. . . . We need an open and honest exchange of experiences and ideas." I endorse this view and I would like to invite you and your colleagues to meet with me to discuss your recommendations to the House Committee on Public Health and Environment, specifically those included in your letters of February 29 and March 22, 1972, addressed to Congressman Rogers. I have scheduled this meeting in my office, Room 6821, 200 C Street, S.W., Washington, D.C. at 2:00 p.m., Tuesday, June 6, 1972. I do hope you will attend.

Sincerely yours,

CHARLES C. EDWARDS, M.D.,
Commissioner of Food and Drugs.

Senator NELSON. And then for clarification, Doctor, do I understand the "Dear Doctor" letter sent out by Lilly on Darvon is a violation of the law? Is it or is it not a violation of the regulations?

Mr. HUTT. It certainly appears to me that it is, Senator.

Senator NELSON. It is not statutory; it is the regulations of the FDA?

Mr. HUTT. In my opinion, it does violate the regulations I referred to earlier.

Senator NELSON. And what kind of action do you take in such a violation of such regulations?

Mr. HUTT. I believe the Commissioner mentioned three specific things we intend to do. This matter just recently came to our attention, I believe only 4 days ago, and this is as far as we have proceeded in our thinking at this time.

Senator NELSON. Are there any penalties for violating regulations?

Mr. HUTT. Yes, there are. The agency may take whatever legal action it believes appropriate under the circumstances. All of the penalties under the act could apply.

Senator NELSON. What kind of penalties are those?

Mr. HUTT. Basically, there are three: the product could be seized, which is probably inapplicable in this type of situation; an injunction could be sought in court; or criminal penalties could be requested. Of course, there are informal sanctions that could also be applied, of the

type we have already mentioned, namely, a corrective letter or a corrective advertising program, or whatever other informal means of correcting might be available.

Senator NELSON. Has the Food and Drug Administration made any determination or decision as to what action it will take?

Mr. HUTT. No, sir.

Sentor NELSON. If there were, among other things, a requirement for another "Dear Doctor" letter—since this one was really written as a response to a study—does the FDA assert the right to approve the letter or disapprove it before it is sent?

Mr. HUTT. Yes, we do.

Dr. EDWARDS. Definitely.

Mr. HUTT. We would require that.

Senator NELSON. Then, I take it you would require them to state in full what the study said, rather than excerpts from it?

Mr. HUTT. Most certainly.

Senator NELSON. But the decision as to what action you will take hasn't been made as of yet?

Mr. HUTT. Except a corrective letter will be required.

Senator NELSON. At the minimum.

Mr. HUTT. At the minimum.

(The letter follows:)

ELI LILLY & Co.,
Indianapolis, Ind., May 19, 1972.

DEAR DOCTOR: The Food and Drug Administration has requested that we send you information about Darvon ® (propoxyphene hydrochloride, Lilly) relevant to certain statements in our letter to you of April 17, 1972, which the FDA regards as misleading.

Our letter referred to a recent article in the *New England Journal of Medicine* in which the authors concluded that single doses of aspirin (650 mg.) were superior in analgesic effectiveness to other drugs tested, including single doses of Darvon (65 mg.). The study included only single-entity products.

The FDA regards our April 17 letter as lacking in fair balance and states that our letter suggested that Darvon is more effective than aspirin and at least equivalent to codeine while producing fewer side-effects. The FDA regards none of these suggestions as valid.

Additionally, the Government states that our letter gave undue emphasis to the effectiveness of Darvon in combination with other analgesic drugs and failed to give adequate emphasis to the limitation of effectiveness of Darvon itself. Therefore, the FDA requests we inform you as follows:

1. There is no substantial evidence to demonstrate that 65 mg. of Darvon is more effective than 650 mg. of aspirin (two 5-grain tablets), and the preponderance of evidence indicates that it may be somewhat less effective.

2. The preponderance of evidence indicates that Darvon is somewhat less potent than codeine. The best available evidence is that Darvon is approximately two-thirds as potent as codeine. Furthermore, there is no substantial evidence that, when administered at equianalgesic doses, Darvon produces a lower incidence of side-effects than codeine.

Sincerely yours,

ELI LILLY & Co.

Senator NELSON. The hearings will resume tomorrow at 10 o'clock, and we will hear from Mr. Elmer B. Staats, the Comptroller General.

(Whereupon, at 11:52, the subcommittee adjourned, to reconvene at 10 a.m., on Wednesday, May 10, 1972.)

COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY

(Present Status of Competition in the Pharmaceutical Industry)

WEDNESDAY, MAY 10, 1972

U.S. SENATE,
SUBCOMMITTEE ON MONOPOLY OF THE
SELECT COMMITTEE ON SMALL BUSINESS,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:00 a.m., in room 318, Old Senate Office Building, Senator Gaylord Nelson (chairman of the subcommittee) presiding.

Present: Senator Nelson.

Also present: Benjamin Gordon, staff economist; and Elaine C. Dye, clerical assistant.

Senator NELSON. Our witness this morning is Mr. Elmer Staats, Comptroller General of the United States.

Mr. Staats, the committee is pleased to have you here this morning. Your statement will be printed in full in the record.[1] You may present it however you desire.

Go ahead, Mr. Staats.

STATEMENT OF HON. ELMER B. STAATS, COMPTROLLER GENERAL OF THE UNITED STATES; ACCOMPANIED BY GREGORY J. AHART, DIRECTOR, MANPOWER AND WELFARE DIVISION; DEAN K. CROWTHER, DEPUTY DIRECTOR; CHARLES COLLINS, ASSISTANT DIRECTOR; AND PAUL SHNITZER, ASSISTANT GENERAL COUNSEL

Mr. STAATS. I will introduce my colleagues here, Mr. Chairman. I believe you are acquainted with most if not all of them.

To my immediate left is Mr. Gregory Ahart, Director of our Manpower and Welfare Division, a new division which we have just recently established, which is going to be concerned with all aspects of health programs throughout the Government.

Dean Crowther, to my right, is Deputy Director of that Division.

Mr. Collins, to his right, is Assistant Director of that Division.

Mr. Paul Shnitzer, to my far left here, is Assistant General Counsel of the GAO and has followed this area for quite some time.

Mr. Chairman, I have a fairly long statement, but we are dealing here in our statement with some seven different topics, so that I do not

[1] See Appendix II, p. 8801.

know of any better way to proceed than to read the statement. I hope, particularly in view of the length of it, that you will feel free to interrupt me at any point to ask questions.

Senator NELSON. Fine. Go ahead.

Mr. STAATS. We are going to comment today, as I indicated, on seven different subjects.

1. First, actions taken to assure that only effective and low-cost equivalent drugs, when available, are procured by the Government or paid for under Government sponsored medical programs.
2. Information sources used by physicians in selecting drugs.
3. Use of Goverment specifications in the procurement of drugs.
4. Quality assurance and inspection procedures of Federal agencies.
5. Coordination and cooperation between and among Federal agencies which buy drugs.
6. Procurement of drugs of foreign origin.
7. Policies and practices pertaining to furnishing drugs under the Medicare and Medicaid programs.

Estimates indicate that direct Federal procurements of prescription drugs amounted to about $240 million for fiscal year 1971. Most of these procurements were made by the Defense Supply Agency, through the Defense Personnel Support Center, DPSC, and the Veterans' Administration, VA.

DPSC manages about 1,100 drug items on a centralized basis and spent about $95.5 million for drugs in fiscal year 1971. The VA manages about 450 drug items on a centralized basis and procured for central stock drugs valued at $27.4 million in fiscal year 1971. The VA also administers Federal Supply Schedule contracts under which Federal agencies can satisfy their drug requirements by direct purchases from drug manufacturers. Purchases under these contracts by all Government agencies for fiscal year 1971 amounted to about $64 million. The Public Health Service centrally manages about 600 drug items and spent an estimated $14.2 million for drugs in fiscal year 1971. About 50 percent of this amount was spent under contractual arrangements made by VA.

A substantial portion of Federal expenditures for prescription drugs are indirect, consisting principally of the Federal share of the cost of drugs provided to beneficiaries under the Medicare and Medicaid programs. The Department of Health, Education, and Welfare (HEW) estimates that medicaid expenditures for prescribed drugs for fiscal year 1971 amounted to about $485 million, of which about $246 million represented the Federal share and the remaining $239 million the State and local share. Expenditures for prescription drugs under part A, hospital services, of medicare for fiscal year 1971 were estimated at $541 million. No information is available on expenditures under part B, physician services, of Medicare.

Although we have not completed our work with respect to examining into the effectiveness of administration and management of Federal programs for procurement and distribution of drugs, it is already clear that standardized procedures and improved cooperation and coordination among the Federal procurement agencies currently involved in (1) procuring and distributing drugs, (2) financing the supply of drugs to beneficiaries under the Government's social programs, and

(3) evaluating the effectiveness of drugs, would be beneficial in reducing costs and providing service.

Mr. GORDON. Mr. Staats, to what extent is there now coordination and cooperation in purchasing by agencies of the Federal Government?

Mr. STAATS. I believe that is developed a little bit more as we go through here, but if you like, we can cover that point now. I would like to suggest that either Mr. Ahart or Mr. Crowther respond to your question.

Mr. CROWTHER. At this point, there are considerable differences in the amounts paid for drugs and they vary between agencies. Our review has shown at this point that while in some cases, the Veterans' Administration pays less for a drug than the military, there are other cases where the military pays less than Veterans' Administration.

Senator NELSON. You are talking about direct purchases by the Government, not indirect?

Mr. CROWTHER. Yes sir, direct purchases. That is the area of great concern, where there is direct negotiation for contracts for the same firms for similar products. We were concerned that one agency is procuring at a higher price than another agency. So we see the need for cooperation and better coordination in situations of that nature.

Senator NELSON. When you previously appeared we raised the issue about negotiated contracts and bids and the specifications designed by the various purchasers. Are you talking about cases in which the Veterans' Administration or Defense Supply Agency or one of the others negotiates a bid? Is that where you find significant differences, or do you find it both where it is negotiated and where there is a competitive bid?

Mr. CROWTHER. In both cases there are differences. We have examples of negotiated contracts where there are differences in price for similar products in a quite close timeframe, and we also have competitive bids—we cannot tie down the same timeframes there—where there were differences also.

Senator NELSON. Significant differences in competitive contracts?

Mr. CROWTHER. No, not nearly as significant as under the negotiated contracts.

Senator NELSON. Go ahead.

Mr. STAATS. As of January 19, 1972, the Food and Drug Administration (FDA) had published 2,339 reports as to the effectiveness of drug preparations for the indications claimed in their labeling, and had reported them in the *Federal Register*. At that time FDA recognized that several problems pertaining to drug efficacy remained. Briefly they concerned:

Conflicting reports relating to several drugs;

Speeding up the progress on followup actions for drugs requiring evidence to be rated "effective";

Completing compliance activities currently in process pertaining to "ineffective" drugs;

Completing the review, which FDA expects to publish by June 30, of the remaining drug study reports; and

Pursuing plans for evaluating the effectiveness of over-the-counter drugs.

As of November 18, 1971, the Defense Medical Material Review Board had initiated action to stop further procurement and to eliminate from the supply system all items that FDA had then pronounced "ineffective" or "possibly effective". Also, the surgeons general of the military departments have emphasized through instructions to medical organizations the DOD policy on such drugs, which became effective January 21, 1971. This policy provides that for "ineffective" items subsequently withdrawn from the market, remaining stocks are to be destroyed or other appropriate action taken to remove them from the inventory. For items categorized "ineffective" but awaiting final determination by FDA, further use of remaining stocks is suspended until the final status is announced. Pharmacy and Therapeutic Agents Committees are required to question all prescriptions for "possibly effective" items, but local procurement of such items may be made if no alternate means of therapy is available.

No "ineffective" drugs have been purchased by DPSC for central stocks since the pertinent pronouncements in the Federal Register, but we are aware of a Federal Supply Schedule purchase of one item, Darvon (32 milligram), for initial treatment of seriously underweight geriatric patients. Also, 24 procurements valued at $1.5 million have been made of "possibly effective" drug items by DPSC for central stock since the FDA pronouncements. Twenty of these buys, valued at over $1.4 million, were made before the DOD policy prohibiting further procurements of "possibly effective" drugs was issued in January 1971.

Following this subcommittee's hearings in 1970, DOD established a committee to conduct an item by item review of drugs, chemicals, and biologicals in the Federal Supply Catalog to identify high cost, possibly effective, or duplicate items, and to initiate action to minimize the use of high cost drugs where lower price equivalents are available. Items so identified were to be reviewed by the military services to determine whether they should be deleted from the supply system. As of January 1972, seven items had been deleted and 57 items had been reclassified to a status prohibiting further procurements. Included in the 57 items were seven for which lower cost equivalent drugs were available in the supply system. Based on reported unit costs and demand, annual savings in excess of $1.1 million will be realized if the deleted items are not obtained via local purchase. Specific actions to stop local purchase of such items have not been taken because it would tend to dictate the drugs physicians can prescribe.

A VA circular of December 4, 1970, transmitted to hospitals and clinics a listing of "ineffective" drugs and stated that the Executive Committee on Therapeutic Agents had recommended that VA hospital therapeutics committees remove these items from their formularies. If the hospitals and clinics wished to retain any of the drugs they were required to obtain approval from the executive committee. This has been done for certain drugs being used for research.

The hospitals were requested to advise fee basis physicians of VA's policy on these drugs and to attempt to get them to prescribe alternatives. Information on FDA pronouncements made after December 4, 1970, has been sent by the VA headquarters to its hospitals and clinics.

Mr. GORDON. Mr. Staats, how successful has been the attempt to get physicians to prescribe alternatives? Has there been any analysis of the bills for drugs?

Mr. STAATS. Can you answer that, Mr. Crowther?

Mr. CROWTHER. We do not have any information on a specific analysis of that. We know that the VA requires that in the event a fee-basis physician prescribes a drug that is to be filled, particularly in a VA pharmacy, and it is in the ineffective or possibly effective category, then they are required to question that specific prescription. We know that the instructions have been issued by VA and there are means to attempt to control requests for such drugs, but we do not know of any summary report made to determine how well the instructions have been carried out.

Senator NELSON. We raised the question of the procurement, direct Government procurement of Darvon with the Defense Supply Agency, the Veterans' Administration—I think with all of them. Was that one of the seven items for which lower cost equivalent drugs are available in the supply system?

Mr. STAATS. I believe that is correct. We included references to it because it is one of the FDA's listed drugs as "ineffective," but it is still on the Federal Supply Schedule.

Senator NELSON. No, Darvon is not listed as "ineffective."

Mr. AHART. Darvon is not one of the seven items which were referenced in the Comptroller General's statement which were deleted——

Senator NELSON. Was not or was deleted?

Mr. AHART. It was not one of the items deleted.

Mr. GORDON. Incidentally, I notice, Mr. Staats, that the 32-milligram dose of Darvon was being bought for the "initial treatment of seriously underweight geriatric patients." None of the medical sources I looked into gave such an indication. How could they be buying it for this particular purpose? And the National Academy of Sciences said that the 32-milligram dosage is no more effective than a placebo.

Senator NELSON. That is, as an analgesic!

Mr. GORDON. But that is the only indication—as an analgesic.

Senator NELSON. What do you want to say to that, Mr. Staats?

Mr. STAATS. I do not think I am qualified to answer your question.

Senator NELSON. I think we should raise that question when the appropriate Federal agency comes up who handles the procurement. I do not expect you to be informed on that.

Mr. STAATS. The VA policy for "possibly effective" drugs is that consideration should be given to using alternative products having a higher FDA effectiveness classification. The VA purchased seven "ineffective" drugs for central stock after FDA pronouncements appeared in the *Federal Register*. Procurement of six of the seven items was discontinued after the VA policy was issued on December 4, 1970. The other item was purchased for over 2 years after the FDA pronouncement because it was inadvertently excluded from the list of "ineffective" drugs issued on December 4, 1970. I believe this is what you may have had reference to; that is Darvon. The VA Marketing Center has now been instructed to suspend issuance of all "ineffective" drugs and to negotiate with manufacturers for return of existing stocks for credit.

The VA continues to purchase "possibly effective" drugs, apparently because of its philosophy that it should not take actions that would unduly restrict the prescribing practices of physicians.

On January 13, 1971, VA hospitals and clinics were advised to ensure that every effort be made to treat VA patients with the most effective therapeutic agents at the most favorable prices. Also, VA hospital therapeutic committees were requested to continually review prescribing practices—with due regard to the effectiveness and fluctuating prices of drugs—as patents expire, or competitive market conditions make price advantages available. Also, the hospital therapeutic committees were advised that the purchase of high-cost drugs could not be justified when equally effective, but less expensive, items are available.

HEW has also acted to implement the FDA pronouncements related to the effectiveness of drugs. The Surgeon General on December 11, 1970, established the policy that the Department would not spend Federal funds for (1) "ineffective" drugs, except under approved clinical research projects, or (2) for "possibly effective" drugs, except under approved clinical research projects or when alternate means of therapy are not available. On January 19, 1971, the Department instructed its agencies that provide direct patient care to stop the procurement and use of such drugs and to advise contract physicians of the Department's policy.

The December 1970 policy announcement stated that the policy also applies to Government-financed programs and the Federal Register of October 16, 1971, contains the proposed regulation for medicare. The Department planned to furnish medicare carriers and intermediaries with listings of "ineffective" and "possibly effective" drugs to be excluded from reimbursement under the medicare program. However we understand that the Department has recently undertaken a reevaluation of whether to extend the December 1970 policy to the medicare program.

In January 1971, the Medical Services Administration of the Social Rehabilitation Service, HEW, notified all Associate Regional Commissioners for Medical Services of the departmental policy relating to purchases of "ineffective" and "possibly effective" drugs. The Medical Services Administration stated that program regulations were being amended to implement this policy for medicaid. As of May 1, 1972, regulations have not been issued to implement the revised Federal drug policy for medicaid. We have just recently, Mr. Chairman, issued a further letter to HEW asking them why they have not done so and to advise us as soon as practicable.

Senator NELSON. On December 11, 1970, Dr. Jesse Steinfeld, Surgeon General and Deputy Assistant Secretary for Health and Scientific Affairs, promulgated the departmental policy that Federal funds will not be expended for purchasing "ineffective" or "possibly effective" drug products for use in its direct care programs, its contract care programs under the direct care programs, its Federal grant programs and the medicare and medicaid programs for inpatients and outpatients with two minor exceptions. Now, that is one and a half years ago. Are you saying that the regulations have not even been issued yet to implement this policy with respect to medicaid?

Mr. STAATS. That is my information, Mr. Chairman. Perhaps Mr. Ahart or Mr. Crowther would want to elaborate. That is my information.

Mr. AHART. That is correct, Mr. Chairman. The regulations have not yet been issued to implement the policy with respect to the medicaid program. As the Comptroller General mentioned, we issued a letter just yesterday to the Social Rehabilitation Service, which has the responsibility for the administration of the program, bringing this to their attention and bringing to their attention the information which we have obtained on the extent of use in certain States of ineffective or possibly effective drugs under the medicaid program and suggesting that it take action to implement this policy as quickly as it can and asking it to advise us as to what it is going to do.

Senator NELSON. Well, do you have any figures in your statement that indicate the amount of money spent in the past year and a half since Dr. Steinfeld's announcement of departmental policy, how much Federal funds have been spent on purchasing "ineffective" drugs under the program of medicare and medicaid and the amounts spent on "possibly effective" drugs?

Mr. STAATS. Mr. Chairman, if you will turn to page 22 of our prepared statement, there is some information that I think bears on the question that you have raised. This refers to the program in one State, Mississippi.

Senator NELSON. This is just for the State of Mississippi?

Mr. STAATS. I am sorry, there follows also at the bottom of that page Illinois and New Jersey; then Ohio on the following page.

I believe we have it just for those four States.

Senator NELSON. Are these just on "ineffective"?

Mr. STAATS. It covers both.

Senator NELSON. On page 23, it appears that——

Mr. STAATS. That covers only ineffective.

Senator NELSON. So that in the State of Ohio, just one State, the total amount spent was $138,032. In what period is that?

Mr. STAATS. Four months.

Senator NELSON. So in just a 4-month period $138,032 was spent on ineffective drugs.

Do you have the "possibly effective" information?

Mr. CROWTHER. No, we do not.

Senator NELSON. What percent of that $138,032 is Federal money?

Mr. CROWTHER. Approximately 50 percent.

Senator NELSON. And the other under these programs comes from——

Mr. CROWTHER. State and local money.

Senator NELSON. So in a 4-month period alone, in one State, the Federal Government has wasted $70,000 on purchasing drugs that are classified as ineffective, and the State of Ohio and the local municipalities have spent $70,000 on drugs that are rated as ineffective?

Mr. STAATS. I believe that is correct.

Senator NELSON. Who did this study?

Mr. CROWTHER. GAO.

Senator NELSON. So you have not done it for every State?

Mr. CROWTHER. No, sir; the information is not available in many States. We were fortunate enough to be able to arrange with the selected States' computer operations to have them run a summary of particular selected drugs that we knew were "ineffective" and were able

to devise a program wherein these items could be listed. We did that in Ohio and two other States.

Mississippi has made its own analysis, and has made a listing, which we had access to also.

Now, we have not made such an analysis in any other States.

Senator NELSON. So you have done it only in Mississippi and Ohio? Is that what you said?

Mr. CROWTHER. No, in Mississippi, Ohio, Illinois, and New Jersey.

Senator NELSON. These figures for Illinois and the others on the bottom of that page, are for just "ineffective" drugs?

Mr. CROWTHER. Yes, sir.

Senator NELSON. And the period is July and October?

Mr. CROWTHER. No, sir; that is a 2-month period.

Senator NELSON. Just for those specific 2 months?

Mr. CROWTHER. Yes, sir.

Senator NELSON. And in Illinois, they spent about $90,000 on those programs; about $45,000 was Federal money, and the rest State or municipal money? Is that right?

Mr. CROWTHER. Yes, sir.

Senator NELSON. In just a 2-month period?

Mr. CROWTHER. That is correct.

Mr. STAATS. Mr. Chairman, we were not trying to do a national survey here. What we were really trying to do is test the significance in selected States to see whether there was a continued use of "ineffective" drugs. It was after this review that we called this to the attention of the HEW to see why they have not taken some action.

Senator NELSON. Well, nobody knows whether Ohio is typical, but that is a 4-month period, almost $140,000. If that is typical for the year, you are talking about over $400,000 being spent in Ohio alone on drugs classified as ineffective. They might just as well throw the money out; they would be better off if they just threw it out on the street. At least they would not be damaging the patient and they would get rid of the money faster that way, too.

You wrote a letter to the Secretary of HEW inquiring about the implementation of this program?

Mr. STAATS. Our letter has gone to Mr. Twiname, who is Administrator of the Social Rehabilitation Service of HEW.

We will be happy to place the letter in the record if it is useful to you.

Senator NELSON. I think we ought to have it.

(The information referred to follows:)

UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

MANPOWER AND WELFARE
DIVISION

May 9, 1972

Dear Mr. Twiname:

At the request of the Chairman, Subcommittee on Long-Term Care, Senate Special Committee on Aging, we obtained information on prescribed drugs provided to recipients of old-age assistance in nursing homes under the Medicaid program in Illinois, New Jersey, and Ohio. In response, we issued a report to the Chairman on information obtained on the Medicaid drug program in Illinois (B-164031(3), dated September 10, 1971) and a consolidated report on all three States entitled "Drugs provided to elderly persons in nursing homes under the Medicaid program" (B-164031(3), dated January 5, 1972). These reports have been made public by the Chairman and copies have been furnished to officials of the Social and Rehabilitation Service (SRS) and to officials of the Department of Health, Education, and Welfare (HEW).

This letter report presents our views concerning the need for SRS to issue instructions to States which would implement the Department's policy relating to the payment for purchases of ineffective and possibly effective drugs under the Medicaid program.

INTRODUCTION

On December 11, 1970, the Surgeon General directed HEW agencies to establish the necessary procedures within 45 days to implement departmental policy prohibiting the use of Federal funds for the purchase of drug products classified as ineffective and possibly effective by the Food and Drug Administration (FDA). This policy was applicable to HEW's direct care programs, contract-care programs under its direct care programs, grant programs, and the Medicaid and Medicare programs.

In January 1971, the Medical Services Administration (MSA) of SRS notified all Associate Regional Commissioners for Medical Services of the departmental policy relating to purchases of ineffective and possibly effective drugs. MSA stated that program regulations were being amended to implement this policy for Medicaid. The Commissioners were instructed to notify Medicaid State agencies as soon as possible of the change in Federal policy so that they in turn could notify hospitals, nursing homes, pharmacies, physicians,

dentists, and any other providers of drugs, and begin making the necessary changes in drug formularies, drug purchasing guides and drug claims payment processes.

As of May 1, 1972, regulations have not been issued to implement the revised Federal drug policy for Medicaid.

SUBSTANTIAL FUNDS BEING EXPENDED UNDER MEDICAID FOR INEFFECTIVE AND POSSIBLY EFFECTIVE DRUGS

Officials who administer the Medicaid drug programs in Illinois, New Jersey, and Ohio, furnished us with computer printouts listing purchases by drug name, number of prescriptions, and amount paid during the first month of each quarter of calendar year 1970. We compared this information to FDA's November 1970 listing[1/] of drugs classified as ineffective and found the following.

--In Ohio about $196,000 was expended in January, April, July, and October for about 38,000 prescriptions for 106 drugs classified as ineffective.

--In Illinois and New Jersey about $99,000 was expended in July and October for about 21,000 prescriptions for 16 drugs classified as ineffective.

Although our identification of purchases of ineffective drugs was limited to these three States, similar conditions probably exist in other States. For example, the Mississippi Medicaid Commission--the single State agency administering the program--reported that in a study of drug usage from July 1, 1970, to February 19, 1971, about $89,000 was expended for about 22,000 prescriptions for three drugs classified as either ineffective (two drugs) and possibly effective (one drug).

State officials in Illinois, New Jersey, and Ohio informed us that they would continue to pay for such drugs until HEW notifies them that such drugs are no longer eligible under Medicaid. These officials further informed us that their States were not in a position to determine drug efficacy and if they were to declare such drugs not eligible for Medicaid they would be subject to strong criticism from pharmaceutical manufacturers.

1/ We did not compare this information to FDA's October 1970 listing of drugs classified as possibly effective; however, as discussed above, expenditures were made under Mississippi's Medicaid program for the purchase of drugs classified as possibly effective.

For calendar year 1970, Illinois, New Jersey, and Ohio reported drug expenditures under their Medicaid programs of about $50 million, of which about $25 million, or 50 percent, represented the Federal share. These expenditures accounted for about 12 percent of the total $425 million expended nationwide for drugs under Medicaid for calendar year 1970.

As discussed above, Ohio expended about $196,000 for ineffective drugs during January, April, July, and October 1970--an average of $49,000 a month. If these monthly expenditures for ineffective drugs were representative of the entire calendar year, then as much as $588,000 could have been expended in Ohio for these drugs during 1970. Considering the large amount of expenditures for Medicaid drugs during 1970--$425 million--and the probability that other States are purchasing ineffective and possibly effective drugs under their Medicaid programs, then nationwide expenditures for such drugs purchased under Medicaid could be substantial.

RECOMMENDATION TO THE ADMINISTRATOR, SOCIAL AND REHABILITATION SERVICE

Because of the substantial amounts expended for drugs under the Medicaid program--and the probability that a significant portion of these expenditures are being made for ineffective and possibly effective drugs--we recommend that SRS issue, without further delay, regulations to preclude the purchase of ineffective and possibly effective drugs under Medicaid.

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We shall appreciate receiving your comments and advice as to any actions taken or planned with respect to our recommendation.

Sincerely yours,

John D. Heller
Associate Director

Mr. John D. Twiname, Administrator
Social and Rehabilitation Service
Department of Health, Education,
and Welfare

Senator NELSON. It is incredible to me, with all the talk about unbalanced budget and wasting of Federal funds, that the Federal Government and HEW would not implement a policy immediately on prohibiting reimbursement for "ineffective" drugs. I cannot think of any greater waste of taxpayers money than that. I cannot understand why it takes them a year and a half to do it.

On that Mississippi study, it is interesting to note that among the 10 leading drugs arranged by total amount paid, five drugs are specified as "not recommended" or as "irrational mixtures" by the AMA's "Drug Evaluations 1971." Also, one drug among the 10 has been classified as "possibly effective" by the Food and Drug Administration. The Mississippi study states: "This indicates an overall negative relationship between popular usage of drugs and the evaluation of their efficiency and safety by the AMA Council on Drugs and the FDA. It is suggested that this represents a fertile area of professional education."

Go ahead, Mr. Staats.

Mr. STAATS. Continuing on the bottom of page 8. Since 1966 HEW has required that Federal funds be expended only for the lowest priced drugs consistent with acceptable standards of identity, strength, quality, purity, and effectiveness. Information we have obtained on the medicaid program in four States—this is what we've been talking about—shows usage of "ineffective" or "possibly effective" drugs. For example under the medicaid program we found that in Mississippi during a 7½-month period in 1970–71 nearly $90,000 was paid for two prescription drugs classified by FDA as "ineffective" and one as "possibly effective". In Ohio, during four months in 1970, about $138,000 was spent for 43 drugs classified as "ineffective" by FDA as "possibly effective". In Ohio, during 4 months in 1970, about $99,000 was spent on prescriptions for 10 randomly selected drugs classified as "ineffective". See appendix I for a summary of such drugs paid for in Mississippi, Illinois, Ohio, and New Jersey.[1]

In the 1971 hearings, the subcommittee expressed interest in the sources of information considered by physicians in making their selections of prescription drugs.

Two studies, one by Milton S. Davis, Ph. D. and Lawrence S. Linn, Ph. D., under a Social Security Administration grant and the other by a professor of pharmacy and pharmaceutical chemistry, University of California, shows that detail men were the most important source of information to physicians.

The American Medical Association (AMA) in 1971 published a manual entitled "AMA Drug Evaluations" to provide physicians with a convenient source of information for the sound use of drugs. This manual contains an evaluation by the AMA Council on Drugs regarding the effectiveness of drugs, information on the pharmacology and therapeutic indications of drugs, and preparations available, dosage, and generic and proprietary names.

The manual was distributed free to all members of the AMA—about 300,000, of which 170,000 are practicing physicians. Large numbers have also been purchased by the Government, pharmacists, physicians in residence and intern training, nurses, and medical students. In 1972, the AMA began a survey of 2,000 physicians to determine the extent to which this manual has been used. The AMA hopes to complete the survey in June 1972.

[1] See p. 8822.

We understand that a second edition of the manual is scheduled for publication shortly and will include changes designed to make it more useful including dosage guidelines, ingredients of over-the-counter drugs, and additional trade name items.

One requirement of an efficient supply system for prescription drugs is the development of specifications which can be used to encourage competition and assure controlled quality production of drugs with the desired therapeutic effect.

Both DPSC and VA develop specifications for items they intend to buy competitively. These items account for about 25 percent of all VA centrally managed drug items and 99 percent of all DPSC centrally managed drug items. The remaining items procured centrally by the agencies are designated for purchase from preselected sole sources. Data for preparation and development of DPSC specifications is obtained primarily from the manufacturers of drug products.

Although DPSC attempts to purchase virtually all of its drug items competitively, it has been able to do so for only about 51 percent of its approximately 1,100 drug items. The remainder, about 535 items, have been supplied by single sources.

Senator NELSON. What is the explanation for that? Is it because the specifications are drawn in such a way that, though there may be several of the same compounds in the market for the same purpose, the competition is eliminated because of the way the specifications are drafted?

Mr. STAATS. Well, we cover that a little bit later. I believe it will be partially answered.

Senator NELSON. All right.

Mr. STAATS. Of these, competitive procurement of 386 is limited by patents or by FDA regulatory requirements which preclude marketing without an approved New Drug Application or antibiotic certification. The remaining 149 items have no apparent legal or regulatory restrictions that would preclude interested firms from submitting bids on DPSC requirements. That narrows the field down, as you see.

In 1969 and 1971 DPSC made a widespread effort to develop competition on a large number of drug items but the responses were few and disappointing.

Basically DPSC's specifications require full compliance with the product standards and requirements set forth in the U.S. Pharmacopeia (USP) or National Formulary (NF). But additional requirements are often included to provide assurance that items manufactured will have needed characteristics for such requirements as potency and purity, from the time of manufacture to use.

Senator NELSON. I do not quite understand that. The U.S. Pharmacopeia sets a potency standard. The National Formulary sets a potency standard. Are DPSC's standards more narrow, that is, they allow a more narrow variation? I do not quite follow that.

It says "But additional requirements are often included to provide assurance that items manufactured will have needed characteristics for such requirements as potency and purity, from the time of manufacture to use."

Mr. STAATS. We have several examples here, Mr. Chairman, of requirements which are additional to the compendia to provide assurance that drug items manufactured have the necessary characteristics from the time of manufacture to use. For example, there are color standards.

These aid in detecting deterioration and resolving differences of opinion over color acceptability.

There is a time limit for solubility of dry powder in a vial. This is to assure that the powder will go into solution within the desired time.

There is a potential hydrogen, or ph, range. This is to assure greater stability over the shelf life.

The fourth example is consistency test requirements, to be sure that the item has the proper consistency at the anticipated use and storage temperature.

There are some other examples of this type that have been given to us to explain these additional specifications.

Senator NELSON. I would like to get this clear: Is the suggestion here that drugs that are procured meet USP standards at the factory or the manufacturer, but for some reason or another, by the time they are sent to wherever they will be used, they do not meet USP standards? Or are we talking about some additional specifications?

Mr. STAATS. Just the latter, Mr. Chairman. I think if I understand it correctly, what the USP and the NF will do is set the standards for public use. There are additional requirements which the military feels that they need for their own special requirements.

Senator NELSON. Are these requirements that the military feel they need or are these specifications submitted to the procurement agency by the drug company?

Mr. STAATS. I cannot answer that question.

Mr. CROWTHER. Generally, these are requirements that the military needs in order to maintain a particular consistency, potency, color, whatever it is, for a shelf life for a period of time at a particular location. Their concern is the point in time that the particular drug will be used, and it may take quite a length of time, either shipment or storage, before actual use.

Senator NELSON. I just want to be clear about what we are talking about here. The Defense Department testified on that point about a year and a half ago.

If you are talking about the question of being sure that it is appropriately packaged and protected for handling in Africa or such places as a jungle, which puts the drug to a different test than in this climate, that is one item. But I am trying to get at a question which we raised once before. We raised the question in the hearings in January and February of 1971, and we read at that time a quote from a speech which was given at the 21st annual meeting of the Defense Supply Association and was printed in the Review for November-December 1968. The speech is by Col. W. V. Breyfogle, Chief, Division of Medical Materiel, Defense Personnel Support Center, Defense Supply Agency, in which he addresses himself to the question you raised in your remarks here. I would like to read them for the record:

> The first problem that has been bothering us for some time is our inability to procure competitively. The policy of the Department of Defense, as it has been for many years, is that we will obtain competition on our procurements to the maximum extent possible. The major problem in our failure to procure competitively is the nature of the specifications that we are using. It has been said in the past that our specifications are too restrictive in nature and thereby restrict competition. There is some validity in the statement. Before you can understand why we have a problem of procuring competitively, however, you must understand how items are selected for standardization and stockage in our DSA depot system. The items that are standardized by the Defense Medical

Materiel Board and stocked in the DSA depot system were, for the most part, developed by industry or independent research organizations for use by the civilian medical profession and for sale in the marketplace. These items were presented to the Board for study and the determination was made that they would be stocked for use in our system. Therefore, the specifications that are developed of necessity describe a certain manufacturer's item. Most of the information used in writing these specifications was furnished by the developer. Therefore, even if we have a, pardon the expression, generic specification, in many cases it merely describes the generic equivalent of a brand name.

Now, have you dealt with that question, this specific problem in evaluating procurements?

Mr. CROWTHER. I think that——

Senator NELSON. I think that is a very damning statement by one of the Government's own representatives. It disturbs me that we have developed a pattern here of pretending that we are trying to get competitive bids, pretending that we are doing the best we can, then you have the procurement agency saying, "But the specs are drawn by the manufacturer." So they draw them in such a way that even though there are half a dozen other drugs on the marketplace by qualified manufacturers, they cannot compete because the specifications were drawn by somebody else.

Have you looked at that question?

Mr. CROWTHER. Yes, sir, we have, in the sense that we wanted to know what goes into the specifications at the time they are drawn, because the DPSC does draw up specifications for 99 percent of the items that they procure centrally. Of that group, they attempt to draw specifications on the generic equivalent of a drug. It is true that they have to draw heavily upon a manufacturer for information on protocols and similar things. Part of this information can come from USP and NF when it is available.

But we understand from even the USP and the NF people that much of the information they have obtained also comes directly from manufacturers, the problem being that it is the only source of information in many cases.

So I think it is right when you say that a significant amount of the information does come from manufacturers. The military does make a strong effort to attempt to write specifications where they can gain competition, and in instances, in order to take care of particular temperatures, long shelf lives or particular storage locations, they have to add to the requirements of the basic specifications for those items.

Senator NELSON. I am not talking about special cases in which the drug may have to be handled in unusual circumstances in different parts of the world. I am talking about specifications. Are there special specifications that end up here in the procurement process by the Defense Supply Agency which conform to Colonel Breyfogle's assertion. If there are, something ought to be done about that.

He has made this assertion and it has been published here for a year. We have heard no refutation. He is or was chief of the Division of Medical Material, Defense Personnel Support Center, Defense Supply Agency. It is a statement that has to be taken very seriously. To my knowledge, it has not been refuted.

This method of getting around competitive bidding disturbs me. Now, we are going to get to that question later. We raised the ques-

tion a year ago that under sole negotiated contracts the Government has the right to then go to the manufacturer after the purchase and examine the cost of production. I understood that the companies you have gone to have refused, even though it is in the contract, to let you look at their cost-of-production figures.

Is that correct?

Mr. STAATS. We were going to develop that point a little later.

Senator NELSON. So they have it coming and going all ways. They get the specifications drawn up by industry so somebody else can't compete. Then instead of having a competitive bid, they negotiate a bid. The Government is not in an arm's length deal because the Government does not know the cost. In the contract, they agree and understand that the law authorizes the Government to examine their production figures.

So now, that has apparently never been done. We raised the question with the GAO a year ago. You now go to the manufacturers, who have this marvelously, elaborately designed method of protecting them so they do not get a competitive bid, and you say to them, "Now, under the law, and in your contract, you have agreed that you will comply with the law and we can look at your production figures"; and the company says, "Go to hell."

Is that not the status?

Mr. CROWTHER. We have not looked at their cost records.

Senator NELSON. This is shocking to me. I think they ought to be hauled right into court. But I think you ought to take a further look at this business and see what kind of funny game they are playing with their specifications.

Have you tried, for example, taking a case where the Government agency ends up with a negotiated contract and compare it with the price paid by a big purchaser like New York City?

In other words, I am referring to a negotiated contract with the Federal Government, where you suspect that it may be a case where the specifications have been designed by the manufacturer, and then take a look to see if New York City does, in fact, have a competitive bid, and if so, what the difference is in price.

Mr. CROWTHER. No, sir.

Senator NELSON. I think there is a lot of negotiated bidding going on which is absolutely unnecessary, in which the Government, as the colonel suggests, is accepting the specifications supplied by the manufacturer. And then the drug companies have refused to let the GAO look at their cost figures, despite the fact that that is what the law says, despite the fact that that is what is in every contract that they signed. I suspect that the taxpayers are being cheated, and I think the drug firms ought to be hauled into court and fast.

Mr. STAATS. Mr. Chairman, if this information is available from large cities like Chicago or New York, I think it would be worth pointing out here that they would be buying most likely, today, the largest quantities in connection with medicaid. They would be making the procurement, reimbursed to the States. But this is an interesting idea and we will give it some thought.

I think we are talking at this point in our statement about the matter of specifications which would result in greater competition. That is really all we are dealing with at this point in our statement.

Senator NELSON. I understand. What I am curious about is the additional requirements. Expert testimony before this subcommittee indicates that if you meet USP and NF standards, that is all that is necessary. That is not to say that you cannot improve on the standards, but the compendial standards are the best we have at present.

Now if, after that, there are some additional specifications that the manufacturer slips in here so that as the Colonel says——

Mr. STAATS. I understand.

Senator NELSON (continuing). As the Colonel says, you end up buying another drug on a negotiated basis, despite the fact that there are other drugs that meet the USP——

Mr. STAATS. We have the same problem, Mr. Chairman, as you are expressing. We say here in the central paragraph of page 11 that only about 50 percent of these drug items managed by the DPSC and 60 percent managed by the VA are in the USP and NF. Then we say the use of manufacturer's data by DPSC in the development of its specifications could result in including requirements which are not essential to producing a comparable product or which do not contribute to its medical usefulness. That is the point.

Senator NELSON. Please recite the statistics again about those monographed in the USP?

Mr. STAATS. Only about 50 percent of the drug items managed centrally by DPSC and 60 percent of those managed centrally by the VA are monographed in the USP and NF.

Senator NELSON. The 50 percent that are not monographed to which you refer—are they prescription drugs?

Mr. CROWTHER. Yes, sir.

Senator NELSON. That is the second point that ought to be looked at. We have had testimony that everything that is considered medically useful as a prescription drug is monographed in the USP or NF. That might indicate that they should not be buying about half the drugs they are buying.

Is that not correct?

Mr. STAATS. Yes, if they are a prescription drug for a medically indicated purpose, the USP or the NF would have them unless they are new drugs that have not been evaluated yet.

Senator NELSON. That rather astonishes me. Would you give us a list of that 50 percent that are not monographed in the USP or NF?

Mr. CROWTHER. I am sure that we can get information on that, both from the miltary and the VA, that would give you an indication of which drugs they are.

Senator NELSON. Would you give that list to us? I cannot imagine that half the drugs they are using are not even mentioned in the USP or NF. Maybe they are spending half their money on placebos.

Would you give us the list so we can pursue it further?

Mr. CROWTHER. Yes, sir.

Mr. STAATS. We will get you whatever we can.

I want to point out in here that DPSC includes in its solicitation packages a Specification Analysis Sheet for potential suppliers to submit comments on the specification requirements and those that bidders claim are unnecessary or unduly restrictive are evaluated by DPSC.

(The subsequent information was received and follows:)

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-164031(2)

July 10, 1972

Dear Mr. Chairman:

During testimony before your Subcommittee on May 10, 1972, concerning the present status of competition in the pharmaceutical industry, you requested that we furnish for the record a list of the prescription drugs purchased centrally by the Veterans Administration (VA) and the Defense Personnel Support Center (DPSC) that are not monographed in the United States Pharmacopeia (USP) or the National Formulary (NF).

We found that 34 percent of the drug items purchased centrally by DPSC and 33 percent of those purchased centrally by the VA Marketing Center are not monographed in the USP or NF. Listings of the drugs which are centrally purchased by DPSC and VA, and included in the agency supply catalogs but not monographed in the USP or NF are provided as enclosure 1.

According to Defense Personnel Support Center personnel there are three primary reasons why they procure non-monographed drugs. These are:

1. NF and USP compendia monographs limited dosage forms as well as active drug ingredients. Many of the drugs procured by DPSC are in dosage forms useful to DPSC but are not included in the monographs. For example, in the case of Acetaminophen solution, the NF monographs an elixir with a usual dose of a teaspoon. While this is adequate for older children, fractional teaspoon doses are required for infants, but fractional doses are not monographed in the NF and this poses a problem. To provide prescribing physicians with dosage forms for children, DPSC stocks the solution in a calibrated dropper bottle which is not monographed even though the solution is the same substance which is monographed in larger doses.

2. Both compendia are conservative on combination drugs, and although many irrational combinations have been declared ineffective by the Food and Drug Administration (FDA) for good reasons, according to DPSC many combination drugs continue in medical use for equally good reasons, e.g., prenatal vitamin and mineral tablets, belladonna and phenobarbital tablets, oral contraceptive mixtures of estrogens and progestins. Some, such as the combination of chloroquine and primaquine--used to suppress malaria--may meet a peculiar military need which would not justify inclusion in the national compendia.

3. There is a time delay in getting items included in the compendia after approval by FDA and adoption by physicians. An example is Spectinomycin, recognized by FDA as the drug for gonorrhea but not monographed in either compendia. Another example is Ketamine Hydrochloride, an injectible anesthetic.

Also discussed during our testimony was the problem of developing independent and objective specifications for use in competitively procuring drugs. Additional information regarding DPSC specifications for prescription drugs, taken from a booklet prepared for the Inter-Agency Study for Medical and Nonperishable Subsistence Items, is attached for the information and consideration of your Subcommittee. (See enclosure 2.)

During hearings you quoted an extract from a speech made by Colonel W. V. Breyfogle in which he stated that most of the information used in writing the DPSC specifications was furnished by the developers of the drugs. Colonel Breyfogle was the Chief, Medical Materiel Division, Directorate of Procurement and Production, DPSC. Colonel Breyfogle is no longer with the military. Currently, he is the Executive Director of the Medical-Surgical Manufacturers Association which provides credit information to members of the association and training courses for dealer salesmen.

Officials of the USP and NF advised us that they also obtain their information for monographs initially from drug manufacturers and that there is no alternative source for such data. It is our understanding that the initial information used by DPSC in preparing specifications for drugs is obtained from the drug manufacturers because this is the only source for the information.

As you are aware, much of the data developed by drug manufacturers during all phases of research is proprietary and must be respected as such, including information furnished to FDA in applications for investigational new drugs and for new drug applications.

With respect to variations in prices paid by cities and by the Federal Government, you mentioned during the hearings that a manufacturer quoted a price to the City of New York under a competitive procurement which was one one-hundredth of the price charged to pharmacies. You asked whether DPSC and VA were buying this drug based on specifications designed by the manufacturer.

We found that both DPSC and VA are purchasing the drug, Meticorten, on a competitive bid basis under its generic name, prednisolone. Upon examination, we learned that since December 31, 1968, no purchases have

been made of this drug from the brand name manufacturer who furnished the initial data used in preparing the procurement specification. DPSC and VA have purchased the item at prices ranging from $.387 to $.457 per 100 tablets which was significantly less than the price of $1.20 per 100 offered by the brand name manufacturer to the City of New York.

We trust the information furnished in this letter will serve the purpose of your request and be of assistance in your further inquiries into aspects of drug procurement, such as the development of specifications.

Sincerely yours,

Comptroller General
of the United States

Enclosures

The Honorable Gaylord Nelson
Chairman, Subcommittee on Monopoly
Select Committee on Small Business
United States Senate

ENCLOSURE 1

LIST OF CENTRALLY PURCHASED DRUG ITEMS IN VA's MARCH 1, 1971 SUPPLY CATALOG WHICH WERE NOT MONOGRAPHED IN THE U.S.P.[1] OR N.F.[2]

	Item name	Number of line items[3]
1.	Acetazolamide Capsules	1
2.	Acetylcysteine Solution	2
3.	Aluminum Hydroxide Gel, Magnesium Hydroxide, and Simethicone Suspension	1
4.	Aluminum Hydroxide Gel, Magnesium Hydroxide, and Simethicone Tablets	1
5.	Aluminum Hydroxide Gel and Magnesium Hydroxide Tablets	2
6.	Aluminum Hydroxide Gel and Magnesium Trisilicate Tablets	2
7.	Aluminum Hydroxide Gel with Magnesium Hydroxide	1
8.	Aluminum Hydroxide Gel with Magnesium Trisilicate	2
9.	Aminophylline, Amobarbital, and Ephedrine Hydrochloride Capsules	1
10.	Antipruritic Liquid	1
11.	Antiseborrheic Liquid	1
12.	Arginine Glutamate for Injection	1
13.	Azathioprine Tablets	1
14.	Barium Sulfate, Diagnastic	2
15.	Benzoin Compound, Concentrate	1
16.	Brophenıramine Maleate, Phenylephrine Hydrochloride, and Phenylpropanolamine Hydrochloride Tablets	1
17.	Butalbital, Aspirin, Caffeine, and Phenacetin Tablets	1

	Item name	Number of line items
18.	Calcium Carbonate and Aminoacetic Acid Tablets	1
19.	Carbozachrome Salicylate Injection	1
20.	Carisoprodol, Caffeine and Phenacetin Tablets	1
21.	Carisoprodol Tablets	2
22.	Cephaloridine for Injection	1
23.	Chlordiazepoxide Hydrochloride and Clidinium Bromide Capsules	1
24.	Chlorphenesin Carbamate Tablets	1
25.	Chlorpheniramine Maleate Tablets, Modified	2
26.	Chlorzoxazone and Acetaminophen Tablets	1
27.	Colistin Sulfate, Hydrocortisone Acetate, Neomycin Sulfate, Thimerosal and Thonzonium Bromide Suspension, OTIC	1
28.	Cyclandelate Capsules	1
29.	Cyclandelate Tablets	1
30.	Cyclopentamine Hydrochloride and Isoproterenol Hydrochloride Solution	1
31.	Danthron and Dioctyl Calcium Sulfosuccinate Capsules	1
32.	Detergent, Surgical	3
33.	Dexbrompheniramine Maleate and Pseudophedrine Sulfate Tablets	1
34.	Dioctyl Sodium Sulfosuccinate, Sodium Carboxymethylcellulose and Casanthranol Capsules	1

	Item name	Number of line items
35.	Dioctyl Sodium Sulfosuccinate and Sodium Carboxymethylcellulose Capsules	1
36.	Dipyridamole Tablets	1
37.	Disulfiram Tablets	1
38.	Dyphylline Tablets	1
39.	Emollient Lotion	1
40.	Epinephrine Sulfate Ophthalmic Solution	1
41.	Fentanyl Citrate and Droperidol Injection	2
42.	Fluocinolone Acetonide Cream	3
43.	Furosemide Injection	1
44.	Gentamicin Sulfate Injection	1
45.	Griseofulvin Tablets, Modified	1
46.	Hematinic Concentrate with Intrinsic Factor Capsules	1
47.	Hemiacidrin Powder	1
48.	Hemorrhoidal Suppositories	1
49.	Hexachlorophene and Mineral Oil, Lanolated Water-Dispersible Lotion	1
50.	Isoetharine, Phenylephrine Hydrochloride, and Thenyldiamine Hydrochloride Solution	1
51.	Isoproterenol Hydrochloride and Phenylephrine Bitartrate Inhalation	1
52.	Isosorbide Dinitrate Tablets	3
53.	Lubricant, Surgical	2

	Item name	Number of line items
54.	Meglumine Diatrizoate-Sodium Diatrizoate Injection	2
55.	Meprobamate and Benactyzine Hydrochloride Tablets	1
56.	Meprobamate and Tridihexethyl Chloride Tablets	1
57.	Meprobamate Capsules	1
58.	Methenamine Hippurate Tablets	1
59.	Methocarbamol and Aspirin Tablets	1
60.	Methoxyphenamine Hydrochloride Tablets	1
61.	Methyprylon Capsules	1
62.	Mucolytic Detergent Solution	1
63.	Neomycin Sulfate, Hydrocortisone, and Polymyxin B Sulfate Suspension	2
64.	Niacin and Meclizine Tablets	1
65.	Nicotinyl Alcohol Tablets	1
66.	Nitrofurantoin Capsules	2
67.	Nitroglycerin Capsules	1
68.	Nystatin, Gramicidin, Neomycin Sulfate, and Triamcinolone Acetonide Cream	1
69.	Orphenadrine Citrate, Aspirin, Caffeine and Phenacetin Tablets	1
70.	Orphenadrine Citrate Tablets	1
71.	Oxtriphylline and Glyceryl Guaiacolate Tablets	1

	Item name	Number of line items
72.	Pancreatin, Bile Salts, and Pepsin Tablets	1
73.	Papaverine Hydrochloride Capsules	1
74.	Pentacrythritol Tetranitrate Tablets	1
75.	Pentazocine Hydrochloride Tablets	1
76.	Perphenazine and Amitriptyline Hydrochloride Tablets	2
77.	Perphenazine Solution	1
78.	Phenacetin, Aspirin, Hyoscyamine, and Phenobarbital Capsules	1
79.	Phenformin Hydrochloride Capsules	1
80.	Phenobarbital, Hyoscyamine Sulfate, Atropine Sulfate and Hyoscine Hydrobromide Tablets	2
81.	Phenobarbital and Belladonna Extract Tablets	1
82.	Polymyxin B-Bacitracin Ointment	1
83.	Potassium Aminobenzoate, Ascorbic Acid, and Potassium Salicylate Tablets	1
84.	Procyclidine Hydrochloride Tablets	1
85.	Propoxyphene Hydrochloride, Aspirin, Caffeine, and Phenacetin Capsules	2
86.	Propranolol Hydrochloride Tablets	4
87.	Psyllium Hydrophilic Mucilloid with Dextrose	1
88.	Reserpine, Hydralazine Hydrochloride and Hydrochlorothiazide Tablets	1

	Item name	Number of line items
89.	Salicylazosulfapyridine	1
90.	Senna Pod Extract	1
91.	Senna Pod Extract Solution	1
92.	Senna Pod Extract Tablets	1
93.	Sodium Aminobenzoate, Sodium Salicylate and Ascorbic Acid Tablets	1
94.	Sodium Colistimethate and Dibucaine Hydrochloride for Injection	1
95.	Sodium Dicloxacillin Monohydrate Capsules	1
96.	Sodium Phosphate - Sodium Citrate Solution	1
97.	Sodium Phosphate Solution, Diluted	1
98.	Theophylline and Glyceryl Guaiacolate Capsules	1
99.	Therapeutic Formula Vitamin Capsules	1
100.	Thiothixene Capsules	3
101.	Tolazoline Hydrochloride Tablets	1
102.	Triasyn B Capsules	1
103.	Triprolidine Hydrochloride and Pseudoephedrine Hydrochloride Tablets	1
104.	Trypsin, Chymotryspin and Ribonuclease Tablets	1
105.	Trypsin - Chymotryspin Tablets	1
106.	Urine Sugar Test Tablets	1
107.	Vitamin B Complex and Ascorbic Acid Capsules	1
108.	Vitamin B Complex and Ascorbic Acid for Injection	1

	Item name	Number of line items
109.	Whiskey, Straight	1
110.	White Pine Syrup Compound	1
111.	Wine, Sherry	1
112.	Zinc Bacitracin, Neomycin Sulfate and Polymyxin B Sulfate Ointment	2
		139

The above listed 139 drug line items represent 33.0 percent of the 421 centrally purchased drug line items appearing in the VA's supply catalog as of March 1, 1971.

Legend:

[1]The United States Pharmacopoeia--Eighteenth Revision, Official from September 1, 1970

[2]The National Formulary--Thirteenth Edition, Official from September 1, 1970

[3]Line items are those items for which individual Federal stock numbers have been assigned because of differences in dosage, strength, package size, color, or other product variations

Source: Comparison of the September 1, 1970 Official Compendia with the VA Federal Supply Catalog for Drugs, Biologicals and Official Reagents (FSC 6505) dated January 1971 and updated as of March 1, 1971.

ENCLOSURE 2

INFORMATION ON THE DEVELOPMENT OF SPECIFICATIONS FOR PRESCRIPTION DRUGS BY DPSC[1]

The development of specifications by the Medical Directorate, DPSC, is a complex function because there are few standards in industry that can be used for procurement purposes. Further, there is no Government agency that develops technical data on drug products which can be used to develop specifications for competitive procurement. Accordingly, a significant portion of the technical data for prescription drugs used by DPSC, the FDA, the National Institutes of Health, and the USP and NF must initially be obtained from the drug manufacturers.

The data included in DPSC specifications contain information on purity, safety, effectiveness, and stability standards. In competitive procurement comprehensive standards must be clearly established to eliminate misunderstandings. DPSC often finds it necessary to designate more stringent product standards than those applicable to commerce because of the possibility of long term storage and transportation under adverse conditions and the need to assure that the product will retain its safety and effectiveness until time of use. These needs tend to be more stringent to meet the many vicissitudes of military usage rather than civilian usage.

DPSC has learned that quality products cannot regularly be procured by simply referencing the USP and NF. DPSC has had many experiences where drug products complying with USP or NF standards, have not been suitable in actual use.

Bio-availability involves the release of medication from a dosage form that can be absorbed within the patient and assert its therapeutic intent. A growing list of drugs is being reported in medical literature which reveals that the same drug manufactured by different companies using different formulations and manufacturing and quality control conditions can yield a product that meets all current requirements, but does not give the anticipated bio-availability characteristics, such as blood levels and urine concentration. These products include tetracycline tablets, Sodium Heparin Injection, Sodium Warfarin tablets, Sodium Diphenyl Hydantoin Capsules, "Tedral" type tablets and Oxytetracycline Tablets.

On this subject, Dr. Edwards, Commissioner of the Food and Drug Administration, has stated that:

> "It has become increasingly apparent that drug products which purport to be equivalent and which may satisfy chemical and other analytical tests of equivalence, may not be therapeutically equivalent. We believe the key to the problem lies in what we refer to as bio-availability. We have found that comparable bio-availability frequently does not exist for products that are otherwise, so far as concurrently available methods are concerned, identical. We are not fully aware of the extent of this problem, but know that it exists particularly in tablet or capsule dosage forms. Among other factors, solubility of the drug substance, the amount of active drug in the dosage form, the excipients used, and certain aspects of the manufacturing processes play a role."

To ensure that such products will give suitable therapeutic responses, rather than merely comply with applicable laboratory tests, DPSC adds bio-availability standards to its specifications to assure that the drug products will yield the desired therapeutic effect.

Military specifications for ophthalmic ointments for over ten years have included standards for melting range, particle size, and limits

of bacterial contamination and a requirement that there be no pseudomonas. The USP and NF are now moving toward limiting the level of contamination in ophthalmic ointments, but there are still no other Government or industry standards for melting range and particle size even though contaminated ointment or ointment containing large crystals can cause additional damage to the eyes being treated.

Even though discoloration of pharmaceuticals generally is the initial sign of instability and degradation, neither the FDA nor the compendia are formally concerned with this problem so long as the products comply with the USP or NF. The military considers it essential that products retain their effectiveness until the time of use and accordingly DPSC has, for over ten years, included color standards in specifications for injections.

DPSC specifications for certain drug products require individual tablet assays of the product. The USP and NF are now requiring individual tablet assays to an increasing extent. DPSC also included requirements for dissolution rate of tablets and capsules long before this requirement was considered by the USP and NF. Currently, a concentrated effort is being made in pharmaceutical investigations to correlate the dissolution rate with bio-availability.

An important factor of military specifications are the requirements for accelerated aging tests and packaging and packing to ensure stability until the time the products are used.

The Medical Directorate of DPSC is a major contributor to the USP and NF in establishing standards for the country and has a member on the USP/NF Panel on Therapeutic Equivalency. Following are examples of

specification requirements developed by DPSC and later adopted by the USP or NF.

The DPSC specification for Aluminum Hydroxide Gel, USP, has included a bacterial count requirement since 1953. This requirement was included in the USP on September 1, 1970.

By March 1963, DPSC specifications for Phenacetin and Phenacetin-containing drugs included limits for two contaminants which had been implicated in causing kidney damage. These requirements were included in the USP in May 1963 and September 1965.

The DPSC specification for Carbarsone Tablets have included a limit on arsanilic acid, which causes a toxic reaction, since June 1962. The NF included this limit effective April 1971.

The DPSC specifications are used by the Veterans Administration and the Public Health Service with modifications generally limited to packaging and packing requirements. DPSC also receives requests for its specifications from States, cities and municipalities, and insurance companies.

An important by-product of DPSC's definitive specification requirements is that they furnish potential competitors with highly detailed standards of purity and quality not available from other sources. DPSC specifications have aided small business firms in producing and becoming successful contractors for drug items such as acetaminophen elixir and tablets; hydrocortisone cream; belladonna alkaloids and phenobarbital tablets; and lanolated, water dispersible mineral oil.

1
Source: DPSC booklet prepared for the Inter-Agency Study for Medical and Nonperishable Subsistence Items.

Mr. STAATS. We found that it was common for manufacturers to add requirements to those in the compendia (USP and NF) for products they sell to the general public. Comments by manufacturers and compendia officials and statements in professional publications explain that the additional requirements are added for controlling manufacturers' production processes and to ensure product quality and uniformity.

The DOD practice of establishing a specification for every drug item in its central supply system, while commendable for purposes of broadening and equalizing the competitive base and assuring the receipt of acceptable products, results in unnecessary technical and administrative effort when the policy extends to drug items which, because of legal or regulatory restrictions, are obtainable from only one source.

The VA, after its appearance before your subcommittee in 1970, began developing specifications for 115 sole source items for which competition appeared feasible. We were informed on May 1, 1972, that 36 final specifications had been issued as a result of this effort.

In our last appearance before the subcommittee we reviewed the quality control activities of FDA, DPSC, and the VA. We have noted (1) apparent overlap of these activities, (2) the acceptable results obtained by VA from its minimal inspection efforts supplemented with the use of FDA's testing services, and (3) that substantial military procurements are made each year from Federal Supply Schedules and local vendors—about $21 million in fiscal year 1970—based only upon the quality assurance work of the FDA. We suggested in our statement that consideration should be given to assigning sole responsibility to FDA for inspecting drug contractor plants and testing products and quality control procedures.

So far as we are aware no action has yet been taken to consider the advisability and feasibility of centralizing drug inspection along these lines. The estimates of manpower requirements and administrative costs, including inspection activities, involved in the DOD and VA procurement systems for drugs are provided in appendix II.[1]

In our previous statement we suggested that closer cooperation between VA and DPSC could result in substantial savings in the procurement of drugs. Our subsequent review work confirms that improvements can be made.

We found little exchange of requirements data or coordination of procurements for drugs which are centrally stocked by both organizations, or those centrally stocked by one system but procured from either Federal Supply Schedule contracts or from local vendors by the other system. The VA negotiates several special contracts which exclude military activities and, in some cases, other civilian agencies from using them. The military uses Federal Supply Schedule contracts for its requirements for items in these special contracts and pays prices higher than those in the contracts. The lack of adequate cooperation and coordination has resulted in increased drug costs to the Government.

The VA has an agreement with DPSC under which it can buy drugs from DPSC for its central stocks. In fiscal year 1970 purchases from DPSC were only about $206,000. One drawback to this agreement is

[1] See p. 8824.

the add on of surcharges by DPSC and the VA Marketing Center for drugs supplied to VA field stations. DPSC charges the VA Marketing Center its standard price (cost plus 7 percent) plus a 3½-percent surcharge for packing, handling, and crating costs for medical items shipped from DPSC depots; a total add on of 10½ percent. For items shipped directly from a vendor to the VA depot, DPSC adds a 1-percent surcharge, for administration, to the cost of the items. The VA Marketing Center adds an 8-percent surcharge on all items bought from DPSC to recover its operating costs.

VA field stations do not order directly from DPSC because the VA requisitioning system requires the stations to submit requisitions, other than for local procurements, via the VA Marketing Center. As a result, certain drug items are purchased by the field stations from either the Federal Supply Schedule contractors or local vendors at substantially higher prices than they could obtain them from DPSC. The flow of drug items from DPSC depots or manufacturers to VA depots and then to VA field stations is cumbersome and results in extra handling and added transportation costs.

Even though the addition of surcharges discourages procurement from, or through DPSC, we found many cases where ultimate prices to the VA stations would have been significantly lower than the prices paid by these stations. For example, if VA field stations had purchased Aristocort (8-ounce jar) directly from DPSC the cost would have been $39.85 per jar, with all surcharges, instead of $46.07 paid on the Federal price list. Total savings for this drug item alone during calendar year 1970 would have amounted to over $4,600. Further, even with the 8-percent surcharge of the VA Marketing Center a savings of $3.03 per jar would have been realized.

The military has made no formal arrangements to allow its activities to purchase from VA depots drug items which are not centrally managed by DPSC. During the period July 1, 1970, to December 31, 1971, military hospitals purchased about $550,000 of the drug Macrodatin from the Federal Supply Schedule at about $275,000 more than it would have cost to buy from VA at the contract price. This item has now been approved for inclusion in the DOD central supply system and a contract has been awarded by DPSC at prices comparable to those negotiated by the VA. But, until delivery is received under the DPSC contract, military hospitals will continue to purchase the item at the higher Federal Supply Schedule price.

Our examination of invoices and sales records for purchases totaling about $6.2 million from four manufacturers during a recent 2-year period showed that the Government incurred excess costs of about $721,000 because (1) many drugs were purchased by local installations at prices which ranged as much as 100 percent higher than prices available to DPSC and VA Marketing Center, (2) prices paid for the same drugs differed between DSPC and VA Marketing Center, and (3) there were purchasing weaknesses at VA and DPSC field stations.

Our review of DPSC and VA procurement records for 43 identical drug items purchased by both agencies within 30 days of each other during fiscal years 1970 and 1971 showed excess costs of at least $246,000—split approximately equally between the VA and DPSC—resulted from the differences in prices paid for these items.

From 1964 to 1971 several studies have been made by the Defense Supply Agency and the General Services Administration, separately and jointly, to determine the feasibility of a single agency having Government-wide responsibility for management of various categories of supplies including medical materials. The studies indicated differences of opinion on the feasibility of consolidating the procurement and management of medical items. Decision on this has been deferred pending the outcome of a current study.

The Office of Management and Budget in January 1972 initiated a joint study by DOD, the General Services Administration, HEW, and VA to determine the lowest cost system or combination of systems to achieve maximum economy in meeting Government-wide needs for medical material, including drugs.

We believe that procurement costs can be reduced significantly by better cooperation and coordination between the VA and DPSC. However, the differences in their procurement practices, such as the respective volumes of procurements of brand name and generic items, use of specifications, and inspecting and testing requirements, must be reconciled to insure that drugs will be purchased at the lowest possible cost to the Government.

Studies by HEW covering world drug prices in 1970 and 1971 show that prices charged by manufacturers to druggists in the United States were generally higher than prices charged to druggists in other countries for the same drug. Recent comparative data is provided in appendix III.[1]

Although drugs of foreign origin are frequently priced lower than comparable drugs of domestic origin the following factors influence procurement of the cheaper drugs:

1. FDA's New Drug Application (NDA) requirements. DOD and VA normally will not procure drugs which require an NDA approval from firms which do not have them. Foreign firms sometimes do not have the required NDA approval.

2. Inability of some foreign firms to satisfy American manufacturing standards for such matters as quality control and good housekeeping.

3. Possible legal action on patent infringements.

4. Implementation of the Buy American Act (41 U.S.C. 10 a–d).

For evaluating bids or offers of foreign firms for their products against offers of domestic products, civilian agencies are required by the Federal Procurement Regulations, which implement the Buy American Act, to add to foreign bids or offers a price differential equivalent to 6 percent, inclusive of import duties, or 12 percent, inclusive of import duties, if the low domestic bid is a small business or distressed labor area concern. Military departments generally add a price differential of 50 percent to bids or offers of foreign products, exclusive of import duties, for evaluation purposes, when a 6 or 12 percent differential, plus import duties, does not result in a greater evaluated price for the foreign products. This policy, I might add, applies all across the board in all Defense procurements, not just in this area.

The effect of adding these price differentials can be seen in a procurement of 310,464 units of tetracycline hydrochloride tablets by DPSC in April 1971. The low foreign bid was 85 cents a unit, excluding duty, and the low domestic bid was $1.19 a unit. After an evaluation using

[1] See p. 8827.

the 12 percent factor plus duties, the foreign bid was still low. But, an evaluation using the 50 percent differential resulted in the domestic bidder being low and receiving the contract. After considering discount and freight, this procurement cost almost $107,000 more than it would have from the foreign source.

Because of the above influences neither DPSC nor VA normally make any special effort to develop foreign sources for their drug requirement even though prices of drugs of foreign origin, as a general rule, are lower than domestic prices. Efforts to obtain bids from foreign sources are limited to the actions normally taken to obtain bids from any source, that is, solicitations are sent to the few foreign firms on the bidders list at the time they are sent to other potential suppliers and the proposed procurements are announced in the Commerce Business Daily. The VA also sends copies of its solicitations for items to be procured competitively to publishers of a number of marketing publications.

In November 1971 VA wrote to several Canadian firms inquiring whether they marketed three specific drug items in the United States. Four of the eight replies said that the firm did not yet have the necessary NDA approval and the others said that they did not market or manufacture the items.

Appendix IV shows the drug items procured from foreign firms in the years 1968 through 1971 by DPSC and VA.[1]

I would like to turn now to the policies and regulations and practices which relate to medicaid and medicare.

The current HEW policy for the payment for prescription drugs under the medicaid program does not require uniform procedures and practices to be followed by the States. Also, the use of a formulary is optional, but where one is used standards for quality, safety, and effectiveness must be set and supervised by professionals. The Social and Rehabilitation Service is responsible for administering the medicaid program.

The formulary system should be broad enough to enable physicians and pharmacists to select high quality drugs of recognized therapeutic value for the treatment of any medical situation. Approximately 20 States have attempted to control the cost of drugs in their medicaid programs through the use of formularies. Attempts have also been made by the States to limit certain drugs in their formularies to generic names.

In November 1970 we reported to the Congress that significant savings could be available to the States and the Federal Government if physicians were to prescribe lower-priced, chemically equivalent drugs instead of higher-priced brand name drugs. We pointed out that the HEW Task Force on Prescription Drugs reported in December 1968 that of the 409 brand name drugs most frequently prescribed for elderly persons in 1966, chemical equivalents for 63 of these were available at lower costs. These 63 drugs accounted for about one-fourth of the prescriptions for the 409 drugs, and the task force computed that prescribing the lower cost chemical equivalents would have resulted in annual savings of $41.4 million.

The HEW task force reported also that physicians were not always aware of low-cost, chemically equivalent drugs produced by competing manufacturers or were reluctant to prescribe such drugs until their safety and effectiveness had been proven.

[1] See p. 8831.

Regulations for part A of medicare set forth two basic requirements that must be met in order for a drug or biological to be included as a covered hospital service. It must (1) represent a cost to the institution in rendering services to the beneficiary, and (2) either be included, or approved for inclusion, in the USP, the NF, the U.S. Homeopathic Pharmacopoeia, or New Drugs or Accepted Dental Remedies (except for those unfavorably evaluated), or approved by the Pharmacy and Drug Therapeutics Committee (or equivalent) of the medical staff of the hospital for use in the hospital. There are no medicare regulations concerning the use of generic versus brand name drugs.

Payments for drugs under part A are made on the basis of reasonable cost. Payments are audited by fiscal intermediaries under contract to the Social Security Administration in accordance with the "prudent buyer concept." Under this concept, the Government pays the amount a prudent and cost-conscious buyer would pay for a given item or service.

Under part B of medicare, coverage of drugs and biologicals is limited to those drugs and biologists (except for insulin) commonly furnished in physicians' offices which cannot, as determined by regulations, be self-administered. Thus, a drug or biological is reimbursable under part B of medicare only if it is of a type which is normally not self-administered.

Medicare carriers are responsible for determining whether the services in a given case are reasonable and necessary. In making its evaluation, the carrier is expected to take into account accepted standards of medical practice in its service area. Because accepted standards of medical practice vary from one area to another, the Social Security Administration has issued general guidelines leaving it to the carrier to develop more detailed guidelines which reflect accepted patterns of care in its service area.

This concludes my statement, Mr. Chairman. I have attached several appendixes to my statement. If agreeable, I would like to suggest that these be included as part of our statement.[1]

Senator NELSON. Has the GAO attempted to make any estimate of the amount of money wasted by poor purchasing practices? I am not talking so much about buying drugs they ought not to buy, but the varying prices that are paid by the different agencies for the same drug? No attempt has been made to estimate that?

Mr. STAATS. Not on a Governmentwide basis. We have made these comparisons of the type we have referred to in our statement. On a Government-wide basis, we do not have anything that we can describe as a total amount of money wasted or which could have been saved if there had been proper coordination and use of VA's facilities by DPSC or vice versa.

Senator NELSON. I would like to pursue the question I raised previously about the authority of the Government in negotiated contracts to examine the cost figures of the suppliers after the purchase, which is what I understand to be the law. This applies not before, but after, the purchase; is that correct?

Again, in January and February hearings of 1971, part 20 of these hearings, on page 8018, I raised the question with you about this authority. It was agreed—I do not want to read all this material—that the General Accounting Office has authority under the present

[1] See pp. 8822–8831.

law to examine all negotiated contracts for drugs and medicines, and to require price and cost information from the suppliers who are supplying these medicines.

Then I raised the question of whether you intended to use the authority in this law. The answer by Mr. Ahart was: "As the Comptroller General mentioned, we are continuing our work in examining drug procurement systems; and as a part of that work, we will be giving consideration to utilizing the authority which we have under the provisions of the 1951 act which Mr. Shnitzer mentioned, and actually, examine the costs of certain of the drug manufacturers. We have not decided how far we are going to go on this and the final plans are indefinite. But this will be given consideration as part of this continuing work, and I am sure some of it will be done."

I commented: "I realize it would be a very complicated matter, but it would seem to me that all companies ought to be served notice that the GAO is going to utilize this statute. I think we ought to take a look at some of these costs. I think it would be a service to the taxpayer to take a look at that, and I am glad that you have it under consideration."

Now, my understanding is that you, in fact, pursuant to authority under the statute, did go to some manufacturers and seek to get their production costs respecting drugs they supplied on negotiated contracts. Is that correct?

Mr. STAATS. We have had discussions with some manufacturers with respect to the costs of their drugs. The main difficulty that we have encountered is that there are indications that the manufacturers with whom we have had discussions do not allocate major overhead costs on a product basis. In other words, it would be impossible to develop from their internal accounts what their costs are with respect to an individual drug. They just do not keep them this way.

I do not think there would be any problem of looking at their total costs, at how they allocate these costs with respect to the costs of drugs sold. That is, I am thinking here about research and development, with respect to merchandising, marketing, with respect to professional services, and things of this type. The only problem so far that has been presented is in connection with inquiries that relate to costs for an individual drug. And they have just never made allocations of all overhead costs on this basis. So this is the problem that we have encountered.

Now, I do not think we would have much difficulty, and as I have indicated, if we were to approach them in terms of a cost allocation system, I think it may be possible to develop some comparisons as to how much goes into advertising, R. & D., and various costs of this type.

We would have to more or less have our own definition as to cost allocation methods here.

Senator NELSON. So you tell me that these great——

Mr. STAATS. But by individual product, I do not know quite how you would go about it. We would have to draw, again, our own guidelines. We would have to go in and examine every voucher and related charges and determine their proper allocation.

Now, the other side of this question——

Senator NELSON. Well, I just want to raise a question. That puzzles me because we have been told so often about the great sophistication

of methods of accounting, their capacity to decide whether they are making a profit or not, and on what they are making a profit. Do you mean to say that the drug companies really do not know whether they are making money on this drug or that drug, that they are just pouring out a lot of drugs, and at the end of the year, they are making a great profit, but they can just not tell us which one is profitable?

Mr. STAATS. They know what their total business is. They know what their profit is on pharmaceuticals and other products, I am sure of that. That is all public knowledge.

The statement has been made that product line cost is a matter of proprietary information which deeply affects their competitive position in the market.

Senator NELSON. Well, let's pursue that point. I understand that if there is a negotiated contract, the 1951 law authorizes the Government to examine the supplier's books to determine what are the costs of production.

Mr. STAATS. No, the truth in negotiation law. You are referring to 87–653, the Truth in Negotiations Act of 1962.

Senator NELSON. Oh, the 1951 is the applicable statute; is it not?

Mr. STAATS. Yes.

Senator NELSON. Can you tell me exactly what that law authorizes, what the authority is in that law?

Mr. STAATS. I think at the time the contracts are negotiated today, the basic law involved is the Truth in Negotiations Act of 1962, which generally requires in the case of negotiated contracts, that supplier furnish the Government contracting officer with all of his known costs: His labor costs, his equipment costs, his material costs, and things of this type.

Now, Mr. Shnitzer can tell you why that law does not apply in this case.

Mr. SHNITZER. Well, the Truth in Negotiations Act——

Senator NELSON. I want to know what law does apply; I do not care what does not apply.

Mr. SHNITZER. Mr. Chairman, I think we have to go back to the 1951 act, which is the act that you referred to. That act requires that any contract negotiated under the authority of either the Federal Property Act or the Armed Services Procurement Act, which would be the two basic statutes I am talking about, include a provision to the effect that the GAO shall for a period of 3 years after final payment, have the right to examine the records, essentially, of the contractor relating to costs.

Senator NELSON. Now, the GAO has a right to examine the records?

Mr. SHNITZER. The Comptroller General or a duly authorized representative; yes, sir.

Senator NELSON. All right.

Mr. SHNITZER. The statutory authority says that each contract, which comes within the ambit of what I am talking about here, shall include such a provision; and, as a matter of fact, such a provision is included in the standard boilerplate. As a practical matter, there would be no contract without such a provision.

Mr. STAATS. But that has nothing to do with access by the contracting officer to information at the time the contract is negotiated. That is the point I was making a while ago.

What Mr. Shnitzer is talking about is after the contracts have been awarded, after the goods have been delivered, access to records post facto, you understand.

Senator NELSON. That was my understanding. That is the testimony that I read from a year ago, that it had to be after the negotiated contract had been settled; that at that stage, the GAO has the authority under the law, and it is agreed as part of the boilerplate in each contract, to go look at the books of the company to make a determination of what the cost of production of that drug is.

Is that correct?

Mr. SHNITZER. Yes, sir; directly relevant books, documents, paper, and records, I think it is.

Senator NELSON. If they tell the GAO that they do not keep product lines, maybe your accountants can teach them something by going in and breaking it down and improving their accounting system. Do you not think that would be worth while?

I think a good accounting system can do it. I just do not believe companies when they say, we are producing seven products, we are selling $80 million of this and $20 million of this and $10 million of this, the compounds cost us this amount, our overhead is this amount, it takes this long to produce this product, and so forth and so on. I do not believe them. I just think they are lying when they tell you they cannot give product line costs.

But if they are not, if they are that incompetent, it seems to me that under the law, the GAO ought to go in and maybe you can help them become a little more efficient.

I think they are lying to the American public. I think it is as simple as that.

Mr. STAATS. I think a very important point——

Senator NELSON. Pardon?

Mr. STAATS. I do not see how we can go in and tell the contractor what kind of accounting system he is going to use.

Senator NELSON. You do not have to. But the law allows you to look at their costs. I think you can reach a conclusion yourself.

Mr. STAATS. We do have new legislation which will have a bearing here which has to do with cost accounting standards. I am a Chairman of a separate agency which is called the Cost Accounting Standards Board. This board has been in operation now for about a year. We have already promulgated standards, and we will be promulgating more standards.

Now, these will be relevant to what you are talking about. And I think it will have a significant bearing on your question.

But as of now, I do not know how we can go in and tell any drug manufacturer that he has to keep his accounts a certain way except under the cost accounting standard framework.

Senator NELSON. I did not suggest that you tell them how they keep their accounts. I suggest that you take an example of one of these and use the law. The law says you are entitled to look at the books. It seems to me you ought to send the team in and see if you cannot figure out and make a good judgment as to what the cost is. I do not quite believe that they cannot tell what they are making money on and what they are losing money on. I do not believe it.

You know, very frequently, they just drop something out of their product line because they are losing money. How do they decide if they are losing money if they cannot decide what they are making money on? I do not believe it.

But it seems to me we ought to use the law when we are having negotiated contracts time after time. We know that the public is being exploited on these things. We have a long record here of companies manufacturing in this country and selling their drugs in this country for five times what they sell it for in Europe. They manufacture it, package it, ship it to Europe and charge one-fourth as much. Well, if they do not know what it costs to produce it, how can they decide that they can sell it for one-fourth as much and still make a profit?

We have any number of cases where they are putting drugs into the retail marketplace, our 21 volumes are loaded with this type of material, where they are charging the pharmacists a high price and then just look at the bids to New York City, where they will be charging them 1/20 or 1/100.

We have a case of firms selling to New York City for 1/100 of the price they charge in the retail market, and they are glad to have the business. Yet they are outbid by somebody who bids one-third as much as their 1/100.

Now, I do not know how they can bid to New York City 1/100 of what they are charging in the retail marketplace if they do not know which product they are losing money on. It seems to me you ought to look at their books.

Which company is it that refuses to let you look at its books?

Mr. STAATS. We have not had a formal refusal from any company. We have not really felt that from the point of view of the major savings that could be achieved in the drug procurement area—the Government here is, after all, less than a 5 percent customer of the drug industry directly, when it comes to direct procurement—we have not felt that this was the most productive way to get at reduction of costs to the Government in that $240 million area. We think the greater payoff is in the area of improving the coordination among the agencies, improving the procurement management. We have felt for several years, have testified before the Finance Committee 3 or 4 years ago, that for the purpose of increasing competition, the generic drug route is the most profitable aspect of this problem. I would hope that this committee would—I believe you do—support that. But if you want to get competition, you have to have common specifications. That is what we have learned in other areas of Government procurement. You cannot get competition unless you get common specifications and go out and get some competition. And you are not going to get that until you move down the generic drug route.

Senator NELSON. I agree with that, but you do have the Government engaging in negotiated contracts, apparently for drugs that are available from several sources, excepting that the specifications are designed by a producer in such a way that you eliminate the other competitors. How widespread that is, I do not know.

Mr. STAATS. I am not saying that that is a good idea, but I would prefer to see us focus on what a total output is from a drug manufacturer as to what his costs are in relation to what it costs the Government.

I do not think, frankly, from what I know about the drug industry, that we are going to get very far just trying to take a dramatic single product line and show that that manufacturer has made a lot of money off it where, in other cases, he may have lost money. I think we should approach it from the standpoint of total sales to the Government on negotiated contracts. We might have a better chance of getting cooperation.

Senator NELSON. How would they know they lost any money? Under their accounting system they cannot tell you they made any money. How would they know they lost any?

Mr. STAATS. Well, you can find this out.

Senator NELSON. You and I just do not agree on that. I think that when we put the provision in a negotiated contract, we should use it. It was not put in the statute to be honored in the breach. I think we ought to use it. You say $240 million is involved. Maybe it is not a large item. I think there are a lot of other items in here that you have mentioned that ought to be pursued. But I do not see why we should not just take a look at one of those and let's just find out.

Have you done this? Have you taken a product that is procured, and which is available from several manufacturers under different brand names—and possibly a generic name—and studied to find out whether the negotiated price by the Government was substantially higher than the price that could be gotten from these other companies?

Mr. STAATS. Well, now, I am not sure I understand your question, but in no case do I know that the Government has paid more than has been paid by another customer. It has been less.

Senator NELSON. I am not talking about another customer. I am talking about the situation referred to by Colonel Breyfogle that I read to you earlier, about the specifications being prepared by a manufacturer so no other supplier can meet them. Of course, if you have a drug that is patented and there is a sole supplier in the whole United States, you cannot compare prices. But when there are several suppliers of a particular compound for which the Government has a contract, have you ever tried to find out whether or not it is being sold, for example, to New York City at a lower price? In other words, if there are several suppliers, why should you ever negotiate a contract? Why not bid?

It seems to me we ought to take a look at every negotiated contract where there are several manufacturers, two or more manufacturers of the product, and find out why the contract is negotiated. If it is negotiated for the reasons suggested by the colonel, then I think we ought to put a stop to that.

Mr. STAATS. I am not suggesting that I agree with what you have read here.

Senator NELSON. Well, he is the procurement officer.

Mr. STAATS. Well, again I come back, until you can get common specifications where you can go out for competition, I do not know, quite honestly, what alternative the Government has except to negotiate contracts.

Senator NELSON. Well, this is the exact point. I am saying that what Colonel Breyfogle, Chief, Division of Medical Materiel, Defense Personnel Support Center, Defense Supply Agency, here is saying is that specifications are being supplied by the manufacturer so that the rest

of the competition is eliminated. That is what you have to get at. And he says that it is because frequently specifications are designed by a particular manufacturer.

All I am saying is that if a drug meets USP standards or National Formulary standards, you should investigate the possibility that other specifications are being infiltrated in here in order to eliminate the competition?

Now, if it is a question of being able to handle it under adverse climatic conditions, as in the jungle, that is another problem. I am not talking about that. I am talking about a negotiated contract for supplying our forces here in the United States or Europe or VA. When there are several manufacturers, why should there be a negotiated contract?

Mr. STAATS. We are in agreement with you on this point, Mr. Chairman. That is why we brought it out in our statement and that is why we said there are dangers here unless these are truly required for the needs of the military services, such as the climate conditions that you just referred to.

Senator NELSON. Well, if this statement of Colonel Breyfogle means anything, he is addressing himself to a different situation from that.

I do not really understand. We raised this question a year ago. You thought it was important enough to take a look at it so that you go and have conferences with the manufacturers. Then the manufacturers turn you down in informal conferences, at least. And now you are saying that you do not think it is worthwhile doing in the first place. Well, why bother to confer with them if you did not have it in mind that it might be worthwhile to find out what their costs were on a negotiated contract?

Mr. STAATS. Well, I think we are interested in getting what we can if it is going to be meaningful. But if it is not going to be meaningful, if the accounts are not kept in such a way that we can draw any meaningful conclusions, I do not see that it is anything but a waste of time.

Senator NELSON. But they just turned you down. They did not let you look at their books, did they? How do you know whether there is——

Mr. STAATS. I do not think that would be quite an accurate statement.

Senator NELSON. I am asking you.

Mr. STAATS. It is a good question. But the only problem that we have encountered——

Senator NELSON. The only what?

Mr. STAATS. The only problem that has been raised in connection with this is to try to break down the total costs by product line, by individual drug. I do not think the problem would be as great if you wanted to take a company's drug sales for, say, the DPSC or the VA. It is when you try to break it down by product line and make the information public so that Company X knows exactly what Company Y's costs are that you have a very serious proprietary data issue. This is a matter of law also.

Now, maybe you are not suggesting that we ought to make product line information public. I am not sure what you are suggesting.

Senator NELSON. I do not know what the intent of Congress was in passing the law and I would not want to make an off-the-cuff judg-

ment of it. But it would seem to me that at the very minimum, GAO ought to make the determination for itself as to whether or not a profit is being made and its extent.

There is nothing in the statute, I take it, for any recapture, anyway. It is just to inform us, inform the Government, whether or not or what kind of profit is being made. Is it not? Am I correct on that? So that you can be forewarned for future negotiations, right?

Mr. STAATS. The purpose of the authority as included in the contract is to enable on a postaudit basis to go in to see whether the charges made against the contract are fair and reasonable.

Senator NELSON. Right.

Mr. STAATS. Now, if I understand what you are suggesting, it is that we ought to, in spite of the proprietary data information question, make public procurement on individual drug by drug itemization. And this is where we have the proprietary data question.

Senator NELSON. Well, I was not making any specific recommendation as to what ought to be and what ought not to be made public. You represent the Congress, which represents the American people, who pay the money. We ought to know when we negotiate a contract whether or not we are getting a fair price. That is the purpose, as I understand it. And if the price is not fair, you ought to negotiate a better price the next time, or negotiate with somebody else, or get a competitive bid, or go to Europe, which we have done once in awhile.

Mr. STAATS. Not very much, probably not as much as we should.

Senator NELSON. No, not as much as we should, when in fact, domestic prices are set artificially high. We have several tools, but the problem that bothers me is we do not seem to use them.

Now, are you saying that if a company is supplying several drugs—two or three or four or five different drugs—to the Government over a period of time, you think it is feasible to look at that negotiated price and then go look at their books?

Mr. STAATS. In terms of the total package, it might.

Senator NELSON. And then make some judgment as to whether or not you have a fair price? You are saying you can do that?

Mr. STAATS. I think it might be possible.

Senator NELSON. Well, what are the companies——

Mr. STAATS. Mr. Chairman, again, though, I thing we are on your side in terms of what the objective is here. But I still have the feeling that we are putting the focus on the wrong thing.

We have been advocating for several years in testimony before this committee and before the Senate Finance Committee trying to get common specifications so you can get a broader procurement base. You cannot get advertised procurement if there is only one supplier. You have to go sole source.

Senator NELSON. Well, why have only one supplier? One supplier because of the way the specifications are drawn?

Mr. STAATS. Sure, in many cases.

Senator NELSON. We know we have a hundred cars in the marketplace——

Mr. STAATS. You recognize as we do that in the case of medicare and medicaid, the physicians and the intermediaries, the ones that are involved here, this is much more difficult to do unless the Government prescribes the way these drugs are to be procured.

Senator NELSON. Or establishes a formulary.

Mr. STAATS. One of the reasons we have suggested that the FDA ought to play a part in this picture is that we think the FDA, as an independent agency separate from the procurement agencies, could play an important part in setting these kinds of specifications.

Senator NELSON. I think all these things are important. I just think that, like anything else, some of these are more important than others. But what, however, does concern me is that we appear to negotiate too much. What is the total amount of negotiated sales by all Federal agencies?

Mr. STAATS. A sizable portion of the $240 million figure, in 1971.

Senator NELSON. Is negotiated.

Mr. STAATS. Yes.

Senator NELSON. Now, it seems to me that this may not be the biggest item, but if it is almost a quarter billion dollars per year, that is a billion dollars in 4 years; it seems to me we ought to check to find out whether we are getting value received. You are saying that you do not think this is as important as other things. I would not quarrel with that, but I think it is important to do something about, since apparently we do not do it in drugs. We never have, have we? Have we ever taken a case in the field of drugs and used that cost statute to find out whether we are getting a fair bargain?

Mr. STAATS. No. Factually, what you are saying is correct.

Senator NELSON. Then you are saying that you would raise several problems if you did it by product line, especially if you made the figures on the product line public. Well, reserving judgment about that—I do not know what the law is on the subject of making the information available—it seems to me we ought to look at some of these things on product line. But you are saying that you can do it by just looking at the whole cost of the company.

Well, supposing the company is supplying just one item.

Mr. STAATS. I do not know of any such company.

Senator NELSON. You mean the companies in question are negotiating on a number of drugs?

Mr. STAATS. Yes, sure.

Senator NELSON. What have the companies said to you? Have you asked them to look at their cost figures so that you can make a judgment overall?

Mr. STAATS. Not on this basis, no. As I told you in the letter which I sent to you on January 18, we were pursuing other avenues here to see whether we could not get a better fix on how we could reduce these drug costs.

We have not closed any doors in this area, Mr. Chairman. I do not want to leave the impression with you that we have. But we are pursuing all of these avenues. I think we are going to have to explore all these avenues before we are able to say to you that we have reached a conclusion.

Senator NELSON. Do you expect to take some action on these negotiated contracts and requests for their production data so you can make an overall judgment? In other words, they must have some cost data. How do they know what price to charge for the product?

Mr. STAATS. You have to recognize that again, the Government here is a very small customer, a very small customer—in most cases, less than 3 percent, or certainly less than 5 percent. So the companies are

concerned with the commercial market. This is not without some protection to the Government. If they have to meet their competition in the commercial market, which represents 95 percent of the business, and the Government gets a discount from any other published price, it is a little hard on the face of it to say that the Government is not getting good prices.

Senator NELSON. Well, I do not know whether they have been—we have some figures we could show you from past hearings where general hospitals and cities and States around this country were paying 10 and 20 times as much for a drug product as New York City paid. Somebody was getting cheated. Either the company was losing money in New York City or overcharging in Illinois or wherever else.

Mr. STAATS. I think your suggestion here that we look for the same items to see what other large organizations, particularly the public organizations like New York, are paying for drugs is a very good one. As far as I know, we have not done this and I think we probably should.

Senator NELSON. Well, my question is do you intend to implement the statute which authorizes you to look at cost production figures on negotiated contracts respecting drugs or not? My understanding from my conversations and our hearings and your letters to me is that in fact, you were going to proceed and that when you got started, the company said, no, we "ain't" going to show you anything.

What did they refuse to show you, then?

Mr. STAATS. You have the transcript there. I do not recall that we ever said we were going to proceed. I think we said we were considering what we could get here. And there have been informal conversations with several of these companies. But we have neither formally requested nor formally been turned down on these records to date.

Senator NELSON. Well, informally, were you turned down?

Mr. STAATS. I am not sure we can get around some of the problems which I have indicated.

Senator NELSON. Well, did they informally tell you that they are not going to let you look at their production cost data?

Mr. STAATS. Well, I do not think as a company matter, I do not believe it has come up to that level in most of these companies that we have talked to. We have the matter held in abeyance because of certain problems which I have referred to earlier.

Senator NELSON. Well, these are negotiated contracts, paid for by public money under a statute passed by the Congress representing the public. What matters are you not free to discuss?

Mr. STAATS. I am well aware, Mr. Chairman, that you would like us to take these cases into court. I think that is what you are asking that we do.

Senator NELSON. Well, I do not know why you would go into court when they have neither informally nor formally refused to show you the data. You must be of the opinion that they are not about to.

Mr. STAATS. I am using your words. You stated a little earlier that you would take them into court.

Senator NELSON. Well, I have been under the impression, perhaps incorrectly, that they simply refused to give you the data. You are saying that they did not formally or informally refuse. Is there some other way they have refused?

Mr. STAATS. Well, we have never formally asked for it.

Senator NELSON. Well, what did happen? You had these conversations in which you said that in pursuance of this statute, we would like to find out the cost of production, but nothing happened.

Mr. STAATS. Well, we have had discussions. I guess that is about all we can say. We have had discussions. The matter is not foreclosed; the matter is still under consideration. But I am not prepared to tell you here today what our final decision is.

Senator NELSON. Well, I was not going to ask you. I am just curious.

Did they say, so that we avoid any formal or informal problem here, did they say that you have not asked us, but in the event you did ask us, our people would probably say no, but don't ask us so we will not be forced to give you that answer. You went to them and talked about it. I cannot figure out what happened. I was under the impression that they said: "No, we will not show you our cost figures."

Well, why don't we ask them, then? Maybe they will.

Mr. STAATS. Well, again, there are certain problems here. If we can deal with the question of costs without it, that is one thing. If we cannot, that is something else.

Senator NELSON. I do not understand that. If you can deal with the costs——

Mr. STAATS. Well, we feel that in terms of priorities, what we ought to be focusing on are some other things. I really am not quite sure what your point is. Maybe we are not communicating. Are you interested in the total negotiated contracts with a company, or are you interested in some particular drug?

Senator NELSON. Oh, I am not interested in any particular drug. I am interested in the question of all these negotiated contracts. I am disturbed when I see Colonel Breyfogle telling about specifications being set by companies so nobody else can compete. I am concerned about the taxpayer's dollar, I am interested in the statute that authorizes us to check costs.

Now, I would not attempt to tell you what your priorities should be. I know that you have all kinds of work assigned to you by the Congress and you have to make a decision about that. You may have other priorities that certainly may be greater than this. I cannot judge that. But we raised it a year ago. You were interested enough in the idea to come to my office and discuss it and to send me mail.

Mr. STAATS. I think, Mr. Chairman, you will recall that at that time, I furnished you with a long list of study items that we had underway, our reviews in this area. And I affirmed that in a letter to you January 18. We are still underway with these various studies; they are not all completed. We have given you the best we can today—our progress report. I am afraid I cannot really respond to your questions better than that.

Senator NELSON. And you do not wish to tell the committee what companies you even talked to?

Mr. STAATS. I would prefer not to.

Senator NELSON. Well, as I say, there is no way for me to assign priorities to the GAO. You know, I do not know what the highest priorities are. Perhaps we should get back to this again.

You have not made any final decision on what you might do about requesting examination of books and so forth?

Mr. STAATS. That is correct.

Senator NELSON. All right. We will hear from you at a later date on that; is that right?

Mr. STAATS. We will be very happy to keep in touch with you on it, as we have, I hope. And we are glad to know any thoughts that you have. But there are many factors, as I say, which have to go into this decision and we are considering them.

Senator NELSON. Well, at some later date, when you have decided one way or the other, we will have a hearing on it and you can advise us what judgments you made and why.

Perhaps the people investigating for you are very knowledgeable about this whole field of pricing structures and bidding and so forth, and maybe they are not. If they are not, I think it would be worthwhile for them to get informed sufficiently so that they can get at the question I have been raising. If we are purchasing drugs for use by the Veterans' Administration, the Department of Defense, and other Government agencies for use in this country, and the companies or the Government are insisting upon standards higher than USP or NF, then I would be very suspicious of them. And No. 2, they really ought to have to justify them so that we are not in the position of being forced to buy on a noncompetitive basis.

Mr. STAATS. I believe we are in full agreement on this part.

Senator NELSON. If you would pursue that question, then at a later date, we would have further hearings.

Has the GAO completed its study of the Food and Drug Administration?

Mr. STAATS. Have we completed our study of the Food and Drug?

Senator NELSON. Yes.

Mr. STAATS. We have several studies on the Food and Drug Administration. I do not know which one you have reference to.

Mr. CROWTHER. We just recently completed one on sanitary conditions in food manufacturing plants. We have several others underway. We have one, for example, dealing with the legal constraints that FDA is under for performing their efforts, and several others.

Senator NELSON. I have not seen your studies. I understand that the GAO has found out that the FDA has, in a period of 3 years, been refused data of various kinds from drug manufacturers 10,000 times, which included such requests as refusal to allow the FDA entry into a plant; refusal to supply formula data respecting a drug; refusal to show production control records; shipping records; refusal to show complaint files.[1]

Is that correct?

Mr. CROWTHER. Yes, sir; that is correct. That particular review has not been completed. It is still underway, but the figure that you quoted is the number that we have obtained. There have been more than 10,000 refusals for FDA access to various things needed for FDA to exercise its authority and the items range from refusal of entry to refusal of access to formulation data, and refusal of other related requests for specific data.

[1] See Appendix V, p. 9067.

Senator NELSON. Are these requests which are for information which is necessary for the Food and Drug Administration to carry out its assigned responsibilities under the law?

Mr. CROWTHER. Yes, sir, they are and the legal constraints that the Food and Drug Administration operates under in carrying out its regulatory authority as between various product lines is quite different. Under the law, the Food and Drug Administration is provided with greater authority for access to information on prescription drugs than it is for information on over-the-counter drugs. In cases where a firm manufactures both products, they could be side by side. The Food and Drug Administration may have complete access to formulation data on the prescription drug line but does not have the same access authority on over-the-counter type drugs. Consequently, FDA inspectors are unable to determine whether or not all the ingredients are put in properly or whether the formula has been followed.

Also, since FDA's authority goes to those items shipped in interstate commerce, it is necessary for FDA to have access to records showing whether or not an item is shipped in interstate commerce. But quite often, the burden of proof is placed upon the Food and Drug Administration, rather than to be freely allowed access, to even shipping records.

Senator NELSON. Were there actually 10,000 refusals in 3 years? How can there be 10,000 in 3 years? That runs about 10 a day.

Mr. STAATS. These would not be that many companies——

Senator NELSON. Are all these 10,000 refusals in areas where the FDA needs the information but does not in fact have legal authority to get it?

Mr. CROWTHER. I would say most of the cases here are in that category. Again, we have not completed our work, so I cannot give you a breakdown on how many are and how many are not in that category, but probably most of them fall in that category.

Senator NELSON. Most of them fall in the category where the FDA does not have the legal authority to demand and require production of the information?

Mr. CROWTHER. That is correct, and this information is needed in order for FDA to perform its job, but FDA does not have legal authority to get access to the data.

Senator NELSON. You say most of it. Do you have any notion how much? Were they refused on a large number of cases, a fourth or fifth, in which they do in fact have legal authority?

Mr. CROWTHER. I just do not have that information.

Senator NELSON. You have not made any evaluation of that?

Mr. CROWTHER. Not yet.

Senator NELSON. We will take that up with the Food and Drug Administration.

Did you, in checking on procurement, check the question of the total amount of drug contracts, negotiated or otherwise, received by small businesses as so classified under the law?

Mr. CROWTHER. Yes, sir; I think these were included in a separate letter to you on February 3, 1972. Some of that information, if you would like, we could repeat for the record.

At that time, we provided information on small business purchasers from the Defense Supply Agency and the Veterans' Administration for fiscal years 1969, 1970, and 1971.

Senator NELSON. You sent us a letter on that?
Mr. CROWTHER. Yes, sir.
Senator NELSON. What date?
Mr. CROWTHER. It was dated February 3, 1972.
Senator NELSON. All right. If you would leave a copy with us so we can——
Mr. STAATS. Would you want it in the record at this point?
Senator NELSON. We want to incorporate it in the record.
(The information referred to follows:)

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, D.C., February 3, 1972.

B–164031 (2)

Hon. GAYLORD NELSON,
Chairman, Subcommittee on Monopoly, Select Committee on Small Business, U.S. Senate.

DEAR MR. CHAIRMAN: This is in response to your request made during our meeting of August 9, 1971, that we furnish information on the policies and practices followed in establishing set-asides for small business in Government procurement of drugs.

To answer your request, we examined the policies, procedures, and criteria used by the Small Business Administration (SBA), the Veterans Administration (VA), and the Defense Supply Agency (DSA) for setting aside procurements of drugs for small business concerns. Our review was directed to VA and DSA because they procure most of the drugs bought directly by the Government.

STATUTORY AUTHORITY AND RELATED POLICIES

The statutory and regulatory authority under which the procurement programs of SBA are conducted includes:

1. Section 2(a) of the Small Business Act (15 U.S.C. 631) which, in general, states that it is the policy of the Congress that the Government shall assist the interests of small business to preserve free competitive enterprise and to insure that a fair share of Government procurements is placed with small business concerns.

2. Section 8(a) of the act empowers SBA to contract directly with Government agencies for the purpose of letting subconstracts to small business firms.

3. Section 15 of the act provides that all or a part of any procurement shall be set aside for small business when SBA and the contracting agency jointly determine that such action would (a) be beneficial to the national productive capacity, (b) be in the interest of national defense programs, or (c) insure that a fair share of Government procurements is made from small business.

Unilateral set-asides for small business by the Department of Defense are made under authority of section 2304(a)(1) of Title 10, United State Code, and implementing regulations set forth in section I, part 7, of the Armed Services Procurement Regulation. Federal civilian executive agencies make unilateral set-asides in accordance with section 302(c)(1) of the Federal Property and Administrative Services Act of 1949, as amended [41 U.S.C. 252(c)(1)], and implementing regulations set forth in Federal Procurement Regulations, primarily subpart 1–1.7.

SBA National Directive 605–1 of April 8, 1968, requires that procurements of $2,500 and more which have not been recommended for set-asides by either a small business specialist (employee of the contracting agency) or the contracting officer, or which have been recommended and then withdrawn, shall be screened by a SBA representative for possible small business set-asides action.

One hundred percent set-asides for small business are to be initiated on all procurements determined to be within the purview of Section 15 of the Small Business Act. However, SBA National Directive 605–1 states that one hundred percent set-asides shall not be initiated if any of the following conditions esists:

"(1) The item is a proprietary item, * * *

"(2) There is the expectation of receiving insufficient small business competition to provide a reasonable price to the Government.

"(3) The procurement is of a qualified product [item must pass specification test requirements and be on a list of qualified products prior to the procurement] unless * * * none of the qualified large firms desire to participate.

"(4) The item is on the Departments Planned Producers List unless * * * none of the large business Planned Emergency Producers desire to participate.

"(5) Item is being purchased for field test purposes following an R&D [Research and Development] contract.

"(6) R&D procurements with small business competition insufficient to provide * * * the best proposal.

"(7) Construction procurements estimated at more than $500,000."

Information obtained at the VA Marketing Center and DSA's Defense Personnel Support Center, which procure about 70 percent of the drugs bought directly from suppliers by the Government, follows.

DEFENSE PERSONNEL SUPPORT CENTER PRACTICES

The Defense Personnel Support Center has formalized procedures to implement the small business procurement requirements for defense activities as set forth in the Armed Services Procurement Regulation. Also the Center has established a position of small business specialist, responsible for planning, implementing, and directing the small business and economic utilization programs.

Each year DSA sets small business goals for the Center by commodity grouping. For fiscal year 1971 the Center awarded 17 percent of the procurements in the medical commodity group—includes, in addition to drugs, many other medical federal supply classes, such as, surgical dressings, and instruments, dental, X-ray, hospital, optical, and laboratory instruments and equipment—to small concerns. A goal of 16 percent had been set by the parent organization, DSA. For fiscal years 1969 and 1970, the Center awarded 20 percent and 18 percent, respectively, of the medical commodity group procurements to small business, or slightly less than the goals of 22 percent and 21.5 percent set by DSA.

The purchase of drugs, biologicals, and chemicals by the Center represented over 50 percent of the total dollar value of procurements within the medical commodity group for fiscal years 1969 to 1971. Of this, less than 10 percent was procured from small business and the value of set asides for small business increased from about $336,000 to about $800,000. (See enclosure.) The percentage of awards to small business in the medical commodity group, other than drugs, biologicals, and chemicals, was about 30 percent for these years.

A purchase at the Center is initiated by a request prepared by the Division of Supply Operations. Upon receipt of the request, the contracting officer prepares a form which identifies the item and estimated quantity required and any known limitations toward making a partial, or total, setaside for small business. These forms are reviewed by the Center's small business specialist who decides whether a small business set-aside should be made. These decisions are then reviewed by a representative of SBA who may appeal decisions not to make a set-aside, or withdrawals of set-asides to (1) the contracting officer, (2) the Commander of the Center, or (3) if necessary, the Commander, DSA, through SBA in Washington, D.C.

VETERANS ADMINISTRATION PRACTICES

Except in the area of contruction services, VA has not issued instructions to implement the provisions of the Federal Procurement Regulations relating to small business set-asides. As of August 1971 VA had not designated anyone at the VA Marketing Center to be responsible for planning and implementing VA's small business programs.

Until about January 1970 an SBA representative was not assigned to review the activities of the VA Marketing Center from a small business viewpoint. Thus until that time set-asides for small business were of necessity initiated by the contracting officials.

For each of the 3 fiscal years 1969 through 1971, VA purchased over $1 million worth of drugs and chemicals from small business firms. Most of these procurements resulted, however, from the small business firms meeting price competition under normal procurement practices. Contract awards totaling only $11,400 in fiscal year 1969 and $15,800 in fiscal year 1970 were attributable to set-asides for small business. (See enclosure.)

Beginning in fiscal year 1971, VA has actively particpated in a program of procuring drugs from small business minority group enterprises. Initiated under section 8(a) of the Small Business Act (see above), this program involves VA contracting directly with SBA. In turn, SBA subcontracts with small busi-

ness minority group enterprises. Under this program suppliers appear to have an advantage compared with suppliers under regular small business set-asides because prices negotiated by SBA with minority enterprises do not have to match the lowest price as under normal small business transactions. The minority group enterprise prices need only be considered reasonable. The SBA representative at the Defense Personnel Support Center informed us that the Support Center had not initiated a program for drug procurements under section 8(a) of the Small Business Act.

For fiscal year 1971 the VA Marketing Center reported purchases from minority group enterprises of about $299,100. These purchases were reported as other agency contracts to small business, but not as small business set-asides.

* * * * * * *

During our review we identified the following factors which seem to contribute to the lack of small business participation in drug procurements compared with the participation in procurements of other commodities.

The increasing number of drug products for which a new drug application—which is often costly to obtain—is being required by the Food and Drug Administration.

The continuous reduction in the number of drug firms in the small business category due to acquisition by large concerns, or growth into the category of large business.

The fact that most new drugs are developed and introduced into the market as proprietary or patented items by large business concerns.

We trust this information will serve the purpose of your request. We have not obtained written comments from VA on DSA on the matters discussed in this report.

We plan to make no further distribution of this report unless copies are specifically requested, and then we shall make distribution only after your agreement has been obtained or public announcement has been made by you concerning the contents of the report.

Sincerely yours,

ELMER B. STAATS,
Comptroller General of the United States.

Enclosure.

SET-ASIDES AND OTHER AWARDS TO SMALL BUSINESS BY DSA AND VA, IN FISCAL YEARS 1969-71 FOR DRUGS, BIOLOGICALS, AND CHEMICALS

	Fiscal year—					
	1969		1970		1971	
	DSA	VA	DSA	VA	DSA	VA
Set-asides	$336,000	$11,400	$672,000	$15,800	$800,000	
Other awards [1]	8,728,000	1,783,800	5,011,000	1,048,800	6,640,000	[2] $1,434,700
Total (small business)	9,064,000	1,795,200	5,683,000	1,064,600	7,440,000	1,434,700
Total (drugs, biologicals, and chemicals)	102,366,000	23,427,100	71,997,000	23,019,100	95,066,000	27,186,700
Small business as percent of total	8.9	7.7	7.9	4.6	7.8	5.3

[1] These awards resulted, for the most part, from small business firms meeting price competition under normal procurement procedures.
[2] Includes purchases of about $299,100 from small business minority group enterprises. (See above.)

Senator NELSON. Do you have anything you want to add?
Mr. STAATS. No.
Senator NELSON. Thank you very much.
We are adjourned subject to the call of the Chair.
(Whereupon, at 12:20 p.m., the subcommittee was adjourned subject to the call of the Chair.)

COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY

(Present Status of Competition in the Pharmaceutical Industry)

WEDNESDAY, JUNE 21, 1972

U.S. SENATE,
SUBCOMMITTEE ON MONOPOLY OF THE
SELECT COMMITTEE ON SMALL BUSINESS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 4221, New Senate Office Building, Senator Gaylord Nelson (chairman of the subcommittee) presiding.

Present: Senator Nelson.

Also present: Benjamin Gordon, staff economist; and Elaine C. Dye, clerical assistant.

Senator NELSON. Our first witness this morning is Brigadier General Hayes, Medical Corps, U.S. Army, accompanied by Colonel Lindsey.

The committee welcomes you here this morning, gentlemen. Your prepared statement will be printed in full in the record. You may proceed to present it however you wish.

STATEMENT OF BRIG. GEN. G. J. HAYES, MEDICAL CORPS, U.S. ARMY, PRINCIPAL DEPUTY ASSISTANT SECRETARY OF DEFENSE (HEALTH AND ENVIRONMENT); ACCOMPANIED BY COL. DOUGLAS LINDSEY, MEDICAL CORPS, U.S. ARMY, DIRECTOR OF MEDICAL MATERIEL, DEFENSE PERSONNEL SUPPORT CENTER (DPSC)

General HAYES. I think I will read the first portion of this Mr. Chairman, and present the last portion for the record.

Mr. Chairman, it is a pleasure to appear before this subcommittee to bring you a further report on the procurement of drug products by the Department of Defense (DOD). You have already introduced my colleague, Col. Douglas Lindsey, Medical Corps U.S. Army. He is the Director of Medical Materiel, Defense Personnel Support Center (DPSC).

It has been a busy year for us. Our central procurement and issue of drug items has held steady at about $100 million per annum in spite of decrease in size of the Armed Forces and winding down of American involvement in Vietnam. We have initiated many changes, and many others are in the mill.

We have again solicited the participation of small business in our drug procurement program, and we have solicited seriously, specifically, and with encouragement. Nevertheless, the response has been disheartening. Many of the best small drug producers have been bought

up by larger industry. Many of the remainder are already quite busy enough in production for the trade or under their own label many of the producers who would like to contract with us simply are unwilling to make the effort to bring themselves up to the standards required by DOD.

We are vigorously sounding the foreign market. The problems of patent, licensure, and New Drug Applications are formidable, but not insoluble. We hope to be able soon to report two major breakthroughs in the form of price quotations from foreign sources which will provide major savings to the American taxpayer, either through procurement of foreign drugs at lower cost, or through pressuring reduction in certain domestic drug prices.

We have made major savings in the past year by more discriminating application for our requirements for marking and packaging.

We are continuing to revise our specifications to broaden competition, and we have initiated efforts to give our specification writers a freer hand in adjusting to potential suppliers by limiting the scope of prescribed "essential characteristics," or stating performance in functional terms, without compromising quality.

Mr. GORDON. General, could you give some specific examples of that?

General HAYES. Well, one of our—anytime we can increase competition and lower price by revising a specification, we do so, if we can still preserve the quality. In at least one instance recently, we accomplished the same aim by refraining from revising the specification. We pioneered a specification requirement which limits the bacterial content of a common antacid preparation. Now, the major brand name supplier is making and offering a sterile product and has proposed that we change our specifications to require sterility. We have not done so. We feel that the the specification is quite adequate as it is. A requirement for sterility would severely limit potential competition. The changes we made in our specifications have been strictly as to details which do not limit quality but tend to limit range or resources—the color, shape of tablet, type of capsule, characteristics of container, to limit the insoluble residue in an antacid. When the detail in the specification is clearly important to the potency and purity, as for instance, the hardness of a chewable tablet or the color of an injectable solution, we don't change. The producer makes the change to specifications or he doesn't compete.

Mr. GORDON. As I understand it, a particular company came to you and asked you to include a change in a certain specification which would really have given it a monopoly; is that it?

Colonel LINDSEY. I do not think it would have given him monopoly, but it would have limited the range of potential competition. We pioneered the requirement to limit the bacterial content of a number of preparations and we think we are getting a quite satisfactory product and we see no reason to gold plate it by tightening it up.

Mr. GORDON. On the first page, you talk about soliciting participation of small business in drug procurement. How did you go about doing this?

Colonel LINDSEY. We have made two approaches. One is to look at individual drug items or classes of items and seek out small business sources.

The other incidents, we have examined the list of potential bidders, past bidders, and have looked at their quality record to see how close they have come to our standards, and we have specifically solicited a number of small business concerns that in the past have produced for us but have not bid recently, or in the past have been turned down on a preaward survey, but for a deficiency which is correctable without major capital investment.

Mr. GORDON. And you say the response has been disheartening?

Colonel LINDSEY. Yes, sir.

Mr. GORDON. Why is that?

Colonel LINDSEY. We only got about 20 percent replies of any sort from letters that we sent out to specific concerns. We sent back to these companies a copy of our latest issue of our drug standards booklet, our equivalent of FDA's good manufacturing practice document. In each instance, when they see what they have to do to meet our standards, why, they hold back. These are new small business concerns that we are looking for to add to our active list.

Senator NELSON. On the specifications, I take it the specifications required to be met are often beyond USP or NF standards, is that right?

Colonel LINDSEY. Yes, sir. This was mentioned in previous hearings and as a result, the General Accounting Office spent about a half a year on a special project, looking at 25 drug items which they selected. These were items which are monographed in the Compendia, either USP or the National Formulary, which have been limited for some time to a single supplier and in which our specifications have added something to the Formulary requirement. They thoroughly justify the additions which have been made as reasonable and necessary to insure value received to the Government. We have been a leader in many of these things and we expect to see many of these specifications added to later revisions of the Compendia. The things we have added, Senator, are simple. Color standards for an injectable solution so that there is no argument over what "light yellow" means in USP, or "straw colored:" pH limitations ophthalmic ointment, particle limitations on ophthalmic ointments. While the USP says there shall not be palpable particles, we specify particle size, bacterial limits, and melting range for an ophthalmic ointment. So we have requirements both for storage and the body surface for which it was intended.

I have here if you wish a summary of each of the 25 items that GAO studied, with notations on what the additions were in the specifications. I would be glad to answer any one of them.

Senator NELSON. Do you have an extra copy for the committee files?

Colonel LINDSEY. I can give you this copy. It is not an extra copy. The notations are in my handwriting. It is usable.

Senator NELSON. How large a document is it?

Colonel LINDSEY. Twenty-five pages, sir.

Senator NELSON. Are you going to duplicate that?

Colonel LINDSEY. I will leave it with you.

Senator NELSON. If you have an extra copy, we would like to have it.

Colonel LINDSEY. Will do.

Senator NELSON. Did not part of this problem arise—I think we raised this question last time—from the fact that, in some of the drugs

at least, the specifications drawn were specifications that only one brand name manufacturer could, in fact, meet. Is that not correct?

Colonel LINDSEY. Sir, I do not think this is the case. When a new drug hits the market, a new brand, a patented product or a new trademark mixture hits the market and it is the sole item of that type, the source of the information, both for us in our specifications and for the Compendia in developing their monographs, is the guide of mixture for the product itself. So we develop our purpose description, the specifications from that. But as soon as we find out anything in it that is not essential to quality and which is restrictive as to source, we change it. I think our specifications are sound and not restrictive of anything except insuring that the Government gets what it pays for with public money.

Senator NELSON. Please proceed.

General HAYES. To continue the prepared statement, each of the services has continued to stress the importance of the pharmacy and therapeutic drug committees as teaching organizations. A little later, I have some examples of these for you.

Two additional measures contribute to a concentrated effort to continue the education of pharmacists in the optimum management of drug therapeutics. Articles on pharmacological subjects now appear regularly in service medical publications. Service pharmacy officers are revising their role in the patient care team and with increasing frequency are participating in what has come to be called "clinical pharmacy." This involves direct first person assistance to ward and clinic medical officers in selecting from alternative chemotherapeutic approaches.

These proposals are not radical departures. They simply reflect the increasing interest of military physicians and military pharmacists in rational and economical usage of drug products. We have been heartened by the sober deliberative efforts of our therapeutic agents committees, by the number of our stations which are publishing "How Much Does It Cost?" data, and by the awareness of our physicians of drug alternatives and options. We have seen several examples of highly touted "new" drugs having marginal, if any, advantage over older products being sharply limited in use for only special situations.

Senator NELSON. Do you have any specific examples of that?

General HAYES. One good example is that of the macrocrystalline form of Meticorten. In some cases, it appears to have a marginal advantage over the tablet form, so we carry both in the catalog, but with a price differential of 250 percent for the macrocrystals, it pays the hospital to restrict usage to selected patients. Typically, this is only on the approval of the chief of urology.

Similarly, the use of the newer topical steroids such as triamcinolone and fluocinolone is controlled by the chief of dermatology. Levodopa is controlled by the neurologist.

Chiefs of service set restrictions on the use of gentamicin, carbenicillin, antibiotics resistant to staphyllococyl, penicillinase.

Perhaps one of the most significant advantages in the past year has been the development of a reorganization proposal by DPSC to the Defense Supply Agency which will integrate the separate procurement function at the Defense Personnel Support Center with the med-

ical specification, quality assurance, and supply operations functions, in order to give to the Director of Medical Materiel maximum flexibility and responsiveness in getting the drug to the customer on time and with adequate quality but at lowest attainable cost. We are proud of the fact that the Department of Defense buys the best drugs in the counry, and at the lowest price—but we intend to do even better.

Mr. GORDON. General, you just spoke about a reorganization proposal. Is this anything more than a reorganization proposal at this time?

General HAYES. At the present time, it is only a proposal which is being staffed through the DPSC. It will eventually come to the Department of Defense Installations and Logistics, and go through the normal staffing process.

Senator NELSON. Please proceed.

General HAYES. Mr. Chairman, in your letter of the 16th of May, you requested certain information regarding the procurement of drugs by the Department of Defense. This information is attached to my statement for the record. That completes my statement. My colleague and I will attempt to answer any questions you may have. I have attached the answers to the statement that I have just completed.

Colonel Lindsey and I will answer any further questions you may have.

(The attachments referred to follow:)

The following is a discussion of the nine questions outlined in Chairman Nelson's May 16, 1972, letter to the Secretary of Defense.

1. The system for identifying high volume local purchase items for central procurement and the extent of coordination with other agencies.

There has been no change in the system during the past year. Each of the three military services has a different system for identifying high volume local purchases. The Navy utilizes an "open purchase high dollar report" whereby all medical commands report quarterly drugs and other medical items that they have purchased locally. From these reports the Navy determines requirements for items to be recommended for entry into the system. Additionally, any field activity at any time may submit a recommendation for standardizing an item. The Army requires the semiannual reporting of cumulative purchases totalling $2,500 or more from 19 selected stations in the Continental United States, and DPSC records data on all local purchases from oversea stations. The Air Force has the most nearly complete system: computer tabulation of local purchases by item and by cost from 102 out of 122 Air Force stations worldwide accounting for about 91% of the total dollar value of Air Force drug purchases. Each of the services reports purchases of significant dollar value to the defense medical materiel board for consideration of standardization and central procurement. We are not aware of any coordination with other agencies prior to the time of standardization and development of specifications. However, these data will be made available to any agency which might ask for them.

2. The areas of cooperation and coordination with other agencies in the determination of requirements, specification development and use, procurement, and interagency requisitioning.

Both VA and HEW report to DPSC semi-annually for budgeting purposes the anticipated volume of purchases through the DOD system. DPSC is the dominant Federal agency in development of medical specifications; 95% of all Federal specifications for medical materiel are prepared there. These specifications are in wide Federal use. Technical coordination among Federal agencies is effected through the intra-governmental professional advisory council for drugs and devices (IPADD). The type of interchange of information includes specification data, plant inspections, defective or substandard material, and quality control experiences. Interagency requisitioning and interagency coordination of specific procuremets are limited. We are aware of the need for greater efforts in these fields, and we are most willing to work with other agencies.

3. The extent to which drugs not found in the USP and NF are procured and stocked.

As a result of earlier hearings of this subcommittee, the General Accounting Office has prepared for submission to you a listing of Federal stock number drug items which are not listed in USP or NF. The list begins with acetaminophen and ends with zinc sulfate. I am sure you will recognize that the vast majority of the items listed are "bread and butter" preparations needed in daily practice.

4. The possible effect on competition if only the drugs monographed in the USP and NF were purchased.

The effect on competition would be negligible if we limited central procurement to only those drugs monographed in USP and NF. The effect on the taxpayer would be considerable; it would be necessary to purchase many non-monographed drugs locally at a steep increase in prices in comparison to those obtainable by central procurement. It is simply not possible to give the patient full benefit of modern medicine if the therapeutic armamentarium were limited to monographed items.

Drugs selected for inclusion in the compendia are those which are considered to be the "best," or "most understood." It does not necessarily follow, however, that the compendia cover all contingencies, or that a drug not monographed does not have a wide usefulness founded on entirely rational evaluation.

Supplements to the compendia continually add new drugs, but there is always a significant lag time, and some drugs which are frankly essential, or are drugs of "best choice," have not yet been admitted. Many older drugs, of established efficacy and safety, but decreasing popularity, have been dropped from the compendia but still deserve a place in our military formulary.

The compendia refrain, in general, from listing fixed combinations of drugs. Although many irrational combination preparations have been declared "ineffective" or "possibly effective" for good reason, many combinations remain on the market. There is good cause for a wide range of gastric antacid preparations: the proper balance between the constipating effect of aluminum compounds, and the cathartic effect of magnesium compounds, is a fine adjustment which varies for the individual patient. The same holds for the oral contraceptives, which are combinations of various estrogens and progestins. Many of these combinations are not included in the compendia.

There is a call, too, for many dosage forms of standard drugs, and not all of these dosage forms are monographed. For example, the preparation of acetaminophen as a concentrated solution in a dropper bottle permits accurate dosage in small children, while estimation of fractional teaspoon doses of the NF elixir does not.

The negligible effect on competition of limiting procurement to monographed items is readily evident on examining the list we have previously submitted of some 500 drugs which are currently single source items. Over two-thirds of these drugs are included in USP or NF. In some instances we are buying from a single source simply because that source has the know-how and efficiency to meet our standards. Two good examples are aspirin tablets, USP, and alcohol, USP. Here we have already the ultimate in competition, and limiting procurement to USP/NF will not make the competition any better.

Many other monographed items are single source because of patent or NDA limitations. Good examples are: sulfasoxizole; methyldopa; spironolactone; diazepam; methylphenidate; kanamycin; and methylprednisolone.

The military combination preparation of chloroquine and primaquine for suppression of malaria has not been included in the compendia, and possibly never will be. Triamcinolone appears in the compendia as a cream, an aerosol, and a suspension: triamcinolone in a special paste base is widely used by our dentists but has not yet been monographed.

5. The steps taken to insure that FDA pronouncements on less than effective drugs are being effectively implemented.

Our policy and procedures on the handling of less than effective drugs have been reported to you previously and have been published in the record of the 1971 hearings of this subcommittee. We have continued to implement these policies. During the past 16 months since the last hearings, DPSC has declared 13 FSN's to be "limited standard" (issue until exhaustion), and has deleted 17 FSN's with on-hand assets being held for reimbursement and/or replacement.

Briefly, if an item is pronounced to be "ineffective," we suspend it from issue and delete it from the catalog. If an item is pronounced to be "possibly effective," we issue existing assets until exhausted providing the customer submits a requisition with advice code 2F indicating that the item is known to be possibly effective and it is still desired.

6. Discuss the implementation of the Buy American Act and balance of payments procedures in relation to comparison of foreign and domestic bids.

Under departmental regulations we artifically raise the foreign supplier's bid price by "evaluating" it to give an edge to the domestic producer. To the bid price, inclusive of duty and transportation to depot, we add 6% (12% if the low domestic bidder is a small business or labor surplus area concern). Then we take the price *minus* duty, but including transportation and add 50% to the foreign bid. Whichever of those two calculations result in a higher figure is the "evaluated" foreign bid. If this "evaluated" price is still lower than the low domestic bid, the foreign bidder gets the award if the firm is otherwise qualified.

7. The need for requiring a specification prior to introducing an item into the supply system where (1) competition is restricted due to a patent, an NDA, or form 6 which relates to antibiotics, and (2) the item is monographed in the USP and NF.

When time is of the essence, which is almost always the case in the introduction of a newly-standardized drug item into the system, we buy under "accelerated procurement procedures" which in effect permit making the initial procurement by brand name, without specifications. This gives us time to prepare a specification for following procurements. We agree that the preparation of an exhaustive specification is wasted effort if the items is available only from one source, but we do not agree that no specification at all is required. In order to insure that we make only wise expenditures of public monies we need to specify what it is that the Government intends to buy and expects to get. A brand name is an advertisement, not a recipe or warranty. We need to make sure that what we are buying on contract comes up to the quality of the item which originally led to standardization. To assume that this will automatically be the case is a naive disregard of some disappointing experiences. Further, we need to develop firm specifictions during the period of restricted procurement, to be ready to go into a competitive market when patents expire, when we buy around patents under the patent indemnity clause, or when additional NDA's are approved.

During the course of the past year the General Accounting Office has intensively studied the need for specifications which go beyond USP/NF requirements for monographed items. They alluded briefly to their findings in the hearings before this subcommittee on 10 May 1972. ". . . additional requirements are often included to provide assurance that items manufactured will have needed characteristics for such requirements as potency and purity, from the time of manufacture to use."

I am sure they would be happy to report their findings in greater detail. DPSC has been the national leader in developing specific drug standards, and many of their supplementary requirements have been adopted in subsequent revisions of the official compendia. These added requirements include such specifications as: pH compatibility with route of intended administration; objective standards for limits of color loosely described in compendia: particle size, bacterial limits, and liquefaction of ophthalmic ointments; biological effectiveness of hormone preparations; and maximum limits for potentially toxic breakdown products. There is ample testimony to indicate that conformance with the criteria of the monographs in the compendia is not sufficient alone to guarantee the safety and efficacy of a drug product.

8. The actions taken to centralize plant inspection and drug testing under one agency.

The Department of Defense has taken no action to centralize plant inspection and testing under a single government agency. It has no objection to such centralization, so long as the agency can and does provide effective inspection and testing. We do rely on the Food and Drug Administration for the inspection and certification of antibiotics. However, we have found that inspection of a company, a plant, or a process at intervals of one to several years is no assurance whatsoever that the result will be a satisfactory product on a specific procurement. We cannot risk public funds in the volume we expend without positive

assurance that we are going to get a thoroughly good product. We have too many examples of firms who have had initial good performance and then have lapsed hopelessly in many aspects of systematic pharmaceutical management—large firms as well as small.

9. The inspection and testing requirements for drugs procured centrally as compared with the inspecting and testing requirements when drugs are procured locally or under FSS contracts.

Careful examination of the data available indicate that the problem of local purchase of drug items is far less than has previously reported to this subcommittee. The General Accounting Office has been unsuccessful in obtaining from VA the data necessary to substantiate the estimate of $21 million per annum military purchases of drugs from Federal supply schedules. Sampling data from Air Force and Army stations, and DPSC data on local purchases for oversea stations indicate a drug local purchase expenditure service wide of somewhere between 10% and 15% expressed in dollars. Since local purchase and FSS procurement prices are significantly higher than prices for centrally procured items this would indicate that 90% or more of all drug dosages are from DPSC and thus covered by DPSC inspection and testing.

There are a lot of marginal drug products on the market today. Clear evidence of this is the number, type, and scope of recalls made by the food and drug administration. A recall protects the public from further harm, but it does not undo the harm that may have been done. We prefer to buy good products in the first place, not to replace poor products with others later. It is for this reason that we maintain an intensive testing and inspection program. It is for this reason that we generally prefer central procurement over local procurement or FSS contracts.

Nevertheless we recognize that central procurement is not possible in every instance for every item. New items constantly enter the system. Until we have experience from local purchase we do not know whether it is economically justifiable to procure the item centrally or not. When there is a real demand for a special item, but that demand is sporadic, limited to certain types of activities or low in total dollar volume the wisest decision may be to authorize local purchase of procurement on Federal supply schedule.

Even when an item is in the system, the taxpayer cannot afford to fund us for the maintenance of a safety level of drugs which will never run dry. DPSC is performing at 96% supply availability rate, an achievement of which they are justifiably proud. But this means that 4% of all requisitions are met with promise of future delivery, not actual delivery at the moment. The customer may not be able to wait; he must purchase the standard item from commercial sources, and pay a premium price.

The working order of priority at defense personnel support center is first to get the item to the customer; and to get it there on time; then to insure that the item is of adequate quality; and lastly to buy the item at the lowest possible price. When we can buy the item centrally at a low price; when we can insure the quality of the centrally purchased product; and when we can deliver it from the central distribution system on a timely basis—then we do so. When we cannot, the alternative is local purchase. Local purchase is the exception, not the rule. It is an expedient procedure in which we recognize the risk of limited inspection and testing.

We have no objection to turning over to FDA our job of inspection and testing, so long as they do it as thoroughly as we do. The only problem is that it will take FDA about 3,000 more highly skilled personnel to do the job for the country that we are doing for the Department of Defense.

Mr. GORDON. On page 4 of your additional statement you say: "Supplements to the Compendia continually add new drugs, but there is always a significant lag time, and some drugs which are frankly essential, or are drugs of 'best choice' have not yet been admitted."

Can you give us a couple of specific examples to illustrate that point?

Colonel LINDSEY. Yes, sir, for example, clyndamycin, spectinomycin. Spectinomycin is listed by the Medical Letter as the best drug of choice for gonorrhea. It is not yet in the Compendia.

Mr. GORDON. It is not yet in the USP.

Also at the bottom of the same page, you say: "There is good cause for a wide range of gastric antacid preparations: the proper balance between the constipating effect of aluminum compounds and the cathartic effect of magnesium compounds is a fine adjustment which varies for the individual patient."

Since it varies for the individual patient, isn't it a good idea to avoid the fixed ratio combinations and to vary the doses of the different drugs to suit the individual patient? Are you not contradicting a previous statement you made?

Colonel LINDSEY. Sir, we really have a limited range of antacid mixtures in our catalog. Your point is well taken on fixed dosage, but when you start trying to titrate constipation and diarrhea for a patient that is taking this almost on an over-the-counter basis, you are spending a lot of effort, I think, that is not worth it.

Mr. GORDON. You state at the bottom of page 6: "During the past 16 months since the last hearings, DPSC has declared 13 FSN's"—what is that, Federal stock numbers?

Colonel LINDSEY. Stock numbers.

Mr. GORDON (reading). "To be 'limited standard' (issue until exhaustion), and has deleted 17 FSN's with on-hand assets being held for reimbursement and/or replacement." Could you name these drugs, please?

General HAYES. We have a list of drugs here, with stock numbers and the changes. I will give you an example or two, but I would like to submit the whole list for the record.

Mr. GORDON. Please.

General HAYES. One is chlorpheniramine maleate; aspirin, caffeine and phenacetin tablets; doxycycline hyclate capsules; propoxyphene hydrochloride, aspirin, caffeine and phenacetin; oxethazaine; aluminum hydroxide gel, magnesium hydoxide, and magnesium trisilicate suspension.

This gives you, I think, some of the flavor of what we have accomplished. I would like to submit the whole list for the record.

(The list referred to follows:)

DEPARTMENT OF DEFENSE DELETED/LIMITED STANDARD 28 FEBRUARY 1971 THROUGH 30 APRIL 1972

Deleted: 152.
Limited Standard: 179.
Total Actions: 331.

28 FEBRUARY 1971 DMMB MEETING

THE FOLLOWING ITEMS HAVE BEEN DELETED

FSN	
6505–147–1720	Tetracaine Ophthalmic Ointment, NF. (Pontocaine)
6505–286–9868	Tyloxapol Solution—Ineffective. (Alevaire)
6505–606–3409	Tyloxapol Solution—Ineffective. (Alevaire)
6505–687–8459	Procaine Penicillin G and Potassium Penicillin G in oil—Probably. (Lentopen)
6505–890–1913	Dihydrostreptomycin-Polymyxin tablets with activated Attapulgite, Aluminum Hydroxide, and Pectin—Ineffective. (Poly magma)
6505–914–0252	Dihydrostreptomycin-Polymyxin tablets with activated Attapulgite, Aluminum Hydroxide, and Pectin—Ineffective. (Polymagma)
6505–967–8735	Propoxyphene Hydrochloride, Aspirin, caffeine, and Phenacetin Capsules—Ineffective. (Darvon Compound)

THE FOLLOWING ITEMS HAVE BEEN RECLASSIFIED FROM STANDARD TO LIMITED STANDARD

FSN	
6505–782–647	Undecylenic Acid Ointment, Compound, NF—Possibly. (Desenex)

31 MARCH 1971 DMMB MEETING

THE FOLLOWING ITEMS HAVE BEEN DELETED

FSN	
6505–116–5520	Diethyltilbestrol Tablets, USP. (Stilbestrol)
6505–120–3750	Folic Acid Tablets, USP—5 mg size not recommended, NAS/NRC.
6505–138–4070	Progesterone Injection. NF. (Proluton)
6505–146–2192	Sulfadiazine Tablets, USP.
6505–153–8707	Benzoin Tincture, Compound, USP.
6505–153–8728	Sodium Methiodal Injection, NF.
6505–181–7296	Cetylpyridinium Chloride and Benzocaine Lozenges. (Cepacol Anesthetic Troches)
6505–181–7428	Benzocaine, Benzethonium Chloride, Hydroxyquinoline Benzoate, Menthol, and Methylparaben aerosol. (Dermoplast Spray)
6505–181–7497	Bromelains Tablets—Possibly—Never Procured. (Ananase)
6505–181–7517	Acetaminophen, Phenacetin, Phenylpropanolamine Hydrochloride, and Phenyltoloxamine Citrate Tablets. (Sinubid)
6505–299–9666	Cyclophentolate Hydrochloride Ophthalmic Solution, USP. (Cyclogel)
6505–404–8096	Estrogens, Conjugated, Tablets, USP. (Premarin)
6505–443–4511	Aluminum Hydroxide Gel, Magnesium Hydroxide, and Magnesium Trisilicate Suspension. (Gelusil-m)
6505–484–5665	Chlorpheniramine Maleate, Methscopolamine Nitrate, and Phenylephrine Hydrochloride Capsules. (Histaspan-d)
6505–543–7914	Chlorothiazide Tablets, NF. (Diuril)
6505–660–0132	Chloramphenicol for Ophthalmic solution, USP. (Chloromycetin-Ophthalmic)
6055–687–8436	Endo Broth, Membrane Filter.
6505–926–4846	Endo Broth, Membrane Filter.
6505–951–4759	Trimethobenzamide Hydrochloride Injection. NF—Probably. (Tigan)
6505–973–7832	Dioctyl Sodium Sulfosuccinate Syrup, NF. (Colace)

THE FOLLOWING ITEMS HAVE BEEN RECLASSIFIED FROM STANDARD TO LIMITED STANDARD

FSN	
6505–063–8323	Phenylbutazone Tablets, USP. (Butazolidin)
6505–063–8323	Phenylbutazone Tablets, USP. (Aralen)
6505–113–9295	Chloroquine Phosphate Tablets, USP.
6505–723–5015	Hemorrhoidal Suppositories with Hydrocortisone Acetate. (Wyanoids-HC)
6505–764–9014	Dipyridamole Tablets. (Persantine)
6505–817–2228	Phenylbutazone Tablets, USP. (Butazolidin)
6505–857–5352	Aspirin, Phenacetin, and Caffeine Tablets, NF.
6505–912–2404	Lincomycin Hydrochloride Capsules, USP. (Lincocin)
6505–913–7907	Propoxyphene Hydrochloride, Aspirin, Caffeine, and Phenaceain capsules. (Darvon Compound)
6505–926–8879	Oxethazaine, aluminum hydroxide, and Magnesium Hydroxide Suspension. (Oxaine-M)
6505–935–1016	Thiethylperazine Maleate Injection. (Torecan)

30 APRIL 1971 DMMB MEETING

THE FOLLOWING ITEMS HAVE BEEN DELETED

FSN	
6505–110–6647	Boric Acid Ointment.
6505–121–2281	Vitamin-Mineral Tablets.
6505–124–2986	Colistin Sulfate, Hydrocortisone Acetate, Neomycin Sulfate, and Thonzonium Bromide Suspension, Otic. (Colymycin)
6505–142–9140	Doxycycline Hyclate Capsules. (Vibramycin)

6505–228–2765 Glyceryl Guaiacolate Elixir. (3/6, Robitussin)
6505–299–8500 Dextrose, USP.
6505–584–3280 Promethazine Hydrochloride Injection, USP. (Phenergan)
6505–926–2125 Nystatin Lotion. (Mycostatin)

THE FOLLOWING ITEMS HAVE BEEN RECLASSIFIED FROM STANDARD TO LIMITED STANDARD

FSN

6505–135–2995 Alcohol, USP.
6505–290–6032 Bacitracin, Sterile, USP.
6505–782–2633 Chlorpheniramine Maleate, Aspirin, Caffeine, and Phenyllephrine Tablets. (Coricidin-D)

31 MAY 1971 DMMB MEETING

THE FOLLOWING ITEMS HAVE BEEN DELETED

FSN

6505–181–7656 Hydroxypropyl Methycellulose Ophthalmic Solution. (Ultra Tears)
6505–890–1788 Thiopental Anesthesia Kit. (Pentothal)

THE FOLLOWING ITEMS HAVE BEEN RECLASSIFIED FROM STANDARD TO LIMITED STANDARD

FSN

6505–106–1075 Ammonia Spirit, Aromatic, NF.
6505–108–4965 Atropine Injection.
6505–159–6575 Chlortetracycline Hydrochloride Capsules, NF. (Aureomycin)
6505–299–8052 Tolazoline Hydrochloride Tablets. (Priscoline)
6505–299–8149 Primaquine Phosphate Tablets, USP.
6505–299–8276 Oxytetracycline Tablets. (Terramycin)
6505–616–9068 Glutethimide Tablets, NF. (Doriden)
6505–734–0658 Meglumine Diatrizoate Injection. USP. (Renografin)
6505–770–8345 Nalidixic Acid Tablets. (Negram)
6505–777–8911 Clycopyrrolate and Phenobarbital Tablets, (Robinul–PH)
6505–782–6485 Demeclocycline Hydrochloride Tablets, NP. (Declomycin)
6505–784–4976 Propoxyphene Hydrochloride, Aspirin, Caffeine, and Phenacetin Capsules. (Darvon Compound)
6505–853–8608 Sodium Cloxacillin Monohydrate Capsules, USP. (Tegopen)
6505–890–2081 Demeclocycline Hydrochloride Tablets, NF. (Declomycin)
6505–935–9818 Chlorpheniramine Maleate, Caramiphen Edisylate, Isopropamide Iodide, and Phenylpropanolamine Hydrochloride Capsules. (Tuss-Ornade)
6505–943–4384 Cyclandelate Capsules. (Cyclospasmol)

30 JUNE 1971 DMMB MEETING

THE FOLLOWING ITEMS HAVE BEEN DELETED

FSN

6505–074–4106 Sodium Diatrizoate Solution. (Hypaque)
6505–105–4750 Alkaline Aromatic Solution Tablets.
6505–110–6800 Brilliant Cresyl Blue, Analyzed Reagent.
6505–148–8782 Picric Acid, Analyzed Reagent.
6505–160–0495 Chloramphenicol Capsules, USP. (Chloromycetin)
6505–663–2701 Chloramphenicol Palmitate Oral Suspension, USP. (Chloromycetin—Oral Suspension)
6505–687–8205 Cetylpyridinium Chloride Lozenges—Re-Instated. (Capacol)
6505–823–7980 Citric Acid, USP.
6505–913–7907 Propoxyphene Hydrochloride, Aspirin, Caffeine, and Phenacetin Capsules (Darvon Compound)
6505–929–0574 Chlorpheniramine Maleate, Caramiphen Edisylate, Isopropamide Iodide, and Phenylpropanolamine Hydrochloride Capsules. (Tuss-Ornade)
6505–935–1148 Ampicillin Capsules. (Omnipen, Penbritin)
6505–943–4384 Cyclandelate Capsules—Possibly. (Cyclospasmol)

THE FOLLOWING ITEMS HAVE BEEN RECLASSIFIED FROM STANDARD TO LIMITED STANDARD

FSN	
6505–071–0610	Test Strips and Color Chart, Ketone in Urine. (Ketostix)
6505–104–9500	Alcohol, USP.
6505–147–1010	Terpin Hydrate, NF.
6505–147–1820	Tetracaine Hydrochloride, Sterile, USP. (Pontocaine)
6505–147–1840	Tetracaine Hydrochloride, Sterile, USP. (Pontocaine)
6505–435–8475	C-Reactive Protein Control Solution.
6505–584–3126	Octavitamin Drops.
6505–660–1604	Antiserum, C-Reactive Protein.
6505–754–2804	Urease Test Tablets.
6505–890–1551	Test Strips and Color Chart, Phenylketonuria.
6505–890–1872	Antigen, Histoplasmin Sensitized Latex.
6505–890–1901	Test Strips and Color Chart, Urinary Blood, Glucose, Protein, and pH.
6505–913–5873	Oxytetracycline Hydrochloride and Polymyxin B Sulfate Ophthalmic Ointment. (Terramycin-Polymixin β Oph. Oint.)
6505–926–2160	Test Kit, Syphilis Detection.
6505–926–8874	Test Strips and Color Chart, Glucose in Urine.
6505–935–9817	Prochlorperazine Maleate and Isopropamide Iodide Capsules—Possibly. (Combid)
6505–935–9854	Sodium Nitrite and Sodium Sulfanilate Tablets.

31 JULY 1971 DMMB MEETING

THE FOLLOWING ITEMS HAVE BEEN DELETED

FSN	
6505–074–0993	Magnesia and Alumina Oral Suspension, USP. (Maalox)
6505–108–5000	Atropine Sulfate, USP.
6505–113–8990	Chloroform, NF.
6505–126–2037	Chloramphenicol Ophthalmic Solution. (Chloromycetin)
6505–147–1300	Testosterone Propionate Injection. USP. (Oreton)
6505–655–5687	Flavoring, Wild Cherry Compound.
6505–728–2007	Theophylline and Glyceryl Guaiacolate Elixir. (Quibron)

THE FOLLOWING ITEMS HAVE BEEN RECLASSIFIED FROM STANDARD TO LIMITED STANDARD (AAC V)

FSN	
6505–129–5517	Morphine Injection, USP.
6505–129–5518	Morphine Injection, USP.
6505–687–4417	Atropine Injection.
6505–764–9042	Neomycin Sulfate, Hydrocortisone, and Polymyxin B Sulfate Ophthalmic Suspension (Cortisporin).
6505–926–9023	Dextrose, Calcium Chloride, Magnesium Chloride, Sodium Chloride, and Sodium Lactate Solution. (Dianeal)
6505–926–9025	Dextrose, Calcium Chloride, Magnesium Chloride, Sodium Chloride, and Sodium Lactate Solution. (Dianeal)
6505–958–7836	Test Kit, Rheumatoid Arthritis Determination. (RA-Test)
6505–982–7759	Dibucaine Hydrochloride with Dextrose Injection. (Nupercaine)

31 AUGUST 1971 DMMB MEETING

THE FOLLOWING ITEMS HAVE BEEN DELETED

FSN	
6505–063–8323	Phenylbutazone Tablets, USP. (Butazolidin)
6505–104–7990	Alcohol, USP.
6505–107–0325	Anise Oil, USP.
6505–110–7100	Brilliant Green Bile, Dehydrated.
6505–113–9295	Chloroquine Phosphate Tablets, USP. (Aralen)
6505–139–0000	Quinine Sulfate, NF.
6505–656–1345	Prochlorperazine Maleate Capsules. (Compazine)
6505–734–0658	Meglumine Diatrizcate Injection, USP. (Renografin)
6505–782–6485	Demeclocycline Hydrochloride Tablets, NE. (Declomycin)

6505–890–2054 Meclizine and Pyridoxine Solution—Possibly—1972. (Bonadoxin)
6505–926–8879 Oxethazaine Aluminum Hydroxide, and Magnesium Hydroxide Suspension—Possibly. (Oxaine-M)
6505–935–1016 Thiethylperazine Maleate Injection. (Torecan)
6505–935–4030 Furazolidone Tablets. (Furoxone)
6505–935–9818 Chlorpheniramine Maleate, Caramiphen Edisylate, Isopropamide Iodide, and Phenylpropanolamine Hydrochloride Capsules. (Tuss-Ornade)
6505–937–1762 Medroxyprogesterone Acetate with Ethinyl Estradiol Tablets—Unsafe—1972. (Provest).

THE SUPPLY STATUS CODE FOR THE FOLLOWING ITEMS HAVE BEEN RECLASSIFIED AS INDICATED (SSC 1 TO SSC 6)

FSN

6505–116–1890 Dextran Injection.
6505–116–8510 N, N-Dimethyl-p-Phenylenediamine Monohydrochloride, Reagent.
6505–146–2300 Sodium Sulfadiazine Injection, USP.
6505–299–8123 Benzalkonium Chloride Tincture. (Zepharin)
6505–299–8183 Benzalkonium Chloride Tincture. (Zepharin)
6505–619–8917 Menadione Tablets, NF.
6505–753–9580 Nystatin for Oral Suspension, USP. (Mycostatin)
6505–800–1485 Methylphenidate Hydrochloride for Injection, USP—Possibly. (Ritalin)

30 September 1971 DMMB Meeting

THE FOLLOWING ITEMS HAVE BEEN DELETED

FSN

6505–071–0611 Serum, Anti-Human, Coombs Test.
6505–147–1000 Terpin Hydrate, NF.
6505–153–8865 Kliger Iron Agar.
6505–159–5033 Glucose Test Solution.
6505–180–6291 Influenza Virus Vaccine, USP.
6505–550–6120 Pumice, NF.

SUPPLY STATUS CODE FOR FOLLOWING ITEMS RECLASSIFIED AS INDICATED

FSN	From—	To—
6505–142–8730—Cetylpyridium Chloride Sol'n—Re-instated (Cepacol)	6	1
6505–263–3362—Phenylephrine hydrochloride injection (Neo-synephrine)	1	6
6505–515–1584—Foot Powder Fungicidal—Possibly (Desenex)	1	6
6505–530–6469—Zinc Bacitacin, Neo Sulfate and Polymycin Oph Oint—Possibly (Prosporin)	1	6
6505–559–6741—Prednisolone Sulfacetamine, Neo Oph Oint—Possibly (Metimyd-Neomycin)	1	6
6505–664–4814—Undecylene Acid Oint—Possibly (Desenex)	1	6
6505–781–3111—Isosocoide Dinitrate, 40 mg.—Possibly—1972 (Isordil)	1	6
6505–861–0868—Isosocoide Dinitrate, 40 mg.—Possibly—1972	1	6
6505–890–1299—Neo Sulfate, Gramicidin and Polymyxin Ph Sulfate—Possibly (Neosporin)	1	6
6505–890–1535—Test kit, nitrogen determination	1	6
6505–890–1902—Cyclopentamine HCl, Metrapyrilene HCl & Pyrrobutamine Caps—Possibly (Co-pyronil)	1	6
6505–890–1911—Pyrrobutamine Napthalene Disulfonate Cyclopontamine Hydroxybenzoyl Benzoate and Methapyrilene Hydroxygen Susp—Possibly (Co-pyronil)	1	6

31 October 1971 DMMB Meeting

THE FOLLOWING ITEMS WERE DELETED BY SEPTEMBER 1971 IBR'S

FSN

6505–110–6652 Boric Acid Ophthalmic Ointment.
6505–147–2600 Thiamine Hydrochloride Tablets, USP.
6505–261–7245 Benzethonium Chloride Tablets.
6505–656–0497 Smallpox Vaccine. USP.
6505–660–1604 Antiserum, C-Reactive Protein.
6505–782–2683 Sparteine Sulfate Injection. (Tocos Amine)
6505–782–6520 Sodium Sulfobromophthalein Injection, USP.

6505–853–8608 Sodium Cloxacillin Capsules, USP. (Tegopen)
6505–913–5873 Oxytetracycline Hydrochloride and Polymyxin B Sulfate Ophthalmic Ointment. (Terramycin)
6505–935–4117 Dexamethasone Sodium Phosphate Injection. (Decadron)

THE SUPPLY STATUS CODE FOR THE FOLLOWING ITEMS HAVE BEEN RECLASSIFIED AS INDICATED (SSC 1 TO SSC 6)

FSN

6505–111–1235 Calamine Lotion Powder, Phenolated and Mentholated.
6505–181–8098 Cephaloglycin Dihydrate Capsules. (Kafocin)
6505–197–1507 Serum Albumin Test Solution.
6505–420–9584 Tuberculin, Purified Protein Derivative, USP.
6505–420–9585 Tuberculin, Purified Protein Derivative, USP.
6505–420–9586 Tuberculin, Purified Protein Derivative, USP.
6505–420–9587 Tuberculin, Purified Protein Derivative, USP.
6505–926–9096 Basic Fuchsin, Analyzed Reagent.

NOVEMBER 1971 ACTIONS

THE FOLLOWING ITEMS HAVE BEEN DELETED BY THE DMMB

FSN

6505–131–6990 Histoplasmin, Tine Test.
6505–141–8802 Chloroquine and Primaquine Phosphates Tablets.
6505–145–0280 Water for Injection, Sterile, USP.
6505–181–8098 Cephaloglycin Dihydrate Capsules. (Kafocin)
6505–290–6032 Bacitracin, Sterile, USP.
6505–435–8475 C-Reactive Protein Control Solution.
6505–582–5434 Sodium Fluorescein Applicators.
6505–619–8704 Folic Acid Tablets, USP—Recommended by NAS/NRC.
6505–619–8917 Menadione Tablets, NF.
6505–764–9042 Neomycin Sulfate, Hydrocortisone, and Polymyxin B Sulfate Ophthalmic Suspension—Possibly. (Cortisporin)
6505–890–1872 Antigen, Histoplasmin Sensitized Latex.
6505–926–9023 Dextrose, Calcium Chloride, Magnesium Chloride, Sodium Chloride, and Sodium Lactate Solution.
6505–926–9025 Dextrose, Calcium Chloride, Magnesium Chloride, Sodium Chloride, and Sodium Lactate Solution.
6505–926–9106 Dyclonine Hydrochloride Solution, USP. (Dyclone)
6505–931–6646 Methyldopa Tablets, USP. (Aldomet)

THE SUPPLY STATUS CODE FOR THE FOLLOWING ITEMS HAVE BEEN REVISED AS INDICATED

FSN

6505–225–9222 Meglumine Diatrizoate-Sodium Diatrizoate Injection (Hypaque).
6505–753–5043 Chloroquine and Primaquine Phoshates Tablets.
6505–754–0001 Polymyxin B Sulfate Solution—Possibly. (Aerosporin)
6505–926–2062 Meglumine Diatrizoate Injection, USP. (Renografin)

DECEMBER 1971 ACTIONS

THE FOLLOWING ITEMS HAVE BEEN DELETED BY THE DMMB

FSN and Nomenclature

6505–784–4976 Propoxyphene Hydrochloride, Aspirin, Caffeine, and Phenacetin, Capsules. (Darvon Compound)
6505–935–5882 Dichlorvos—Safe. (Task)

THE SUPPLY STATUS CODE FOR THE FOLLOWING ITEMS HAVE BEEN REVISED AS INDICATED (ALL FROM SSC 1 TO SSC 6)

FSN

6505–082–2560 Phosphate Solution.
6505–126–9425 Sodium Mercaptomerin, Sterile, USP. (Thiomerin)
6505–147–1860 Tetracaine Hydrochloride Solution Tablets (Pontocaine).
6505–153–8774 Hexylresorcinol Pills, NF.

6505–181–7203 Erythromycin Ethylsuccinate Granules for Oral Suspension, NF. (Erythrocin)
6505–435–0377 Furosemide Injection. (Lasix)
6505–524–0408 Typhoid Vaccine, USP.
6505–753–9516 Dexpanthenol Injection. (Ilopan)
6505–782–6481 Tetracycline Hydrochloride Tablets, NF
6505–890–1383 Methamphetamine Hydrochloride and Phenobarbital Tablets. (Ambar)
6505–890–1384 Methamphetamine Hydrochloride and Phenobarbital Tablets. (Ambar)
6505–890–1820 Test Kit, Pregnancy Determination.
6505–913–7905 Chloroquine and Primaquine Phosphates Tablets. (Aralen and Primaquine)
6505–914–2198 Dextroamphetamine Sulfate Tablets, USP. (Dexedrine)
6505–926–9018 Homatropine Hydrochloride Ophthalmic Ointment.
6505–935–4021 Sulisobenzone Lotion. (Uval)
6505–935–5879 Typhoid Vaccine USP.
6505–935–6580 Sodium Chloride Injection, Modified.
6505–935–6581 Dextrose Injection, Modified.
6505–935–6582 Dextrose Injection, Modified.
6505–935–6583 Dextrose and Sodium Chloride Injection, Modified.
6505–982–4228 Sodium Warfarin Tablets, USP. (Coumadin)

JANUARY 1972 ACTIONS

THE FOLLOWING ITEMS HAVE BEEN DELETED BY THE DMMB

FSN and Nomenclature

6505–159–6575 Chlortetracycline Hydrochloride Capsules, NF. (Aureomycin)
6505–160–2000 Diphtheria Antitoxin, USP.
6505–724–5088 Carica Papaya Proteclytic Enzymes Tablets—Possibly. (Papase)
6505–753–9580 Nystatin for Oral Suspension, USP. (Mycostatin)
6505–764–9014 Dipyridamole Tablets—Possibly. (Persantin)
6505–770–8345 Nalidixic Acid Tablets, NF. (Neg Gram)
6505–774–5861 Methadone Hydrochloride Tablets, USP. (Dolophin)
6505–817–2228 Phenylbutazone Tablets, USP. (Butazolidone)
6505–861–0868 Isosorbide Dinitrate Tablets—Possibly. (Isordil)
6505–890–1299 Neomycin Sulfate, Gramicidin, and Polymyxin B Sulfate Ophthalmic Solution. NF—Possibly. (Neosporin)
6505–890–1551 Test Strips and Color Chart, Phenylketonuria.
6505–926–2160—Test Kit, Syphilis Detection.
6505–926–9096 Basic Fuchsin, Analyzed Reagent.
6505–957–8005 Methadone Hydrochloride Tablets, USP. (Dolophin)

THE SUPPLY STATUS CODE FOR THE FOLLOWING ITEMS HAVE BEEN REVISED AS INDICATED

FSN: 6505–926–9151; from 1 to 6—Fungicidal solution. (Vardefam)

FEBRUARY 1972 ACTIONS

THE FOLLOWING ITEMS HAVE BEEN DELETED BY THE DMMB

FSN and Nomenclature

6505–108–3800 L-Asparagine, Analyzed Reagent.
6505–142–8796 Canine Distemper-Hepatitis Vaccine-Leptospira Bacterin.
6505–181–7187 Rubella Virus Vaccine, Live.
6505–261–7266 Encephalomyelitis Vaccine (Eastern and Western) Chick-Embryo Origin.
6505–457–2701 Measles Virus Vaccine, Live, Attenuated, USP.
6505–660–1599 Anthrax Spore Vaccine, Veterinary.
6505–926–9090 Diphtheria and Tetanus Toxoids and Pertussis Vaccine, Adsorbed, USP.
6505–926–9091 Tetanus Toxoid, USP.
6505–926–9104 Tetanus and Diphtheria Toxoids, Adsorbed, USP.
6505–926–9105 Tetanus Toxoid, Adsorbed, USP.

THE SUPPLY STATUS CODES FOR THE FOLLOWING ITEMS HAVE BEEN REVISED AS INDICATED (SSC 1 TO SSC 6)

FSN	
6505–105–9400	p-Aminobenzoic Acid, Analyzed Reagent.
6505–106–4843	Levallorphan Tartrate Injection, USP. (Lorfan)
6505–110–6340	Bismuth Sulfite Agar, Dehydrated.
6505–110–8300	Bromothymol Blue, Analyzed Reagent.
6505–112–4000	Capryl Alcohol, Analyzed Reagent.
6505–114–0000	Chromium Trioxide, Analyzed Reagent.
6505–116–8000	p-Dimethylaminoazobenzene, Analyzed Reagent.
6505–117–0000	Dulcitol, Analyzed Reagent.
6505–131–0100	Oil Red O, Reagent.
6505–113–1903	Dextrose, Calcium Chloride, Magnesium Chloride, Sodium Chloride, and Sodium Lactate Solution.
6505–133–1904	Dextrose, Calcium Chloride, Magnesium Chloride, Sodium Chloride, and Sodium Lactate Solution.
6505–136–4000	Potassium Ferricyanide, ACS.
6505–138–0680	Procaine Hydrochloride, Sterile, USP.
6505–148–9225	Peptone Glucose Extract Agar, Dehydrated.
6505–149–0205	Urease Test Broth, Dehydrated.
6505–153–8864	Lactose Broth, Dehydrated.
6505–153–9967	Giemsa's Stain.
6505–153–9976	Neutral Red, Analyzed Reagent.
6505–161–0600	Oxytetracycline Hydrochloride for Injection, USP. (Terramycin)
6505–224–8349	Lactose, Reagent.
6505–226–1202	Sodium Oxacillin Capsules, USP. (Prostaphlin)
6505–237–8480	Potassium Penicillin G Tablets, USP.
6505–261–7247	Methenamine Mandelate Tablets, USP. (Mandelamine)
6505–299–8599	Trisulfapyrimidines Oral Suspension, USP.
6505–299–8697	Procaine Hydrochloride Injection, USP. (Novocain)
6505–531–7757	Chlorpheniramine Maleate Syrup, USP. (Chlor-Trimeton)
6505–664–7117	Potassium Penicillin G for Injection, USP.
6505–817–2227	Oxytetracycline Suspension. (Terramycin)
6505–853–6916	Phenmetrazine Hydrocholoride Tablets, NF. (Preludin)
6050–854–2497	Oxytetracycline Injection, NF. (Terramycin)
6505–890–1388	Erythromycin Estolate Capsules, NF. (Ilosone)
6505–890–1575	Tetracycline Hydrochloride for Injection, USP.
6505–890–1763	Demeclocycline Syrup (SSC 2 to SSC 6). (Declomycin)
6505–890–2193	povidone-Iodine Ointment. (Betadyne)
6505–903–9220	Sodium Sulfacetamide, Phenylephrine Hydrochloride, and Prednisolone Acetate Ophthalmic Suspension. (Prednefrin Forte)
6505–935–4128	Erythromycin Estolate for Oral Suspension, NF. (Ilosone)
6505–935–9702	Dextran 40 Injection.
6505–935–9703	Dextran 40 Injection.
6505–982–5557	Erythromycin Estolate for Oral Suspension, NF. (Ilosone)

MARCH 1972 ACTIONS

THE FOLLOWING ITEMS HAVE BEEN DELETED BY THE DMMB

FSN and *Nomenclature*	
6505–042–8366	Isosorbide Dinitrate Capsules—Possibly. (Isordil)
6505–082–2560	Phosphate Solution.
6505–116–8510	N,N-Dimethyl-p-Phenylenediamine Monohydrochloride, Reagent.
6505–126–9425	Sodium Mercaptomerin, Sterile, USP. (Thiomerin)
6505–181–7203	Erythromycin Ethylsuccinate for Oral Suspension, NF. (Erythrocin)
6505–181–7496	Hexachlorophene, Salicylic Acid, and Sulfur Cream. (Pernox)
6505–181–7721	Rubella Virus Vaccine, Live.
6505–299–8149	Primaquine Phosphate, USP.
6505–531–7757	Chlorpheniramine Maleate Syrup. (Chlortrimeton)
6505–619–8919	Orange Oil, Concentrated.
6505–660–1720	Propoxyphene Hydrochloride Capsules, USP—Ineffective (Darvon)
6505–723–5015	Hemorrhoidal Suppositories with Hydrocortisone Acetate—Possibly. (Wyanoids—HC)

6505–764–3313 Chloroxazone and Acetaminophen Tablets—Possibly. (Parafon Forte)
6505–875–7955 Meglumine Diatrizoate Injection, USP. (Renografin (2))
6505–890–1763 Demeclocycline Syrup. (Declomycin)
6505–890–2081 Demeclocycline Hydrochloride Tablets, NF. (Declomycin)
6505–926–9107 Diphtheria and Tetanus Toxoids, Adsorbed, USP.
6505–982–7759 Dibucaine Hydrochloride with Dextrose Injection. (Nupercaine)

THE SUPPLY STATUS CODES FOR THE FOLLOWING ITEMS HAVE BEEN REVISED AS INDICATED (SSC 1 TO SSC 6)

FSN

6505–064–8731 Sodium Diatrizoate for Oral Solution. (Hypaque Sodium, Oral)
6505–074–0993 Magnesia and Alumina Oral Suspension, USP. (Maalox)
6505–181–8044 Influenza Virus Vaccine, USP.
6505–597–7341 Pentaerythritol Tetranitrate Tablets, NF. (Peritrate)
6505–680–2326 Pentaerytritol Tetranitrate Tablets, Modified. (Peritrate)
6505–761–1506 Isosorbide Dinitrate Tablets. (Isordil)
6505–782–2676 Tuberculin, Purified Protein Derivative, USP.
6505–827–5710 Ampicillin for Oral Suspension, USP. (Omnipen, Penbritin, Amcil)
6505–890–2218 Aluminum Hydroxide gel, Magnesium Hydroxide, and Simethicone suspension. (Mylanta)
6505–935–4129 Potassium Phenoxymethyl Penicillin for Oral solution. (V-Cillin-K)
6505–935–4130 Potassium Phenoxymethyl Penicillin for Oral solution. (V-Cillin-K)

APRIL 1972 ACTIONS

THE FOLLOWING ITEMS HAVE BEEN DELETED BY THE DMMB

FSN and Nomenclature

6505–116–1890 Dextran Injection.
6505–180–5994 Sodium N-Amylethylbarbiturate and Sodium Butabarbital injection.
6505–947–1882 Blood Chemistry Control Serum, Normal.
6505–947–1883 Blood Chemistry Control Serum, Abnormal.
6505–952–7177 Paraldehyde, USP.

THE SUPPLY STATUS CODE FOR THE FOLLOWING ITEMS HAVE BEEN REVISED AS INDICATED (SSC 1 TO SSC 6)

FSN

6505–022–1323 Chlorpromazine Hydrochloride Capsules. (Thorazine)
6505–022–1324 Chlorpromazine Hydrochloride Capsules. (Thorazine)
6505–063–5570 Imipramine Hydrochloride Tablets, USP. (Tofranil)
6505–113–6995 Chloral Hydrate, USP.
6505–116–9325 Sodium Diphenylhydration Capsules, USP. (Dilantin)
6505–116–9670 Dimenhydrinate Tablets, USP. (Dramamine)
6505–126–9400 Mephobarbital Tablets, NF. (Mebaral)
6505–133–9400 Phenobarbital, USP.
6505–141–3725 Sodium Amobarbital Capsulets, USP. (Amytal)
6505–160–7875 Rabies Vaccine, USP.
6505–551–8862 Promazine Hydrochloride Tablets, NF. (Sparine)
6505–559–6695 Sodium Phenobarbital, Sterile, USP.
6505–890–1819 Trimethobenzamide Hydrochloride and Benzocaine suppositories, NF—Possibly. (Tigan)
6505–926–9005 Chlorphentermine Hydrochloride Tablets. (Pre-Sate)
6505–935–9822 Prochlorperazine Maleate Capsules. (Compazine)
6505–935–9831 Dextroamphetamine Sulfate and Amobarbital Capsules. (Dexamyl)
6505–965–2319 Trimethobenzamide Hydrochloride Capsules, NF—probably. (Tigan)
6505–965–2435 Phenmetrazine Hydrochloride Tablets, Modified. (Preludin)

Senator NELSON. In the material you sent us in April, the data indicates that some considerable amount is still being spent on drugs which the AMA Council on Drugs and/or the National Research Council of the National Academy of Sciences regard as irrational and not recommended—Ornade and Darvon Compound for example—Ornade almost a million dollars and Darvon Compound $850,000—Dimetapp Extendtabs $670,000 and Bendectin almost a half million dollars—are we correct in that, that either the AMA Council on Drugs itself or the NAS/NRC regard them as irrational combinations? Is there a reason for using those?

General HAYES. Well, I would like to quote to you from a Jan. 18, 1972 minutes of the Therapeutic Agents Board Meeting at the Valley Forge Hospital. I will give this for the record also, but I will just take this one part.[1] This is paragraph "h" under paragraph (6).

"Discussion of Darvon Compound–65 (deleted by depot as a standard item)—This is one of the biggest volume items in Pharmacy. Plain Darvon, 65 mg., does not have the same acceptance with either physician or patient—preference is approximately 10–1 in favor of D.C.–65. It was unanimously agreed by Board members to continue stockage of this items as a non-standard item. Through Department Chiefs, a physician/patient education program will be initiated with the aim of reducing requests for this item."

I think that more or less gets at the heart of the problem of a number of these drugs, that they have been well accepted both by the physician and by the patients, even though the fundamental statement that you quoted from the AMA and also the Research Council findings indicate that they do not have a great deal of advantage over some other substances.

Senator NELSON. We are talking about local procurement, is that right?

General HAYES. This would be now local procurement, because we have deleted this item, put it at the limited standard and it's being deleted out of the system.

Senator NELSON. But that report you were just reading from is from where?

General HAYES. This is from the Valley Forge General Hospital at Phoenixville, Pa., and it shows the problem of an individual hospital against this kind of thing and how they are trying to meet it. They are both stocking while they are trying to educate people to recognize that there are other ways to get the same result. But as they state very well, it is a matter of both the patient and physician education.

Senator NELSON. This is the same problem over the years with all the fixed combination anti-infectives, I take it.

General HAYES. Essentially.

Colonel LINDSEY. Sir, there has been a sharp drop in the number of the fixed combinations that are in our catalog. The last issue of our catalog was published in October 1971 and since then, through the change bulletins, about one-third of all the fixed combination preparations in the catalog have been deleted or gone on limited standard

[1] See Appendix IV, p. 8885.

pending exhaustion. Not one new combination has been added since October 1971.

General HAYES. Furthermore, in regard to the Darvon, I think if we look at the overall picture, the usage of Darvon is moving downward. In the 12 months of fiscal 1971, we issued about 70 million doses of Darvon in various forms. During the 16 months since the last hearing, we only issued 20 million. That is a lot of Darvon still. But you have to compare that against the 400 billion doses of aspirin in the same period. And about 95 percent of the time, it would look as if now the prescribing is aspirin as the drug of choice.

Now, from the viewpoint of price, propoxyphene still is a significant amount of money. It cost us almost $600,000. The 400 million doses of aspirin cost us $800,000. Or if you put it on a cent per dose, it is 3 cents to two-tenths of a cent per dose.

Senator NELSON. I take it that part of the problem is that patients do not think you are giving them much of anything if they get aspirin, whereas if you give them a drug under another name, they feel the results are better?

General HAYES. Well, that is true. It is rather interesting that people do not understand the value of aspirin for a number of things. I have a hard time getting patients who have minor inflammatory problems in joints, getting them to understand that the aspirin not only helps the pain, but it also helps the inflammatory process, which is not helped by the other analgesics. They are analgesics only. But aspirin has a specific anti-inflammatory action. It is really superior to some other things for certain things.

Senator NELSON. I suppose the patients would probably feel they were getting better treatment if the doctor said we are giving you some acetylsalicylic acid.

General HAYES. Well, our patients are getting pretty sophisticated, and I think they would know that is aspirin.

Now, I think another thing, if we are going to be on Darvon a little bit. The patents run out on it this year and I expect the price will drop as competition comes into the picture.

Senator NELSON. I take it you are following the NAS/NRC recommendations on "ineffective," "possibly effective" or "probably effective" drugs?

General HAYES. That has been a matter of official policy since before the last hearings. I think if you will remember, just shortly before the last hearings, the recommendations came out and the DOD, our office in DOD put forth a directive that these recommendations were to be followed and that those items that were not effective were to be deleted, either by destruction or other disposal from the system, completely; that the effectives were to be monitored if there were changes in ratings by the Council recommendations, and the possibly and probably would be monitored again through the *Federal Register* and changed as advice came through the pages of the *Federal Register*. This has been followed very carefully.

Mr. GORDON. The Darvon Compound 65 that is referred to by the Council on Drugs of the AMA is a combination of Darvon with APC; that is, with phenacetin, caffeine, and aspirin. But the combination of Darvon and aspirin alone is not considered irrational according to the AMA's Drug Evaluations. I just want to clear that up.

General HAYES. Well, if we want to get to it, I do not think APC is a very sensible combination, any way you use it, with or without Darvon. It is an irrational combination in my own mind. But Darvon and aspirin together do give an increased analgesic effect. But again, I come back to that point that in the other analgesic agents, the anti-inflammatory capability that aspirin has is missing, by and large.

Mr. GORDON. How about Ornade? The DOD spent almost $1 million on that.

General HAYES. Fundamentally, Ornade and Dimetapp represent in the service pretty much what they represent outside the service. They are a well accepted drug by both the patients and the prescribing physicians. They are popular.

Colonel LINDSEY. They are in the top 50.

General HAYES. They are in the top 50 across the country.

Senator NELSON. The AMA's Drug Evaluations describe Ornade as an irrational mixture. NAS/NRC evaluation is possibly effective. "The panel is unaware of any evidence that this combination or any of its components is effective for this indication." It goes on to say that several carefully controlled studies in which different antihistamines were tried disclosed no alleviation of symptoms or shortening of the duration of symptoms of colds.

General HAYES. Well, I think we all agree with that. And it again is a matter of how you look at it. Some patients do get relief, they feel at least, with the use of these substances. And I am not talking about the specifically named drugs now, I am talking about the general product. The atropine-like aspects of some of the components do help with the stuffiness. I do not feel competent to say anything against the recommendations of the AMA or the Council on that.

Mr. GORDON. When you drop the ineffectives, the possibly effectives, the irrational and the unnecessary drugs, including fancy duplicates, what do you estimate DOD will save in the next fiscal year?

Colonel LINDSEY. We have already dropped the ineffective and possibly effective. I do not think there is any chance that we are going to drop the drugs that are listed by AMA as "irrational." Some of these things are standbys in a man's practice. It is going to take a generation or two generations of education to do it.

The good example is triprolidine and pseudoephedrine. This is a bread and butter staple item of the physician in the emergency room taking care of a sick kid. If we dropped all the irrational combinations and—what was the other category you mentioned?

Mr. GORDON. The irrational, the unnecessary, the possibly effectives.

Colonel LINDSEY. We have already dropped the ineffective and the possibly effective. If we dropped the irrational—let's say we dropped Arfonad and we put the two ingredients down in the emergency room and the physician had to write two prescriptions and not one and we had to buy two drugs and not a combination, we would save nothing.

Mr. GORDON. I am talking about what are you planning to do. Those that you are planning to drop and have dropped already—what do you expect to save in the next fiscal year?

General HAYES. I do not know how we can project that, Mr. Gordon, because it is a matter of moving evolution so that we do not, at the moment, say, well, now, this year we are going to drop drug X. It is

as the information becomes available and the patterns evolve, then we decide to drop drug X. And as our success in education on some of these items that we admit are irrational but are, as Colonel Lindsey says, bread and butter items in practice—as the educational process cuts down the demand, then we will be in a position to drop it. It is hard to answer, it is impossible to answer, the question you have asked, really. It is just that our goal is to eliminate the unessential just as we have eliminated the ineffective.

Mr. GORDON. All right. Those that you have already dropped, what kind of savings are you making on that?

Colonel LINDSEY. Relatively little. We drop things that people switch to other things for. The place where we are going to save money is in switching from brand name combinations which are limited for one gimmick or another, to equivalent combinations which are made readily available, nonpatented, generic drugs. For example, if we have to have a cold tablet, a mixture of ingredients to make the patient feel better—quit sneezing, quit sniffling, dry his nose up—if we could go out and buy that on a generic basis, I would say on cold tablets alone, we would save $750,000 per annum.

Now, I mentioned earlier, we have already dropped about a third of the fixed combination drugs in our catalog since October of last year.

Mr. GORDON. How much did you save on that?

Colonel LINDSEY. I do not think we saved anything. People switched their volume to other drugs.

General HAYES. Maybe I can give you an idea of the situation as to how they are going at this by quoting from a Pharmacy Newsletter. This one is from Martin Army Hospital at Fort Benning, Ga. This is the January 1972 edition. As you can gather, it is volume 12, No. 1, so this kind of educational process has been going on for some time.

It says from the Department of Clinics. This is on page 1. I will number it with a "3" for the record.[1]

"The Department of Clinics is engaged in a program of reducing the number and amounts prescribed of drugs subject to abuse or addiction." This is what they are covering at the moment. "Statistics generated out of this program reveals aspects of drug utilization which should be of interest to all personnel. During the year ending in October 1971, a review of utilization of 10 commonly prescribed drugs disclosed the following: Amytal, 4,500 units for a value of $24.30."

I am going to the middle. I am not going to take all 10 of these. Meprobamate, 8,500 units for $448.80; and at the bottom, Fiorinal, Librium, and Valium, 287,000 for the first for $2,600—I am rounding off now when we get up to these numbers; Librium 419,000 units for $12,000; and Valium, 727,000 units for $28,200. "It should be noted that the bulk of funds expended on these types of drugs is attributable to only three drugs, the latter three. These three drugs accounted for a total of 1,433,000 units at a cost of $42,892. The significance of these figures can better be evaluated when comparison is made to the other drugs stocked and used in MEDDAC. A total of 1,100 drug products are authorized for use in our activities. The cost per line on a monthly basis of these 1,100 items is $59, while for each one of the aforementioned three drugs, it is $1,194.

[1] See p. 8891.

"While no attempt was made to determine proper utilization of these drugs, physicians and dentists who have studied these figures have raised the following questions:

" 'How many of those patients started on Valium or Librium for its tranquilizing properties could have benefited from the use of phenobarbital, a much less expensive product and effective tranquilizer?

" 'How many of the patients that were treated with Fiorinal as a pain reliever could have obtained the same relief from aspirin, APC, or codeine—all much less expensive and effective pain killers?' "

Now, this is the kind of educational process that is going on all the time. They are trying to get people to look at rational use of drugs which will accomplish an end at lower expense. But I can still not answer your question as to how much money we are going to save. And I cannot go to the point that we at the DOD level, and I think I can speak for the three Surgeons General, that their offices would not go and send a directive to Martin Army Hospital and say, you will not issue Fiorinal, Librium, or Valium. We cannot go that directive. But we certainly can educate, and this is going on.

Another example of it is the Air Force. This is from Wilford Hall Hospital at Lackland, in San Antonio. Their formulary, which as you see is a handy size, their formulary has listed in it opposite—I opened it at Dactinomycin—500 mcg, vial, one vial, $1.40. Every item in this thing has a price opposite it to inform prescribing physicians of what he is spending of his tax money and also the money that is allotted to the base for its overall use. Because the money that is overspent in the pharmacy is not spent for something else that somebody else might want. There is a limited budget.[1]

Now, Wilford Hall is not alone in this kind of thing, but I brought it along as an example of what the services are doing.

Senator NELSON. What hospital is that? Is this their own formulary developed within the hospital?

General HAYES. Yes.

Senator NELSON. What educational process has the DOD adopted from the top here? Have you provided any suggested formulary?

General HAYES. No, we have not, and actually, each hospital has its own formulary, because there are certain differences in the way things are done in the various services, both the services and the needs, so each hospital puts its own formulary together. We have not felt it is necessary to put together a DOD formulary because the services are doing a good job in their various installations.

Senator NELSON. Colonel, when you were talking about irrational combinations, whose definition were you using? For example, the AMA describes a number of drugs as irrational combinations. The NAS/NRC described a number as irrational combination, including, if my memory is correct, all fixed combination anti-infectives, did they not? Except the tuberculosis drugs. Whose definition are you following on irrational?

Colonel LINDSEY. I was responding to Mr. Gordon's question on irrational. I used the term once specifically in relation to Arfonad. I was using in that case the AMA definition.

Senator NELSON. Because the NAS/NRC did not conclude that all combinations were irrational. I think a number of those they did not describe as irrational were topicals, as well as certain tuberculosis drugs.

[1] See p. 8893.

Colonel LINDSEY. We have a number of certain types of penicillin which may not be irrational. Other than the topicals, we have no combination of antibiotics.

General HAYES. To carry on a little further to develop the thought that you had about what are we doing on cost ideas and formularies, the Air Force has in its Medical Digest which comes out monthly a continuing program entitled "How Much Does It Cost?" I will not—again, I will not read all of this, but I will read a little of it and then I will put this in for the record and this will be No. 5:

> How can we readily identify the comparative costs of similar drugs and how can this information be made easily accessible to the practicing physician? The data automation system has many reports that are used to manage our medical resources, but there is not a simple, convenient way in which the practicing Air Force physician can identify and compare the relative cost of similar products of pharmaceuticals.

They go on and develop that a little bit. But then they give the examples in this and this is only one issue of this, where they, in a table, compare the costs of appetite control preparations, for instance—dexedrine, cost per day, 8 cents; Ambar, 3 cents; Eskatrol, 7 cents; Preludin, 9.[1]

Senator NELSON. Are these prices based upon prices charged the hospital by your central procurement? These are not local pharmacies?

General HAYES. No, these are the central prices.

Again, I will not burden you with this whole business. But this is an example of how they are trying to bring to the attention of people what the prescribing members in terms of dollars and cents as well as the effectiveness.

There is another management publication that the Air Force has and this one again emphasizes the "how much does it cost" aspect. The Air Force can do this a little bit better than the other two services because they have at the moment a better system of automation for data computation. But the other services are doing much the same kind of thing in the ways that they can do them.

Mr. GORDON. On page 13 of your additional statement, you say that you have no objection to turning over to FDA "our job of inspection and testing so long as they do it as thoroughly as we do." Then you estimate that they need 3,000 more highly skilled personnel to do the job.

Now, I notice from the material that the GAO gave us that you have approximately 76 people to do that type of work. Why do you say the FDA would need 3,000 more people to do the same job?

General HAYES. Well, there is one little phrase in that sentence, "for the country," that we are doing for the Department of Defense.

Mr. GORDON. Oh, for the country.

General HAYES. If they did it for us, they would not need 3,000. But if they are going to take on the whole job the way we do it for the whole country, they will need 3,000 more people. And that is a guess.

Mr. GORDON. I see. How about doing the job for the Defense Department, rather than for the country?

General HAYES. Well, as we say, if they will do it and do it as well as we do it, we do not care.

Mr. GORDON. One other point. A study has been made fairly recently by Dr. Paul Stolley of Johns Hopkins, Dr. McEvilla and others that show that antibiotics and other drugs are being prescribed fre-

[1] See p. 9041.

quently for the common cold. Do you plan to do anything about this? Have you issued any instructions?

General HAYES. Let me see what I can find. Without finding it, let me answer yes, as part of the continuing education, in the same types of publications that I have talked about, either the Navy's, U.S. Navy Medicine, they call it, the Army's Medical Bulletin, the Air Force's Medical Service Digest—these aspects are addressed directly, that the prescribing of antibiotics for nonantibiotic conditions is discouraged. Again, it is a habit pattern that has developed in the country and it is gong to take time to get this kind of thinking reversed. But it is being addressed.

Senator NELSON. An article in the Annals of Internal Medicine, April of this year, volume 76, No. 4, states that:

> It is equally apparent that a large amount of drug prescribing and drug costs are for a common, benign, and self-limiting illnesses; for example, the uncomplicated common cold. The U.S. National Marketing Research Data also indicate that most physicians—about 95 percent—would issue one or more prescriptions to a patient diagnosed as having the common cold and almost 60 percent of these prescriptions will be for antibiotics. Data are not available to determine what proportion represent bacterial complications of an illness that was originally viral.

This seems to indicate a vast overprescribing of antibiotics for nonindicated uses, would it not?

General HAYES. Oh, I would not argue with that at all.

Senator NELSON. Well, if that is common in the profession—they are saying 95 percent prescribe something and 60 percent prescribe an antibiotic—have you tackled that specific question?

General HAYES. I have found a reference of the kind I am talking about. This is the Navy U.S. Navy Medicine, March 1972. In a letter to the editor discussion back and forth, with a comment from Captain Fox, the Medical Corps, chairman of the Formulary Review Committee, and I will just quote one thing: "Antibiotic prescribing in my own experience is much more rational and restrained now than it was 5 years ago. But there is still a tendency to use an antibiotic when none is needed or to use a large dose when a small one will do the job."

This is what I mean by continuing exposition of the problem through the various professional publications of the services.

Senator NELSON. Have you attempted to establish any procedure for a base line, so to speak, so that you will know 1 year, 2 years, 3 years from now what changes in the prescribing practices have occurred within the institutions within the Army?

General HAYES. Well, I think that will come, first, out of the figures that Colonel Lindsey's shop will develop as the demands are identified. Also, as I say, the Air Force is keeping good track on the various hospitals, and they can do this well, of what is being used. I think we will see the trends of our educational efforts as time goes on, and we plan to keep monitoring this.

Senator NELSON. Do you maintain statistics on an institution-by-institution basis on what drugs are used and for what purposes?

General HAYES. The Air Force does. The other two services do not. They are not set up at the present time in their accounting system to be able to do it. The Air Force, by virtue of the fact of its data processing, can do it.

Colonel LINDSEY. Senator, we can retrieve data by hospital or medical facility of type for all three of the services. We do not usually do

this because we have enough other things to do. We do watch the flow of total service demand. Some of the happenings to these demands when an item is announced as possibly effective, for example, are very interesting.

General Hayes mentioned dextroamphetamine sulfate and Chlortrimeton and Eskatrol. As soon as we indicated that this compound was possibly effective and delimited standards, the demand dropped by 90 percent and we suddenly wind up with 35 years and 8 months' supply of this stuff at current consumption rates. This is an example of where people can and do get to work.

Senator Nelson. That is not considered an excess supply in the military, is it?

Colonel Lindsey. That is a minor item of excess supply.

General Hayes. To give you an example, to answer that question about being able to monitor and monitoring, this is the Carswell Air Force Base, Tex., read out in response to the "How much does it cost" program. It is put together in two ways. One is a gross grouping, cardiac therapy. Cost quarter ending December 31, 1971, $13,231 and $15,208 for the quarter ending March 31. The cost differential there, $2,000 plus.[1]

But in tranquilizers and antianxiety, which is the next line item that I see here, the cost in quarter ending December 31, 1971, was $9,448; for the quarter ending March 31, 1972, it was $7,111, or a minus $2,337.

Now, further back they actually go into the line item listing. Again they give the unit of issue, the unit of cost, the cost per day, cost per tab, the issues between January and March—well, for each quarter—to the end of the listing, which ended in March of 1972. They can tell the numbers of issues and the total annual cost by quarter.

So this monitoring of what is going on can be kept at a very good level. And this is a pretty small base in one sense.

Senator Nelson. Is that in the Air Force?

General Hayes. This is Carswell Air Force Base.

Senator Nelson. As you may recall, we discussed the question of rational prescribing in your last appearance about a year and a half ago. I suggested that it seemed to me that if there was one place in the practice of medicine where it would be possible to establish the best kind of program of rational prescribing, it would be in the military services. I do not know the complications involved, but I am just wondering if it would be valuable if each of the hospitals in the military maintained records the way the Air Force does so that you would be able to compare the situations throughout the military in what has been prescribed and what is done.

General Hayes. Ideally, you are right. But there are practicalities. The Air Force has the system set up and can do it. The other services have to do these things manually in most instances. They have spotty computer capability. But even at that, as I read to you from Martin Army Hospital down in Fort Benning, they have taken the trouble to review the utilization in a manner similar—not in as detailed fashion, but it gives the information in a usable, educational way. So that the various hospitals are doing this, using the techniques that are appropriate to what they can—what they have used and can use. So the spirit of your suggestion is being followed.

Senator Nelson. Within any hospital I assume you know what they have procured from you and they also know what they have procured

[1] See p. 9045.

locally, do they not? Is it a question of some problem in keeping track of how many dosages and what form and what amounts?

General HAYES. That is correct.

Senator NELSON. For purposes of billing the institution, isn't it all broken down as to what they have bought?

General HAYES. Yes.

Colonel LINDSEY. Senator, looking toward the future, there is a Department of Defense-sponsored operation going on at Wright-Patterson Air Force Base, looking toward hospitals of the future where we have an adequate computer base, where you can have a ready, immediate readout of rational drug therapy—not just in terms of the total hospital, but rational drug therapy in relation to a specific patient and his diagnosis and other drugs that he is taking—quantities, doses scheduled, choices of item, interactions and what not. This is the sort of thing we are working toward in a servicewide system.

Senator NELSON. Do all of the hospitals have a drug and therapeutics committee?

General HAYES. Yes. To give you an idea of the detail and the concern, I would like to read again from this one from Valley Forge just a little bit. There is an item on the fact that they bought Griseofulvin tablets, 500 mg. (Fulvisin Ultrafine). Then they have an explanation. "This was a one-time purchase for a particular patient who could not tolerate stocked item." This is how closely they are monitoring in the therapeutic agents committee.

A little further down, the board recommends disapproval of the following new drug requests presented. Prednisolone Sodium Phosphate (Inflamase) and their explanation, "Presently stock Prednedrin which is satisfactory."

Now, this is a professional decision that someone wanted something, but the Therapeutic Agents Board on a professional basis said, we have something that will do it just as well, there is no need to buy something different.

I have only given you some examples from this. I do not want to burden you.

Mr. GORDON. According to the Comptroller General when he was here on May 10, during the period of July 1, 1970, to December 31, 1971, the DOD bought Macrodantin through the Federal Supply Schedule and the Comptroller General stated that you paid $275,000 more than if you had bought it from the Veterans' Administration.

Could you expand on that, please?

Colonel LINDSEY. I do not think I can expand on it other than I can say that was a grave mistake and I did not know it happened.

Mr. GORDON. One other question.

When the FDA Commissioner was here on May 9, he stated that where poor therapeutics are being practiced, it is at least in part due to poor communication to the physician of the information he needs to do a better job. You have told us what you are doing to communicate more and better information to the doctor. Now, what is the function of detail men with respect to your installations? Are they allowed to go in there? What do they do?

General HAYES. The method of meeting the requirements of the detail men varies from installation to installation. But a general answer to your question is that the detail man has to follow a certain

protocol upon entering one of our medical installations. He may have to report to the Chief of Professional Services before he details anyone. He may have to go to the Chief of a Service before he can see individual physicians on that particular service. He may not be allowed in some installations to move through the hospital, but may have an assigned day where he may set up his display in a public area—that is, public in the sense of the medical—where he can then meet with physicians in the hospital and the nurses and the pharmacists and be open for discussion and display of his wares.

This is a little bit old, but it was published in the Navy Medical Newsletter, and I think the spirit of this is again carried out in all of our installations pretty well.[1] It is a system that was started at the Camp Pendleton Navy Hospital of managing the problem of detail men. They got together some ground rules, and I will read some of this, but not all of it. I will put the rest of it here for the record:

The method of management: All detail men are required to check in at the pharmacy before visiting any other area of the hospital. Explicit instructions are personally outlined by the Chief of Pharmacy Services. The Pharmacy must be made aware of the items that are to be detailed that day to the staff. In the case of new products, complete literature must be on file in the Pharmacy before any detailing is done. This is to provide a ready reference for the staff should questions arise. Only a very small quantity of samples are left with the physician. Sampling in quantity is done only in the Pharmacy. This allows the Pharmacy to establish users rates should the item be requested for stock and permits a replenishment of samples should the physician wish to extend his clinical evaluation of an item.

I will not go through all of this, but it gives you some idea of the nature of the approach.

I would say that the detail man, in my own clinical experience, has served a useful purpose. I would also say that uncontrolled detailing can be annoying, in some instances, harmful. I have been fortunate. The detail men that I have met have all been gentlemen, they have been most cooperative and helpful.

Senator NELSON. Thank you very much, gentlemen, for your presentation. We appreciate your taking the time to come. If any member of the committee or staff has any further questions, we will submit them in writing; I assume you will respond to them.

General HAYES. It has been a pleasure being with you, sir.

Senator NELSON. Our next witness is Dr. Benjamin B. Wells, Deputy Chief Medical Director of the Veterans' Administration.

Dr. Wells, we are pleased to have you with us this morning.

STATEMENT OF DR. BENJAMIN B. WELLS, DEPUTY CHIEF MEDICAL DIRECTOR, VETERANS' ADMINISTRATION; ACCOMPANIED BY DR. LYNDON LEE, JR., ASSISTANT CHIEF MEDICAL DIRECTOR FOR PROFESSIONAL SERVICES; ROLAND HARDING, CHIEF, PHARMACY SERVICE; CLYDE COOK, DEPUTY DIRECTOR, SUPPLY SERVICE; AND PHILIP WARMAN, ASSOCIATE GENERAL COUNSEL

Dr. WELLS. May I, before we go ahead, introduce my colleagues here?

Senator NELSON. Yes; if you will, so the reporter will have it accurately. If any of your colleagues wishes to make a comment at any

[1] See p. 9046.

time, I think he should identify himself so it will be correct in the record.

Dr. WELLS. Directly at my right is the Assistant Chief Medical Director for Professional Services. He is also Chairman of our Executive Therapeutic Agents Committee in central office. Dr. Lyndon Lee.

At my extreme right is the Chief of our Pharmacy Service, Mr. Roland Harding.

Then at my left is Mr. Clyde Cook, who is the Deputy Director of our Supply Service and Mr. Phil Warman, our Associate General Counsel.

Senator NELSON. Your statement will be printed in full in the record. You may proceed to present it however you desire, and if you wish to call for any comments from any of your associates, feel free to do so.

Dr. WELLS. Mr. Chairman, inasmuch as this is a fairly lengthy and detailed statement, and I think it is responsive in large measure to the questions that have been forwarded from your office, with your permission, we will put it in the record and speak informally to the subject.

Senator NELSON. Fine. It will be printed in the record.

Dr. WELLS. Thank you, sir.

In the year since we appeared before you we think we have made a great deal of progress in the handling of the drug program in the Veterans' Administration. First off, we have done a great many things to improve our rational prescribing of drugs in the field and with our fee-basis physicians. This has been spearheaded in large measure through the reorganization of our Executive Committee on Therapeutic Agents in the central office, the development of considerably more specific missions for that committee and a great deal more interrelation between the committee in the central office and their counterpart committee at each of the field stations.

We think we have made considerable progress, also, in improving our methods of supply and purchase and distribution of drugs throughout the system. In this area, every attempt has been made to improve the economic situation, to get better kinds of pricing, and at the same time, to reduce as far as we can the level of those things which are less than fully effective by current standards.

Additionally, we have had a great deal of educational input into the system. We have had specific programs under our Department of Medicine and Surgery, Education Service, geared to their therapeutic programs with drugs.

We have also initiated a peer review type of mechanism, which I suspect is really the best kind of education we can use in our hospitals. We always have used this, but we have built it up around the problem-oriented record, for example, which really does change the situation at the hospital considerably relative to any kind of therapy. In the problem-oriented record, as you may know, the physician is required to list all things which are a problem to a patient. Then, anything that comes up later in the way of a diagnostic procedure or therapeutic procedure is keyed to the numbered list that is on the face sheet of the chart. This has a great inhibiting effect on the physicians, I may say, because he must look at the problem list and then orient his therapy to the problem. It becomes abundantly evident if he gives drugs, let's

say, or does anything else in an irrational manner or that cannot be defended before his colleagues, his peers, on the staff.

We have also continued, as we have in the past, a very careful monitoring of our program throughout the agency. As you know, we have a specific monitoring of all drug purchases at all hospitals with monthly reports into the central office and a quarterly complete monitoring on an agencywide basis. So these things, we think, have brought about considerable improvement.

Then we have taken part in a number of other educational ventures which I will leave for later in case you wish to ask about them.

(Prepared statement follows:)

STATEMENT OF DR. BENJAMIN B. WELLS
DEPUTY CHIEF MEDICAL DIRECTOR
BEFORE
THE SUBCOMMITTEE ON MONOPOLY
OF THE
SELECT COMMITTEE ON SMALL BUSINESS
UNITED STATES SENATE

JUNE 21, 1972

Mr. Chairman and Members of the Committee:

We are pleased to appear before this Subcommittee to discuss the current policies and practices of the Veterans Administration, Department of Medicine and Surgery, in reference to the prescribing, dispensing and procurement of drugs. In Fiscal Year 1971, our expenditure for drugs amounted to $64.5 million, or about 3% of our total cost of medical care. Drugs and pharmaceutical preparations are, of course, a vital part of the physician's armamentarium in the care and treatment of veterans. Their proper selection and use is a critical factor in the quality of medical care provided by this agency. During the past year, we have devoted a great deal of time and effort to the assessment of our professional and administrative practices that relate to this area.

Policy on Rational Drug Prescribing

Since our last appearance before this Subcommittee, we have thoroughly re-examined our policy on rational drug prescribing. In the course of this study, we have considered relevant information from other federal agencies; we have reviewed the data developed by this Subcommittee; and we have conducted a complete audit of our management procedures in the drug field using a team of outside consultants. We have secured the advice of academic pharmacologists, officials of the United States Pharmacopeial Conference, officials of the

National Formulary, representatives of the National Academy of Sciences, officials of the Food and Drug Administration, and representatives of other federal agencies that have activities in this area of medical practice. In addition, we have continued to monitor the current literature in the field of drug treatment with special reference to observations and techniques used for the evaluation of therapeutic agents.

On the basis of these studies and observations, we believe that our current policy is a sound one. We realize, however, that we must continue and even intensify our efforts to secure valid information concerning the efficacy of drugs and to disseminate this information to our physicians. Also, we must continue to inform and supervise all of our staff personnel in methods calculated to obtain effective drugs and to assure that these are distributed and used safely and at minimal cost consistent with the principles of good medical practice.

Our policy on rational drug use is very simply stated in two parts:

1. Every reasonable effort should be made to treat all VA patients with the most effective therapeutic agents indicated, and at the most favorable price that can be obtained.
2. Since there are differences of opinion on the effectiveness of many drug products and also valid differences in approach to the selection of therapeutic regimens, we will not rigidly restrict professional practices by administrative direction.

We believe that the interests of sound medical practice are best served by efforts to assure that clinicians who treat VA patients have as much valid

information available to them, in readily usable form, as they require for the proper selection of drugs. Much of our effort is aimed at assuring the availability of this useful information.

Drugs Classified Less Than Effective and Implementation of FDA Pronouncements

In the past 18 months we have taken a number of positive steps to advise against the use of drugs classified as less than effective and to implement FDA pronouncements on these drugs. Our initial implementation was through a Department of Medicine and Surgery Circular 10-70-237 dated December 4, 1970. This required the removal of ineffective drugs from station formularies and called for contacts with physicians in each instance where such drugs were prescribed. The physician was to be notified of the FDA classification, and he was asked to consider the use of available alternatives. The physician was informed that if he did not agree to an alternative medication, the drug would have to be obtained by the patient from a private pharmacy. This policy statement was followed by DM&S Circular 10-70-286 dated December 30, 1970, which prohibited VA stations from carrying stocks of ineffective drugs in inventory. DM&S Circular 10-71-16, issued a few days later, prohibited purchase of these drugs by VA under all conditions and also alerted field station personnel that changes to or additions to lists of drugs classified by FDA would appear regular in the Federal Register.

DM&S Professional Services Letter IL-11-71-44, dated July 13, 1971, gave updated listings of FDA classifications of drugs through April 30, 1971. This Professional Services Letter also re-emphasized VA policy on ineffective drugs.

It also asked field station Therapeutics Agents and Pharmacy Reviews committees to carefully screen all drugs approved for use at their stations to assure use of the most effective products. It emphasized that those drugs rated no higher than possibly effective should be reviewed and consideration given by the committee to approving alternative use of similar drugs having a higher effectiveness classification. It underscored the fact that federal funds should be expended only to purchase the most effective drug products available for a given condition and asked that field station committees assure themselves that sound professional reasons govern their selection. DM&S Circular 10-72-27, dated January 25, 1972, reaffirmed the initial policy and instructed the directors of hospitals and clinics to take whatever steps were necessary to assure compliance. As a part of the overall review of rational drug prescribing, the VA Executive Committee on Therapeutic Agents recommended in April of 1972 that our policy on ineffective or possibly effective drugs be reinforced by another issuance of the policy. DM&S Circular 10-72-92 summarizes our policy that funds will not be expended for the purchase of drugs classified by FDA as ineffective or possibly effective with two exceptions:

1. Drug products for investigational use, and
2. Possibly effective drug products where no appropriate alternative means of drug therapy is available.

On May 25, 1972, we distributed to all VA field stations copies of the current listing of FDA classifications of drug effectiveness. We feel that these actions have almost eliminated the procurement of ineffective drugs, even though FDA still permits their manufacture and marketing.

Techniques Employed to Monitor Drug Selection Practices

We are currently employing several techniques to monitor drug selection practices. The Therapeutics Agents and Pharmacy Reviews Committee at each VA hospital is our primary instrument for this surveillance. Through peer review of the prescribing practices of our staff physicians, we are assured that the knowledge and information of those responsible for patient treatment are combined in determining which drugs should be included in station formularies. Committee members raise questions as to the safety and efficacy of specific drugs and combine their knowledge to evaluate and select the best agent. Education rather than edict is used to achieve rational drug selection in our system. The minutes of these committee meetings are reported to the Central Office each month. They reflect many thoughtful decisions on the use or non-acceptance of therapeutic agents. I am attaching some excerpts from these minutes as Appendix A.

Our Central Office Pharmacy Service routinely reviews records of drugs purchased by individual field stations. When these reviews detect unusual usage patterns or significant usage of drugs whose effectiveness is not generally accepted, formal inquiry is made to the field station. Its Therapeutics Agents and Pharmacy Reviews Committee is asked to examine the question and to report its findings. At the same time, our Marketing Center, which purchases the drugs, conducts a similar kind of review to determine that stations are using the most economical source of supply. The scope of these reviews is significant. No less than 114 letters of inquiry were sent to VA field stations within the last two months.

Cooperation with Others in Assuring Drug Effectiveness

Our concern with the quality of drugs has not been limited to our own efforts nor to the results of the NAS/NRC reviews and subsequent FDA determinations. As I mentioned earlier, we have been consulting for a number of months with officials of government, academic institutions and others concerned with drug efficacy. One of these efforts has involved exploration with officials of the USP of the possibility of that organization undertaking drug efficacy studies for VA, using techniques similar to those employed by USP in establishing monographs for the drugs they list. Such studies would be directed specifically to our drug selection problems; they would include analysis of the relative efficacy of presumably comparable products. Although we shall continue to seek information of this type, we are not satisfied that this particular approach is a feasible one.

In the selection of drug products, we must rely primarily on their chemical equivalency as determined by laboratory assay. In the hope of obtaining a better tool for selection, we have explored the possibility of using bioavailability studies. In February of 1972, the VA formed an advisory panel to consider this approach. This panel consisted of representatives from the Bureau of Drugs, FDA; National Academy of Science/National Research Council; United States Pharmacopeial Convention; National Formulary; Office of Medical Material, Defense Personnel Support Center; the Chairman of the Department of Pharmaceutics, State University of New York at Buffalo; Professor of Biopharmaceutics, University of Cincinnati; the Director, Drug Metabolism Division, University of Tennessee; and key officials of the Veterans Administration,

Department of Medicine and Surgery. The deliberations of this panel to date have established the fact that the amount of bio-availability data currently available is quite meager, that there are few acceptable study protocols and that the cost of such studies will be substantial.

Policy on Selection of Drugs for Central Procurement

In addition to our efforts to assure rational drug prescription, we are reviewing our drug purchasing practices. This Subcommittee has asked for information with specific reference to our policy on selecting drugs for central purchasing. The determination of which drugs will be procured is not a procurement decision, but rather it is a professional decision. The purchasing agent should not determine which drugs will be used by the physician. It is the proper function of the purchasing agent to buy the drugs prescribed by physicians as economically and efficiently as possible. It is his further responsibility to make available to the professional staff information on prices, relative costs of various drugs and any other product information which may be useful in the selection of drugs. The determination of the method by which drugs will be supplied, including the decision on central purchasing, is based on analysis of the amounts and frequency of use of the drug.

These determinations begin at the station Pharmacy Service where a study is made of prescriptions received, and a decision is reached either to order only a sufficient amount for the immediate prescription or to stock a quantity in the pharmacy to fill continuing prescriptions that can be anticipated. At this point, the pharmacist contacts the prescribing physician if the drug is not one

that he holds in stock. He informs the physician as to which items are available in the station formulary and regularly used, so that the physician can consider alternatives. The pharmacist places an order for the drug with the hospital Supply Division, indicating whether or not he anticipates continuing use or use at infrequent intervals. If the drug is prescribed in small amounts and use is expected to be sporadic, the Supply Division purchases it from the nearest available source, delivers the entire quantity to the pharmacy and does not carry any warehouse stocks. If a drug is used in large amounts and repetitively prescribed, the hospital Supply Division procures it from the most economical source available to him, either the VA supply depot, a Federal Supply Schedule or a local distributor.

Each transaction is recorded in a central computer. Once each fiscal quarter, reports of all transactions are made to each hospital on its own operations, and a consolidated report of all VA stations is made to the VA Marketing Center in Hines, Illinois, and to the VA Central Office. The GAO has criticized the utility of this report because of its sheer bulk. As far as we know, this is the only report of its type made by any federal agency. We are trying to streamline it and to make it more useful. Meanwhile, we are making use of this report to determine which items should be procured centrally, which are of sufficient volume to obtain quantity discounts by inclusion on Federal Supply Schedules, and which can best be obtained by individual purchase at each hospital. We also use this report to monitor field station procurements to assure their use of the most economical source available. From these data, plus information on anticipated program changes, we plan our procurement actions.

We have established definite criteria for central procurement and distribution. The first, and cardinal rule, is that an item will not be procured centrally unless the savings through large volume prices will more than offset the overhead costs of maintaining a central procurement system. Many drug items do not meet this requirement. We do not measure the costs of central purchasing on the basis of purchase price alone. Since the costs of maintaining central purchase and distribution systems are borne by the taxpayer, we feel that comparison of costs on this basis alone is improper and constitutes unfair competition with private enterprise, especially small business wholesalers and distribut In the VA, we add to the purchase price all expenses related to procurement of the item, including inspections, testing, quality control, freight charges as well as storage and distribution costs. These additional costs are included in the price of the item charged to users of our central procurement and distribution system, including our VA field stations. This practice is somewhat unique to our agency. By statute (Title 38 USC 5011), we add the total cost of operating the VA Marketing Center and Supply Depots and related Central Office costs to the purchase price of the items sold. In this we include the salaries of all personnel employed in the program, costs of operation of the physical facilities, transportation and costs of all administrative support. The purpose of this statute was to assure a business-type operation, and to make certain that overhead costs of the central system did not dissipate any savings realized in purchase costs. This also assures that we do not maintain government programs in competition with private enterprise. Incidentally, we apply this technique not only to drugs but to all medical and hospital supplies in our system.

Our next most common method of supply is to contract centrally for drugs and use the contractor's distribution facilities or local distributors to ship items to the hospitals and clinics where they are to be used. We employ several methods of doing this. Most commonly, we establish for the VA and all other civilian agencies Federal Supply Schedules for drugs, or we make contracts for specified quantities of drugs to be delivered at specified locations on a predetermined schedule.

The Federal Supply Schedules are executed by the VA on behalf of all federal civilian agencies by assignment to the VA from the Administrator of General Services under the provisions of the Federal Property and Administrative Services Act of 1949 as amended. In addition, these schedules are available for use by Defense agencies at their option. Federal Supply Schedules are negotiated only with firms who will offer a price advantage to federal users over prices charged in the general competitive market. Products not supplied from our central purchasing and distribution system nor from Federal Supply Schedules are procured by our hospitals, either through open market, small purchase procedures, or through formal procurement solicitations.

Efforts to Expand Competitive Procurement of Drugs

I reported to this Subcommittee last year that we were attempting to expand the competitive procurement of drug items in our central system. The actual number of drugs that have been reviewed since that time and determined to be available for competitive procurement is 135. Of these, 62 are either now available in our system or are in advanced stages of the procurement process.

An additional 34 drugs are in the process of specification development prior to competitive solicitation. Of the remaining 37 items, bids were solicited on 23 without improving competition. In the interval, 14 are being deleted from our list of requirements.

We have examined these actions carefully and can state that the specifications or purchase descriptions used were not restrictive to the products of any single manufacturer. It is too early to establish the total potential savings, but we can identify an annual saving of $939,500 or a net of 27.4% to date. We shall continue to seek items potentially available for competitive procurement, and we shall try to develop specifications and tests that will assure us of high quality products.

Drugs not Found in USP or NF

We have been questioned about the procurement by VA of drugs not listed in the USP or NF, and we have been asked to assess the impact on this agency if we were restricted to drugs listed only by these organizations. First, we must recognize the fact that a very large number of drug preparations in use by the medical profession of this country are not listed by either of these bodies. The listings are confined to drugs that have been evaluated by cooperating members of the organizations at the specific request of their Committees on Scope or Revision. Listings are not automatic and they are not intended to be comprehensive. A drug may be omitted from USP or NF simply because it has not been brought to attention of the organizations.

We have examined a listing of drugs which we understand was provided to your Subcommittee and find in the majority of cases that the drugs either are monographed in the USP or NF under their component ingredients or in a related dosage form. For example, acetazolamide is listed in USP XVIII in tablet form. VA procures the capsule form. USP generally does not list all dosage forms of a drug, but this is not an indication that the quality or efficacy is not comparable to the dosage form they do list. A number of the liquid or tablet form antacid preparations are not listed under their official names. The individual components which make up these preparations may be listed. For example, aluminum hydroxide gel is listed in USP XVIII; magnesium hydroxide is listed in NF XIII, and magnesium trisilicate is listed in USP XVIII. Many commonly used antacid preparations are composed of varying combinations of these ingredients. Similar data can be furnished for other items purchased by VA which are not listed in the USP or NF.

We emphasize that failure of a drug or preparation to be listed in the USP or NF provides no indication that the agent is unsafe or ineffective. Among other things, we must realize that there is a significant time lag between initial marketing of a new drug and its listing by these organizations. If we were to confine our drug procurement to items listed in these two publications, we would restrict the ability of our physicians to treat veterans by denying them the use of many products and dosage forms having established values in practice and delaying their use of valuable new products that are available to other segments of the population.

Dispensing Prescriptions of Fee-Basis Physicians

In its medical care program, the Veterans Administration employs a full time staff of approximately 5,400 physicians. This staff is supplemented by use of approximately 100,000 physicians who are primarily engaged in the private practice of medicine. We reimburse these physicians on a fee-for-service basis. These fee-basis physicians write approximately 2,870,000 prescriptions per year for veteran patients. These prescriptions are usually mailed to VA pharmacies for filling. In addition, fee-basis physicians write about 650,000 prescriptions that are filled in private pharmacies and the bill sent to the VA for payment. Obviously, we cannot maintain the close relationship with fee-basis physicians that we have with our full time staff physicians. Private practitioners are inclined to prescribe the types and brands of drugs that they routinely select for their non-VA patients rather than those items which may be stocked in VA pharmacies and warehouses. For this reason, we frequently find it necessary to purchase items that are not regularly stocked by our system. Our hospital pharmacists, within the limitations of their manpower, regularly contact the fee-basis physicians to ask if they will accept the substitution of a generic equivalent when a brand item has been requested. The pharmacist also provides information concerning the effectiveness or reliability of a particular product, and, when indicated, he attempts to persuade the physician to accept items regularly stocked in lieu of special procurement. For several years, we have used a spot check procedure on these prescriptions to assure ourselves that veteran patients are being treated with generally accepted therapeutic agents. Our Executive Committee on Therapeutic Agents has recently proposed an in-depth review of a predetermined percentage of all fee-basis prescriptions to more accurately

determine compliance with policy on rational drug usage.

We have drafted a Professional Services letter which we shall ask our field stations to distribute to all fee-basis physicians. An attachment to this letter will be a concise listing of drugs according to their effectiveness classification. It will also indicate which drugs are listed in the particular station formulary.

Cooperative Efforts in the Procurement Process

The VA has cooperated for many years with other federal agencies in the procurement of commodities which we and others use in common. In 1961, we were assigned the responsibility for procurement of non-perishable subsistence and drugs in behalf of all federal civilian agencies by the Administrator of General Services under authority given him in the Federal Property and Administrative Services Act of 1949. In addition to carrying out this assignment, we have for many years made available to other agencies, at their request, supplies and equipment available in our system. During Fiscal Year 1971, 18 federal agencies ordered supplies valued at $69,612,372 from VA stocks or from contracts made by VA. During the same period, the VA purchased supplies valued at $52,419,131 from other federal agencies' stocks or contracts. This cooperation is not confined to the interchange of stock sales alone, but includes several instances where this agency has provided information to other agencies, and also to private and state bodies for their use in the management of their procurement.

With regard to our central procurement system, our policy is that we will acquire items from the lowest total cost source available to us. When the purchase cost plus the administrative costs of buying from another agency are lower than that which we can obtain by purchase from a contractor, we place orders on that agency for our requirements.

In the case of drugs, we look to the Defense Personnel Support Center as a potential source, since they are the only other major purchaser besides VA. Whenever there is indication that we can obtain our requirements from DPSC at a lower total cost than available to us by direct procurement, we ask them to furnish us with the item. For drugs that we buy in substantial volume, we routinely compare the DPSC price with the anticipated bid prices and initiate purchase action only when there is good reason to believe that we will obtain the item commercially at lower cost. Each year we furnish DPSC the anticipated annual volume of such drug purchases, identifying those items that we may ask them to buy for us.

Types of Contracts and Their Availability to Other Federal Agencies

Our policy is to procure drugs by open competitive bidding whenever we can obtain competition and be assured of a quality product. When we know the drug is manufactured by only one firm, usually because of patent rights, we negotiate with that firm for the product. We have been criticized for the amount of our procurement by "brand name." We believe this is partly due to our policy of listing items by brand name rather than by official or generic name when we know there is only one source, either licensed or with an approved Effective New Drug Application. Obviously, we could develop specifications for drug items

which are in fact available from a single source and advertise for them by generic designation. This would not make a meaningful contribution to the competitive process.

The Federal Supply Schedules for drugs are negotiated with manufacturers or distributors who offer us a discount over the normal market price. We obtain pricing data from them on the various categories of customers (wholesalers, non-profit hospitals, retailers, pharmacies, etc.) and make awards when the drugs are not available to federal users from other sources at comparable prices. In addition, we make available to other federal agencies who have drug requirements, our catalog and other publications regarding our central procurement of drugs. The prices we quote them include all our central system costs and all overhead. A number of agencies procure drugs from us, and we base our projections for items to be procured in volume quantities on the record of past years, supplemented by information from them on anticipated program changes.

A question has been raised as to why VA does not make available some of its contracts to other federal agencies. I can find no instance in which the VA has not made its contracts available to other federal users when we were asked to do so; in fact, the Federal Supply Schedules for drugs are available to all federal agencies. The files of this agency contain records of many instances in which we have made our contracts available to other federal agencies at their request. As I have already said, there are no recorded instances of a refusal to do so. We have refused some

state and local government requests, since we have no authority to permit them to use our stocks. We make contracts for our specific use. When these contracts are competitively advertised, there are general government regulations applicable to all such procurements against changing the terms, conditions, quantities, etc. after the bids have been opened. If a contract is negotiated, it is also not subject to modification to include additional users or quantities without the agreement of both parties.

Plant Inspections and Drug Testing by One Federal Agency

This Subcommittee has asked about the VA's efforts to centralize plant inspections and drug testing in one federal agency. We can and do use other federal agencies to provide us with plant inspection and testing services where available. This practice is not confined to drugs, but is generally applicable to all our procurement. Unfortunately, in the area of drug testing, we are finding it increasingly difficult to obtain needed product testing from the Food and Drug Administration. Just last month, we authorized the payment of premium testing costs to FDA to enable them to reduce a backlog of tests for the VA by the use of overtime services. On May 26, 1972, we received a letter from FDA stating that the pressures of their regulatory work may require that their analysts be reassigned from testing VA samples to their own samples. Thus, they may not be able to guarantee the usual 45 day testing cycle. We have recently experienced delays of 60 days or more after we have procured a drug before we can obtain a final test report from FDA. Unless FDA is adequately staffed to perform this service for us, it is not possible to rely on them

exclusively. Informal contacts with DPSC within the last month disclosed that they, too, are experiencing a heavy work load and do not have time available for us. The VA does not have personnel engaged in the chemical assay and analysis of the type provided by FDA. We must rely on others for the required laboratory services.

Regarding plant inspection and quality control surveillance, we favor the assignment of this function to one agency, provided such inspections can be conducted in a timely and comprehensive manner related to our procurement needs, and provided sufficient data is made available to us to support our procurement decisions. Neither condition exists at this moment. We are unable to obtain information on the results of FDA's inspections beyond the fact that a particular plant was inspected and that it was not required to suspend production. We understand from informal discussions with FDA officials that they are examining the question as to how much information can be released within their statutes and regulations. Until a determination is made that would permit release to us of sufficient information to assure the quality of individual supplier products and the integrity of our procurement actions, we cannot subscribe to the assignment of responsibility to one agency for plant inspection and quality control surveillance. When these conditions are met, we shall support such action. We also rely on data obtained from DPSC on the results of their plant inspections. We check with them before scheduling such inspections and use their inspection reports when possible to avoid duplication of effort.

We recommend close coordination and cooperation between inspecting agencies to avoid duplication, to assure similarity of standards, and to encourage the

exchange of information. To this end, discussions are currently going on in the Intra-Governmental Professional Advisory Council for Drugs and Devices. All agencies engaged in drug manufacturing plant inspections and product testing are members of this group.

Executive Committee on Therapeutic Agents

In conclusion, I would like to refer once more to our Executive Committee on Therapeutic Agents. This is the policy-making body in our agency in all matters having to do with drug usage. We have restructured this body and restated its mission through Chief Medical Director's Memorandum 10-72-7, dated March 14, 1972. Its functions are to:

1. Develop, recommend and disseminate policy and information on safe, effective and rational use of drugs in VA.
2. Conduct epidemiological studies on drug utilization, drug usage and utilization patterns for field station and Central Office use.
3. Review and act on requests from VA hospitals and clinics for use of drugs not available in interstate commerce and for which an FDA New Drug Application has not been effected (investigational drugs), for clinical treatment in a specific patient.
4. Evaluate reports of adverse drug reactions and drug interactions prior to forwarding them to FDA.
5. Review significant actions of Therapeutic Agents and Pharmacy Reviews committees to determine appropriateness of policies on drug usage and to identify and recommend needed changes.
6. Review and act on Quality Improvement Reports submitted by VA hospitals and clinics which indicate dissatisfaction with the quality

of drug products. Appropriate information will be coordinated with concerned officials of FDA, USP and NF.

7. Review proposed marketing and administrative actions on drug items; recommend appropriate action to Supply Service.

8. Perform such other functions as may be assigned.

This committee now has ten subcommittees and each subcommittee as well as the parent committee is actively engaged in bringing about needed improvements in our total drug program. Meetings are conducted at least monthly. Most of the current actions I have described to you today have originated within this committee. Its chairman is the Assistant Chief Medical Director for Professional Services; and its members include the heads of all programs involved in patient care, as well as the support services such as Pharmacy Service, Supply Service and Medical Administrative Service.

In my opinion, the effective functioning of this committee and its counterpart groups at the field stations will assure the continuation of a sound and rational policy for drug therapy in the Veterans Administration. At the same time, I believe that we can and will avoid the bureaucratic tendency to impose an unwarranted and centralized judgment upon those who have direct responsibility for the care and treatment of veteran patients throughout the country.

Mr. Chairman, this concludes my statement. My associates and I will be pleased to answer questions or provide other data you may require.

THERAPEUTIC AGENTS AND PHARMACY REVIEWS COMMITTEE
VETERANS ADMINISTRATION HOSPITAL
LOUISVILLE, KENTUCKY

RSC 10-190

The committee met at 1:00pm on March 9, 1972.

ATTENDANCE: Dr. John Martin, Chairman, Acting Chief of Staff
Dr. Phil Harbrecht, Chief, Surgery
Dr. Shelby Hicks, Ass't. Chief Psychiatry
Miss M. O'Toole, Chief, Nursing Service
Mr. H. Blakeman, Chief, Supply
Mr. Tom Patterson, Secretary, Chief, Pharmacy

Minutes of the last meeting were approved as distributed.

There was no old business.

NEW BUSINESS

1. The following drugs and new dosage forms were approved for permanent stocking:

   a. MYLICON (Simethicone) Chewable tablets - 40mg. Antiflatulent drug which can be used with an antacid (GELUSIL liquid or ALUDROX tablets). Normal dosage is one tablet after meals and at bedtime. Relatively inexpensive.

   b. CETAMIDE (Sodium Sulfacetamide Ophthalmic Ointment 10% - To be used in place of Sodium Sulamyd ointment because it is a sterile preparation.

   c. Methylene Blue (65mg.), Copaiba (65mg.) and Santal Oil (0.03ml.) tablets - Requested by Urology for occasional usage in patients to prevent formation of renal calculi and to aid in dissolution of some types of stones.

   d. COLACE (Dioctyl Sodium Sulfosuccinate) capsules - 100mg. to be used in place of SURFAK (Dioctyl Calcium Sulfosuccinate) when present supply is exhausted. Cost is one half as much as SURFAK. Presence of Sodium ion should not be a problem. Dosage of the two drugs is similar, one at bedtime should be sufficient. DOXINATE (Dioctyl Sodium Sulfosuccinate) 5% Solution and DOXIDAN will continue to be stocked.

   e. POLYSAL-M (Maintenance Electrolyte Solution) with 5% Dextrose - 1000 ml. sterile solution. It will replace POLYSAL effective immediately. Each liter of POLYSAL-M contains the following mEq. :Sodium (Na)-40; Potassium (K) - 16; Calcium (Ca) - 5; Magnesium (Mg) - 3; Chloride (Cl) - 40; Bicarbonate (HCO_3) -24. All wards will please return their stocks of POLYSAL and order POLYSAL -M if necessary. Cost of the two solutions is about the same.

2. The Committee agreed to continue trial usage of KLORVESS or another form of Potassium Chloride tablets. Cost of the tablets is quite comparable with the solution. Memoranda were read from Dr. Hoffman and charge nurse on Ward 6B giving their evaluations.. The only apparent disadvantage is the slow dissolution rate. Since we have a 2 or 3 month supply of the solution, no other dosage form will be approved until this supply is exhausted. Selected wards will be notified for further evaluations.

3. The Committee reviewed a request by Dr. Hoffman for a new investigational drug, Sodium Nitroprusside Injection. The hospital research committee has approved the protocol for use of the drug. It will be given by intravenous infusion in occasional instances of hypertensive crisis when all other methods of control fail. Pharmacy will compound this preparation following the master formula sent to us by the Cleveland Clinics. The Committee agreed that Dr. Hoffman should submit an IND application to the FDA for permission to use this drug. The Committee also directed that the drug be used only under Dr. Hoffmans' direct supervision.

4. The Committee discuses Serum Albumen usage. Although usage decreased in February, cost for the eight months of this fiscal year amounted to $20,002. This is about 6% of total Pharmacy budget. It was recommended that we reissue a memorandum of May 12, 1971 relating to this subject.

5. The Committee reviewed a publication HANDBOOK OF ANTIMICROBIAL THERAPY received by the Pharmacy from the publishers of THE MEDICAL LETTER. It was agreed that this might be a good reference to have available to the staff. Request will be made for 30 copies to be disbributed to wards, clinics and members of the Committee. The book reviews and evaluates antimicrobial drugs and therapies.

Thomas R. Patterson

APPROVED:

John J. Martin, Jr., M.D.
Acting Chief of Staff

Distribution:
All Physicians
Nursing Office (30 copies)
Pharmacy (30 copies)

INFORMATION

1. Physicians and Nurses are reminded that Pharmacy stocks only the 2 gram vial of UNIPEN (Nafcillin Sodium). Package literature states that to reconstitute, add 6.8 ml. of Sterile water for Injection. This will provide 8ml. of solution at a concentration of 250mg.per ml.

2. There has been some confusion in the differences between an elixir, solution and syrup. An elixir is a hydroalcoholic solution (containing water and alcohol) such as Elixir Terpin Hydrate and Codeine. A solution is an entirely aqueous solution such as Potassium Chloride solution. A syrup is a solution of sugar in water or other aqueous liquid, such as ROBITUSSIN or 2/G Cough syrups.

3. Certain ophthalmic solutions are being dispensed under several trade names as follows:

   Artificial tears - ISOPTO - PLAIN (Alcon Labs.);
   TEARISOL (Tilden Yates)

   Hyoscine (Scopolamine) - ISOPTO -HYOSCINE 0.25%

   Pilocarpine - PILOMIOTIN (Tilden Yates Labs)
   (Pilocarpine HCl)
   PV CARPINE (Allergan Labs.)
   (Pilocarpine Nitrate)

4. Folic Acid tablets 5mg. is out of stock and according to minutes of last Therapeutic Committee meeting, is no longer available. This dosage form has been ordered deleted by FDA. Pharmacy will be dispensing the 1mg. tablets. Please write medication orders and prescriptions accordingly.

RDS 10-190

MEETING OF THERAPEUTIC AGENTS & PHARMACY REVIEW COMMITTEE
VETERANS ADMINISTRATION HOSPITAL
DES MOINES, IOWA

The Therapeutic Agents & Pharmacy Review Committee met at 1:00 p.m., Monday, March 20, 1972, in the Director's Conference Room. The following attended:

Dr. William J. Ford, Chief of Staff
Dr. D. J. Lulu, Surgical Service
Dr. R. F. Geeh, Medical Service
Dr. F. M. Burgeson, Chief, Outpatient Service
Mrs. Catherine Sharp, Nursing Service
Mr. H. N. Osborne, Secretary
Mr. W. R. Morris, Pharmacy Service
Absent: Mr. H. O. Goebel, Chief, Supply Division

Approved:

TRAVASE OINTMENT - This is used to dissolve necrotic tissue. Needs little mechanical debridement and is not painful to patient since wound remains moist. This was approved for a 90-day trial period.

Not approved:

RIMACTANE 300 mg. capsule - This is an anti-mycobacterial agent of proven high potency. This was not approved for stocking, but a small amount will be obtained for emergency use. It will be dispensed by prescription only.

Sheets were passed out showing this month's continuing formulary review proposals. A copy is attached to these minutes. The Medical and Surgical Service representatives will take these back to their respective staff meetings for discussion.

A drug exhibit was held in Room 423 on March 20, 1972, with the following companies represented:

Winthrop Laboratories, Inc.
J. B. Roerig & Co.
Ayerst Laboratories
Merck Sharp and Dohme
Stuart Pharmaceuticals-Atlas Chem.

Harold N. Osborne
HAROLD N. OSBORNE

Att.

cc: Regional Medical Director (10C3), VACO
Hospital Director (00)
Chief of Staff (11)
Chief, Medical Service (111)
Chief, Surgical Service (112)
Chief, Outpatient Service (170)
Chief, Nursing Service (118)
Chief, Supply Division (134)
CCU (118A)
Ward 2A (136C1)
Ward 2B (136C2)
Ward 2C (136C3)
Ward 3A (136C5)
Ward 3B (136C6)
Ward 2W (136C4)
Ward 3C (136C7)
Ward 3W (136C8)
Ward 4C (118D)
Ward 5W (136C9)

REVISIONS TO FORMULARY

ANTIINFECTIVES 08:00

DELETIONS:
1. Pasara Na Tab — C
2. Quinine 3 gr cap — B
3. Neothalidine Granules — A
4. Ampicillin 500 mg amps — B

ADDITIONS
1. Ampicillin Injection 1 gm
2. PHENAPHEN + CODEINE 30mg

CARDIOVASCULAR DRUGS 24:08:00

DELETIONS
1. Cedilanid D Injection 2 cc — C

VASODILATING AGENTS 24:12:00

DELETION
1. Peritrate SA 80 mg — B

ANALGESICS 28:08:00

DELETIONS
1. Butazolidin 100 mg tab — B
2. Darvon Compound — B
3. Fiorinal tablets — C
4. Phenaphen with Codeine 30 mg caps \ miss print — SB APC + CODEINE 30mg
5.
6. Sinutab tabs — C

ANDIDEPRESSANTS 28:16:04

DELETIONS
1. Aventyl 25 mg caps — C - D
2. Tofranil 25 mg tabs — C - D

TRANQUILIZERS 28:16:08

DELETIONS
1. Compazine 5 mg tab — B
2. Haldol 2 mg tab — C - D
3. Haldol 1 mg tab — C - D
4. Mellaril 10 mg tab — C - D
5. Mellaril 25 mg tab — C - D
6. Mellaril 50 mg tab — C - D
7. Mellaril 100 mg tab — C - D
8. Mellaril 200 mg tab — C - D
9. Serax 10 mg cap — C - D
0. Serax 15 mg cap — C - D
1. Serax 30 mg cap — C - D
2. Sparine 100 mg tab — B
3. Stelazine 2 mg tab — B
4. Stelazine 10 mg tab — B
15. Taractan 25 mg tab — C - D
16. Taractan 50 mg tab — C - D
17. Thorazine 50 mg tab — B
18. Vistaril 50 mg cap — C - D
19. Vistaril 100 mg cap — C - D

KEY
A. Possibly INEFFECTIVE
B. Other STRENGTHS MAINTAINED
C. Other DRUGS MAINTAINED
D. All STRENGTHS REMOVED

RCS 10-190

MINUTES OF MEETING - COMMITTEE ON THERAPEUTIC AGENTS AND PHARMACY REVIEWS
V. A. Hospital, Memphis, Tennessee 38104

1. The meeting was convened at 1:00 P. M., March 13, 1972, in Room CE-240.

2. Members (or their representatives) present were:

K. E. Lindsay, M.D.	Chairman
B. R. Gendel, M.D.	Member
J. Horan, M.D.	Psychiatry Service
J. C. Larkin, Jr., M.D.	Member
F. A. Burdick, D.D.S.	Member
J. J. McCaughan, Jr., M.D.	Member
R. F. Kelsey, M.D.	Member
F. N. Meade, R.N.	Member
C. N. May, M.S.	Member and Recorder

Others attending:

R. S. Wilson, M.S.	Assistant Chief Pharmacy Service
J. R. Sykes, B.S.Ph.	Director, Pharmacy Service City of Memphis Hospital
R. Hayes, R. N.	Nursing Service Trainee

3. DRUGS APPROVED FOR STOCKING:

a. Ampu-Balm, 3 1/2 oz - Ampu-Balm Co.

This ointment contains Benzoin, Methyl Salicylate, Phenol (0.2%) and Mutton Tallow. It was requested by Dr. Dehne for self-care of the amputee. It is said to reduce the problem of sweating stumps.

Cost: Ampu-Balm, 3 1/2 oz $1.50/can

b. Ampu-Talc, 12 oz - Ampu-Balm Co.

This is a preparation of talc for use by the amputee on the stump. It was requested by Dr. Dehne.

Cost: Ampu-Talc, 12 oz $1.00/can

4. DRUGS NOT APPROVED FOR STOCKING:

a. INH Tablets, 300 mg - Panray

Dr. Cohen had requested the stocking of INH Tablets, 300 mg. This

is the commonly used dosage and could provide convenience for the patient. However, this was not accepted because the 300 mg tablets would cost 8.5¢ per dose as compared to 3.9¢ for a 300 mg dose using the 100 mg tablets.

Cost:	INH Tablets, 300 mg	$ 8.50/100
	INH Tablets, 100 mg	$ 1.31/100

3. DRUGS DELETED FROM THE FORMULARY:

The following items were deleted from the hospital formulary, and they will be in stock until present supplies are exhausted.

a. Aventyl Capsules, 10 mg - Lilly

Aventyl Capsules, 10 mg, were deleted as the usage of this strength has decreased. The pharmacy will continue to stock Aventyl in the 25 mg strength.

Cost:	Aventyl Capsules, 10 mg	$ 1.91/100

b. Stelazine Tablets, 10 mg - Smith, Kline and French

Stelazine Tablets, 10 mg, were deleted from the Hospital Formulary. There has been no usage of this strength tablet in several months. Future orders for Stelazine, 10 mg, will be filled using two 5 mg tablets.

Cost:	Stelazine Tablets, 10 mg	$ 6.06/100

6. DRUGS APPROVED FOR THERAPEUTIC TRIAL:

None.

7. DRUGS ON WHICH THERAPEUTIC TRIAL HAS EXPIRED:

None.

8. DRUG EXPERIENCE REPORTS:

None.

9. OTHER BUSINESS:

a. Action on the request by Drs. Kitabchi and Solomon for stocking Meltrol (Phenformin HCl) Tablets, 25 mg, by USV in place of DBI, 25 mg, by Geigy was postponed until the next meeting. This was done because new contract prices on both of these products will be available this month. A decision will be made after the new prices are presented to the Committee.

b. Action on the request to put Triavil 4-25 Tablets on therapeutic trial was postponed until the next meeting. Dr. Harris will be invited to the meeting to present his request. It was also noted that the length of trial was not included on the request.

c. In the future the person requesting a new item for therapeutic trial will be invited to the meeting to present his reasons for requesting the new item.

d. The Chief, Pharmacy Service, discussed the source of supply of Acetominophen Tablets, 300 mg. We are presently purchasing Tylenol at $2.87 per 1000 and can purchase generic acetominophen from the V. A. Supply Depot for $2.28 per 1000. The present usage is approximately 50,000 tablets per month. The savings in purchasing the generic product would be about $360.00 per year. Presently the V. A. Depot is supplying tablets made by Warner Labs. Joe T. Fisher, Pharmacy Resident, did comparisons of physical properties of the Warner Labs tablets and Tylenol Tablets by McNeil. The results were as follows:

Acetominophen Tablets, 300 mg (Warner Labs)
Cost: $2.28 per 1000
Disintegration Time: 29.5 seconds
Average Hardness: 7.5 kg/cm^2
Average Weight: 430 mg

Tylenol Tablets, 300 mg (McNeil)
Cost: $2.87 per 1000
Disintegration Time: 78.3 seconds
Average Hardness: 8.5 kg/cm^2
Average Weight: 475.25 mg

The Committee felt that there were no significant differences in the two brands of tablets, as to physical properties. It was decided that pharmacy will purchase the generic acetominophen tablets from the Depot and use them throughout the hospital. If any problems occur with the new tablets, they should be reported to Pharmacy Service.

e. The Committee discussed and approved a request by Chief, Nursing Service, to allow administration of narcotics by licensed practical nurses in accordance with Interim Issue 10-71-32 (11/30/71). The following statement will be included in station policy: "Licensed practical nurses who through instruction and closely supervised practice have demonstrated competence in administration of medications may administer selected oral, hypodermic and intramuscular medication including narcotics."

f. A request from the Chief, Nursing Service, for Committee approval of a training program and procedure for professional nurses to insert intracaths in the Intensive Care Unit was discussed. Dr. Sivadon will assist with the teaching and development of the procedure. The program was approved by the Committee.

g. Information compiled by Operating Room and Pharmacy Service personnel indicate that the medication costs for each case of open heart surgery are approximately $88.00. Approximately one-half of this cost is due to Solu-Medrol. The hospital is doing approximately 100 open heart surgery operations per year.

h. During the month of February the use of Carbenicillin (Geopen) has been localized principally on Ward 9 South. The use of this drug has been mainly on the Hematology Section.

i. A discussion was held concerning a trial period for I. V. solutions in plastic bags by Baxter Laboratories and vacuum bottles by Abbott Laboratories. A trial will be started throughout the entire hospital using plastic bags. All 1000 cc Dextrose 5% in Water units will be supplied in plastic bags instead of bottles. All other I. V. solutions will continue to be supplied in bottles. The trial will begin as soon as new stocks can be received and it will continue for one month.

j. Dr. Griffin submitted a request to extend the usage of Vibramycin (Doxycycline) Capsules, 100 mg, for respiratory disease patients. This drug is presently for use only by Drs. Luton and Jordan for patients with renal impairment. The use for respiratory disease patients was approved. Prescriptions for this new use must be signed by Dr. Griffin. This drug is very expensive.

Cost: Vibramycin Capsules, 100 mg $60.80/100

k. Pharmacy inventory is scheduled for Tuesday, May 2, 1972. All patient appointments should be scheduled around that date.

Charles N. May

CHARLES N. MAY, M.D.
Recorder

DISTRIBUTION:
Chief Medical Director (111F)
All Physicians and Dentists (11)
All Committee Members (11)
Chief, Nursing Service (118)
Chief, Supply Division (134)

V.A. CENTER
BONHAM, TEXAS

March 22, 1972

PHARMACY AND THERAPEUTICS COMMITTEE, RCS: 10-190

1. The March meeting of the Pharmacy and Therapeutics Committee was called to order at 3:30 p.m. with the following members present:

Dr. N. Chick, Chairman
Dr. H. B. Griffin, Member
Dr. R. Mesina, Member
Dr. J. L. Stevens, Member
Dr. K. W. Gaylord, Member
Dr. E. C. Williams, Member
Dr. Patrick Kelly, Member
Dr. John Durst, Member
John McKinzie, Secretary

2. New drug(s):

a. GAVISCON TABLETS-Marion. Dr. Sidoti and Dr. Mesina requested this drug for selected patients requiring action other than that of ordinary antacids. Gaviscon forms a viscous gel-like barrier of floating form in the cardia and fundus of the stomach. It is purported to be a specific treatment for heartburn accompanying hiatal hernia. The Committee approved the stocking of limited quantities of the drug since it will not be used as a "routine" antacid.

b. PROMETHAZINE 25 mg. TABLETS and PROMETHAZINE INJECTION 25 mg/cc. (Phenergan-Wyeth). Phenergan tablets and the injectable forms were requested by Dr. Gaylord. Phenergan has many accepted uses. Most notable are: (1) As a sedative, (2) in the management of allergic conditions, (3) in the control of cough, both to diminish the cough reflex and promote expectoration, and (4) in the management of nausea and vomiting. Dr. Gaylord expressed the most interest in Phenergan's anti-nausea effect. Cost of the drug would be a factor in prescribing the drug for its antihistaminic effect. The Committee agreed to the stocking of both dosage forms and placing them in the formulary.

c. SODIUM TYROPANOATE (Bilopaque-Winthrop). Bilopaque 750 mg. capsules was requested by the Chairman for use as a roentgenographic contrast medium in cholecystography. The drug's radiopaque metabolites, when concentrated in the gallbladder, allow delineation of the gallbladder and possible visualization of the extrahepatic ducts. The Chairman stated that he felt this drug was superior to the one presently used and that excellent results had been obtained with the use of a trial supply. Bilopaque will be stocked and placed in the formulary.

3. Drug(s) deleted: SODIUM IPODATE 500 mg. CAPSULES (Oragrafin Sodium-Squibb). This drug will be deleted and replaced with Bilopaque. All existing stocks will either be used or returned to the manufacturer for credit.

4. An announcement letter from Hines, Illinois, VA Marketing Center dated March 16, 1972, was read to the group. Of special interest was the portion relating to Robitussin's deletion from depot stock. The Committee agreed to the use of the generic equivalent of glyceryl Guaiacolate syrup available from depot.

5. The secretary distributed copies of Station Memorandum No. 522-11-71 to all services concerned. This memorandum is the "official" station drug policy. Members were asked to review certain portions of the memorandum and suggest possible revisions. No suggestions were forthcoming; so, the memorandum will be considered current.

6. For the purposes of information and review, the secretary read selected excerpts from VA Manual M2, Part VII. These portions reflect official VA policy regarding the giving of medications on discharge of patients, proper routing of aid and attendance prescriptions, as well as "housebound."

7. There being no further business, the meeting adjourned at 4:10 p.m.

N. CHICK, M.D.
Chairman

JOHN McKINZIE
Secretary

VETERANS ADMINISTRATION CENTER
Temple, Texas

MINUTES OF MEETING OF COMMITTEE ON THERAPEUTIC AGENTS AND PHARMACY REVIEWS
(RSC 10-190)

March 21, 1972

1. The meeting of the Committee on Therapeutic Agents and Pharmacy Reviews was held at 3:00 p.m. with all members or their alternates present except Chief, Surgical Service and Chief, Pulmonary Disease Section.

2. Minutes of the February meeting were approved with no corrections.

3. There was a called meeting of the Committee on March 13, 1972 at 11:00 a.m. with all members or their alternates present. The Committee approved the forthcoming Professional Services Memorandum on Administration of Intravenous Fluids, Medications and Blood by Professional Nurses and Nurse Anesthetists as presented by the Chief of Staff. The Committee also approved the proposed Policies of Administration of Blood Transfusions and Intravenous Fluids, as prepared by Nursing Service and presented by the Chief of Staff. The meeting adjourned at 11:30 a.m.

4. Drug Recall Procedure draft was sent to each member before the meeting and it was approved as corrected by the Committee.

5. The use of Normal Serum Albumin in the hospital was discussed. Since the last regular meeting, three patients had received a total of 35-50 ml. units.

6. The list of vitamins and vitamin preparations stocked in the Pharmacy was reviewed. Cyanocobalamin Injection, 100 mcgm./ml., 10 ml. vials, Riboflavin Tablets, 5 mg. and Trinsicon Capsules were approved for deletion from stock and from the formulary listing. Synkayvite Injection, 10 mg./ml., 1 ml. vials and AquaMephyton Injection, 10 mg./ml., 5 ml. vials are both stocked. There was some discussion as to the need for both since AquaMephyton can be given I.M. or I.V. A decision on possible deletion of Synkayvite Injection was delayed until the next meeting so that staff opinion can be sampled. The value of Ilopan (dextro pantothenyl alcohol) used by Surgical Service for ileus was discussed since the 1971 AMA Drug Evaluation states it is ineffective in this regard. This will also be brought up at the next meeting after further deliberation.

7. CHLORPHENESIN CARBAMATE (Maolate - Upjohn): Chlorphenesin Carbamate Tablets, 400 mg., were not approved for stocking. The Committee felt that the drugs presently stocked could be used effectively as muscle relaxants.

8. HANDBOOK OF ANTIMICROBIAL THERAPY published by the Medical Letter was presented to the members for their comments. The Committee recommended that a copy be purchased for each physician and dentist if available and if the cost was reasonable.

9. Information on increased drug expenditure for this quarter was presented to the Committee. The main reasons for this increased expenditure was the use of hyperalimentation solutions and the increased use of injectable antibiotics. The Committee recommended that Disodium Carbenicillin and Gentamicin Injectables not be used for routine infections but be reserved for more serious or possible life-saving conditions.

10. The meeting adjourned at 4:00 p.m.

Tracy L. Wallace
TRACY L. WALLACE, M.D.
Chairman

Jack Kinard
JACK KINARD
Recorder

DISTRIBUTION:

Regional Medical Director, Region #2 (111F)
Department of Medicine and Surgery
VA Central Office
Washington, D.C.

Center Director (00)
Chief of Staff (11)
Chief, Medical Service (111)
Chief, Dental Service (160)
Chief, Psychiatry Service (116)
Chief, Pulmonary Disease Section (115)
Chief, Surgical Service (112)
Asst. Chief, Nursing Service (118)
Chief, Pharmacy Service (119)
Chief, Supply Division (134)
All Physicians and Dentists
Supervisory and Head Nurses

TO: Clinic Director (00) March 20, 1972

FROM: Chief, Pharmacy Service (119)

SUBJ: Meeting of the Therapeutic Agents and Pharmacy Review Committee.

1. In accordance with VA Manual M-2, Part I, Chapter 3, Change 5, dated August 4, 1967 the Meeing of the Therapeutic Agents and Pharmacy Reviews Committee was called to order by Arthur J Hadler, M.D. - Acting Chairman on Monday March 20, 1972 at 1:30 PM.

2. Those present were:
Arthur J. Hadler, M.D. - Acting Chairman
Dale G. Friend. M D.
Isadore J Karlsberg, M D
Nathan Williams, M D
Alvin M. Cahan, M.D.
Frances E Cullen, R N.
Lawrence N Larson. R Ph. - Secretary

3. The following information is submitted:
(1) Out of a total of 6,903 Fee-Basis Prescriptions filled for the 2nd Quarter FY72:

(a) VA Pharmacy Filled 4,318
(b) Hometown Pharmacy Filled 2,585
(c) Percentage Filled by VA Pharmacy approximately 63%

(2) The average cost of an A&A prescription filled for the 3rd Quarter FY 72 was $3.43.

4. The Committee reviewed the Clinic's "Prescription Formulary" which consists of a list of the most active items stocked by the Pharmacy and indicates the relative cost, dosage form, therapeutic category and code of each item so that the physician can locate the item in the "American Hospital Formulary Service" should he desire more detailed information. A copy of this Formulary will be distributed to all our physicians and dentis (including fee-basis physicians).

5. Emergency Treatment of Narcotic Intoxication with Naloxone HCl (Narcan) indicates that it is an effective opioid narcotic antagonist with important advantages over other narcotic antagonists (Nalline and Lorfan) the most important being the reversal of narcotic-induced respiratory depression. Narcan can also counteract the narcotic effects of Pentazocine (Talwin).

After the establishment of adequate ventilation, naloxone (about 0.8 mg for an adult) is administered intravenously. Its maximal effect takes abou 2 to 3 minutes. The dose can be repeated once or twice at 5 minute interva

NOTE: Not subject to narcotic controls. (NARCAN INJECTION 0.4mg/ml -

6. The British Medical Journal February 6, 1971, informs that diphenylhydantoin intoxication may be noted in patients on combined long-term therapy with diphenylhydantoin - benzodiazepine therapy. Increased incidence of neurological signs of diphenylhydantoin toxicity were reported after six weeks of combined therapy with chlordiazepoxide or diazepam.

7. The following products are now marketed by USV Pharmaceutical Corp:
(1) Azolid Tabs 100 mg - USV
(Phenylbutazone)
(2) Azolid-A Caps - USV
(Phenylbutazone - Aluminum Hydroxide-Magnesium Trisilicate)
(3) Meltrol-25 Tabs - USV
(Phenformin HCl)
(4) Meltrol-50 Caps - USV
(5) Meltrol-100 Caps - USV
(Timed-Disintegration Caps)
(6) Oxalid Tabs 100 mg - USV
(Oxyphenbutazone)
(7) Presamine Tabs 10 mg, 25mg, 50 mg - USV
(Imipramine HCL)

8. The following Ciba-Geigy products are now marketed by USV Pharmaceutical Corp. under their original name:
(1) Doriden (Glutethimide NF)
(2) Hygroton (Chlorthalidone USP)
(3) Regroton (Chlorthalidone USP - Reserpine USP)
(4) Pertofrane (Desipramine HCl NF)

9. Experimental work with the hormone medrogestone, administered orally or parenterally, has given good results in shrinking the diseased prostate making an operation unnecessary, informs Dr. William R. Fair, assistant professor of surgery at Stamford University.

10. DM&S Circular 10-72-27 Purchase of Ineffective Drugs was reviewed by the Committee. This circular informs that necessary measures be taken to see that no VA Funds are expended for the procurement of (Rating 1) Drugs classified by NAS/NRC as "lacking substantial evidene of efficacy", without prior approval of Central Office.

11. Riker Labs. Inc. Letter, March 1, 1972, "Current Status of Norflex Tabs" was discussed by the Committee. Norflex was rated "possibly effective" (Rating 2) by the NAS/NRC. Riker was given a period of time to develop new and additional data proving the efficacy of this product. This has been done and at this time Riker is awaiting a final decision from the FDA, while continuing to market and sell this product.

12. At the September 20, 1971 Meeting of this Committee it was recommended that the following items rated (2) "Possibly Effective" by the NAS/NRC be used and not reordered with a cut-off date of March 31, 1972:

	DRUG	CLASSIFICATION	MFR.
1.	DEPROL TABS	0200	WALLACE
2.	EQUAGESIC TABS	1200	WYETH
3.	ESKATROL SPANS.	0200	SKF
4.	GANTRISIN OPH. SOL.	0200	ROCHE
5.	METHEDRINE TABS	1200	B&W
6.	NORFLEX TABS	0200	RIKER
7.	OXAINE-M	1200	WYETH
8.	PARAFON FORTE TABS	0200	MCNEIL
9.	PERSANTINE TABS	0200	GEIGY
10.	PRANTAL TABS	1200	SCHERING
11.	RELA TABS	1200	SCHERING
12.	ROBAXIN TABS	1200	ROBINS
13.	ZACTIRIN TABS	0200	WYETH
14.	PARAFLEX TABS	1200	MCNEIL
15.	SULFASUXIDINE TABS	1200	MS&D
16.	SULFATHALIDINE TABS	1200	MS&D
17.	NARDIL TABS	0200	W-C
18.	TRASENTINE-PB	1200	CIBA

In view of the fact that many of these firms have submitted new and additional data to FDA and are awaiting a final decision from FDA, the Committ recommends that the cut-off date be extended to September 30, 1972.

13. Drugs Under Investigational Study

(1) Intrathecal Depo-Medrol - Upjohn
(2) F-400- Eaton
(3) W-4020 - Warner-Lambert
(4) MK-130 - Merck Sharp & Dohme
(5) MHS Solution - BOPC
(6) MHS Tabs 10 mg - Lilly

14. Drugs Under Clinical Evaluation

(1) Camalox Suspension - Rorer
(2) Nitro-Bid 6.5 Caps - Marion
(3) Klorvess Effervesent Tabs - Dorsey

15. The Committee reviewed Chapt. 64:00 "Heavy Metal Antagonists" of the American Hospital Formulary Service. No additions or deletions were recommen

16. Blanket Purchase Information for

	JAN.	FEB.
Number of Working Days	21	20
Number of Rxs. Rec'd	145	160
Number of Items Req. to Fill Rxs	144	156
Number of Rxs Filled by Pharmacy	145	160
Number of Rxs Filled by Part. Pharmacy	0	0
Number of Rxs Written by Fee-Basis Phys.	110	124
Number of Line Items Processed by Supply Div.	115	158
Cost of Drugs Purchased	$1,397.88	$2,239.54

17. Every effort is made to buy direct from the manufacturer when repeat prescriptions are expected.

18. The meeting was adjourned at 2:30 PM.

L.N. LARSON
Chief Pharmacist

Dr. WELLS. Beyond this, my colleagues may want to say some of the things that they see as specific improvements in their areas.

Dr. Lee, would you have anything from the professional services?

Dr. LEE. Professional services does its monitoring through a central committee, which is the Executive Committee on Therapeutic Agents with counterparts in the field. We are having direct reports from them which are monitored first by the pharmacy committee, which flags anything that they see in that program and bring it to our central committee for review. We think that this is a fairly tight control mechanism. We are finding that it is necessarily accepted at hospital levels, and there is a good rapport and a good exchange.

I think Mr. Harding from the pharmacy service is suffering the largest demands from this simply because of the volume of paper which he has to handle through his particular service, but it does give him a lead in the pharmacy service and also the supply means by which they can further their support to the clinical program.

Dr. WELLS. Mr. Harding, would you want to add anything from the standpoint of the pharmacy?

Mr. HARDING. I might add that through all these field station reports, we are able to get real close control of the new drugs that may be used or any change that may be developing any trends that are going on throughout the field. This is the greatest advantage we get from this, being able to monitor and note just what the trends are, because they vary so much in different regions.

Dr. WELLS. Mr. Cook of the supply service?

Mr. COOK. Since the submission of this data, Senator, we have discontinued completely procuring any drugs that are listed as ineffective. We have virtually eliminated those that are listed as possibly effective and none may be procured without individual review in each instance where procurement is required.

Using these same reports that have previously been mentioned, we also are able to determine to a certain extent the effectiveness of our own support system in reviewing the times when it is necessary for a hospital to procure drugs under other than the normal conditions.

Senator NELSON. How many veterans hospitals are there?

Mr. COOK. One hundred and sixty-seven, sir. And additional clinics beyond those, sir.

Senator NELSON. What percentage of the drugs for those hospitals is centrally procured by the Veterans' Administration?

Mr. COOK. Approximately 50 percent, sir.

Senator NELSON. Fifty percent?

Mr. COOK. Yes, sir.

Senator NELSON. And the rest is by local prescription from wherever the hospital is located?

Mr. COOK. Either procured through placing an order against a Federal Supply Schedule or by direct local procurement in the open market by the individual hospital or clinic.

Senator NELSON. Well, when you say 50 percent, that is 50 percent from Veterans' Administration central procurement; is that right?

Mr. COOK. Yes, sir.

Senator NELSON. And the other 50 breaks down how?

Mr. COOK. About a little over—I am dividing in my head, sir. A little over 40 percent of the 100 percent. Fifty percent roughly is from

the central system. Approximately 40 percent of the total is procured by placing orders against Federal Supply Schedule contracts. The remainder is either purchased in the local market or is a reimbursable prescription.

Senator NELSON. That is 10 percent of the total?

Mr. COOK. Yes.

Senator NELSON. What other Federal supply areas are you procuring from?

Mr. COOK. Sir, the reference was to Federal Supply Schedules. These are contracts. The Veterans' Administration is the agency that makes them for all of the civilian agencies. They may be used by any agency of Government.

Senator NELSON. What is the total annual expenditure on drugs by the Veterans' Administration?

Mr. COOK. Roughly $65 million, sir.

Senator NELSON. Six-five?

Mr. COOK. For the VA's own use, yes, sir.

Senator NELSON. That includes this 100 percent that we are talking about?

Mr. COOK. Yes, sir.

Senator NELSON. Is there any reason why all drugs purchased for Defense and Veterans' Administration should not be centrally purchased for the same agency?

Dr. WELLS. We have addressed ourselves to this problem. It probably could be done for the entire Federal Government. Thus far, it has not seemed expedient to do so because the requirements of the military, for example, in many instances are quite specific. Where they are going to use drugs in oversea areas, for example, they have very special packaging requirements and so on to take care of the different geography and weather and so on. Each agency has at least some degree of specificity about its needs.

Senator NELSON. I do not understand how that would necessarily militate against centrally procuring. Veterans' Administration would notify the central procuring agency, whatever it may be, that they need such and such drugs and bids would be let or contracts negotiated. What is the handicap on that?

Mr. COOK. Senator, there have been, to my personal knowledge, a half dozen studies of this in the Government over a period of some years. None of them has established conclusively that this would be of benefit to the VA or, for that matter, to the Government. There is such a study currently underway under the chairmanship of the Office of Management and Budget, including participation from the Veterans' Administration, the Department of Defense, and the Department of Health, Education, and Welfare, and the General Services Administration. The outcome of this study will perhaps be known in fall or early winter.

Senator NELSON. Thank you.

Does anybody else have anything to add?

Dr. WELLS. That takes care of us.

Senator NELSON. On page 3, about in the middle, it says, "The physician must be notified of the FDA classification, and he was asked to consider the use of available alternatives."

How successful was this policy of yours?

Dr. WELLS. In terms of actual quantitative success, I am not sure that we have—do we, Roland, figures on that as to what extent we have been able to get physicians to take alternatives? Is that tabulated in here?

Mr. HARDING. Not yet.

Dr. WELLS. I do not think we have any specific figures that we can give you on that. We know that it has had some degree of success. But to give it to you quantitatively, I could not do it.

Dr. LEE. Mr. Chairman, we could not possibly attribute to that statement alone any quantitative degree, because there have been six different releases in the last 18 months to our various stations reminding them of these various things and indicating that these restrictions should be followed.

Mr. GORDON. At the bottom of page 4, you state:

> On May 25, 1972, we distributed to all VA field stations copies of the current listing of FDA classifications of drug effectiveness. We feel that these actions have almost eliminated the procurement of ineffective drugs, even though FDA still permits their manufacture and marketing.

How about under your reimbursement program, where you have fee physicians? Does this apply to the "possibly effective" drugs also?

Mr. HARDING. Yes. That has practically been closed off to the hometown program but we do have some fee physicians writing for particular drugs that are on the ineffective list. We are trying to get this information out to them. What we have done is draw up a paper, a professional services letter, which we have forwarded to all of our field stations with a concise list extracted from this FDA listing and we have told the field stations they can take this list and send it out to all their fee physicians, again bringing it to their attention. The fee physician is still independent. As you know, in the VA, after that law was changed, we don't have the control of the fee physician we used to have. Now any veteran can go to any doctor he wishes and we may not know a particular doctor is going to treat a veteran until a prescription comes in or a fee comes in to be paid for. At that time, we hurry and get out a list to him.

If one of our pharmacies receive a prescription written by a fee physician for a drug that has been classified ineffective or possibly effective, we call the physician, and ask if we can use a drug from our formulary that has a higher classification from the one he is prescribing. However, if the patient takes the prescription to the local pharmacy and has it filled and sends the bill to us for payment, we have to pay for the medication. In the meantime, we notify the physician of our desire to pay for only the most effective drugs available.

Mr. GORDON. Why can't you issue to the physicians who are under contract to you and to the pharmacies a list of all the drugs for which you will reimburse, rather than do it in a negative way. Why can't you say: "Here is a list of drugs; we will pay for these drugs and no other ones"?

Mr. HARDING. Sir, we do not even know for sure who this physician is going to be until we receive the prescription from him.

Dr. LEE. To place this into perspective, may I indicate for present consideration, although it is in the record, that there are 100,000 of these fee basis physicians scattered throughout the country. Hence it is a question of volume as well as a question of attempt to communicate.

Senator NELSON. A hundred thousand. That is about half the physicians in the country, is it not?

Dr. LEE. Yes, sir; and it is increasing.

Senator NELSON. What is the procedure? The physician writes a prescription, if the patient takes it to a local pharmacy, the pharmacist then bills the local Veterans' facility—is that the way that works?

Mr. HARDING. That is right, sir, he bills the local VA facility that has jurisdiction in the region where that patient is located.

Senator NELSON. Would you submit for the record a copy of the letter which you have sent out?

Dr. LEE. We will be happy to submit for the record a series of these, and a series of these releases which have gone to our hospitals if you are interested, sir.

Senator NELSON. We would appreciate having those for the record.

Mr. GORDON. On page 7, about two-thirds of the way down, you say:

> It is his further responsibility to make available to the professional staff information on prices, relative costs of various drugs, and any other product information which may be useful in the selection of drugs.

Now, this is almost impossible to apply to the hometown program, is that correct?

Dr. WELLS. It makes it very difficult, because we simply do not have as much access to the hometown physician or to the fee basis physician as we do to our own hospital staff. This becomes relatively easy to control in-house with our full-time staff. But it becomes exceedingly difficult to handle when we have the fee basis physician; and as Mr. Harding says, we often do not even know who he is until after the prescription comes in for payment.

Dr. LEE. Further complications lay, Mr. Chairman, in the fact that in our affiliation with 93 medical schools, the prescription patterns usually reflect in the medical school programs the things which are going on there, and we are subject to the necessities of attempting to get our people to fit what we think and to have that rationalized with the practices which are dictated by the medical school and its teaching.

Mr. GORDON. Then you really have no control. The only thing you do, your function, then is merely to pay the bill upon receipt. Isn't that right?

Dr. WELLS. I would not really say it is quite that bad, because we have an educational access to them which, again referring to Mr. Harding's statement, we try to make as much use of as we can. When this man is identified, we try to let him know what is in the pharmacy in his area through the formulary and through the access to our publications on them. So it is an educational process; in some instances after the fact, admittedly. But nevertheless, I think we will undoubtedly see this move along.

Mr. HARDING. I might say as a further control, as these prescriptions come in, we make a very strong effort to change the physician's prescriptions or get him to change to something we have in the formulary. We call him up, or we have our director of outpatient clinic or the physician call him, explain to him what we have. We send him a copy of our formulary. We are working this way all the time, but it takes quite a while to cover this many physicians.

Senator NELSON. Do you have a formulary in all of your 168 hospitals?

Mr. HARDING. Yes.

Senator NELSON. Is it a locally developed formulary?

Mr. HARDING. It is developed locally by the local therapeutic agents and pharmacy reviews committee, with guidance through the executive therapeutic agents committee, but it is a local formulary at that particular station.

Senator NELSON. Is there any review of that formulary by the VA at the national level?

Mr. HARDING. To a certain extent. We work on this all the time. We receive copies of every local therapeutic agents and pharmacy reviews meeting; they have meetings once a month, and we receive copies of every one of their meetings, and in the minutes of the meeting, they tell us what they want to add or what they are removing from their formulary. This way we have a good idea what the trend is all the time.

Senator NELSON. I do not know whether you covered that or I heard you correctly. What do you do about drugs that have been determined by the NAS/NRC as possibly effective?

Mr. HARDING. Our policy is that we will not procure the ineffectives. The possibly effectives will be procured only if the doctor states that there is no alternate means of therapy available.

Senator NELSON. Whom does he state that to?

Mr. HARDING. To his local therapeutic committee.

Senator NELSON. So, if they are in the category of possibly effective, it has to go through that routine before it will be approved, is that it?

Mr. HARDING. Yes.

Mr. GORDON. Are you in a position to estimate the amount of money you will be saving by dropping the possibly effectives and the ineffectives?

Dr. WELLS. Strictly speaking, no. We know that when we drop these, we are going to save the money that goes into that, but the alternate prescribing will take this up in part. It could possibly cost us more money. It is exceedingly difficult to make any rational calculation of that.

Senator NELSON. Well, I would assume that a substantial amount of the drugs that you drop would be the largest sellers in the country such as the topicals and the fixed combination anti-infectives? Isn't that right?

Dr. WELLS. Yes; you mean the largest numbers in terms of dollars that have been dropped out?

Senator NELSON. Yes.

Dr. WELLS. Right.

Senator NELSON. The drugs purchased in place of the fixed combinations, in most cases, if not all, are cheaper than the fixed combinations, aren't they? For example, tetracycline is cheaper than tetracycline combined with novobiocin under the brand name Panalba.

Dr. WELLS. No question about it. There are savings to be made within drug categories, but when you try to project that to the total expenditure of the system, we cannot really come up with an all-over savings related to that.

Mr. GORDON. The Comptroller General, when he appeared before the subcommittee last month, stated that the DOD has specifications for competitive buying for 99 percent of all DPSC centrally managed drugs

items and that the VA has only for 25 percent. Why this great difference?

Dr. WELLS. It is simply because they have the practice of writing specifications for a drug even though there is only one source, a single source available for supply. It has been our practice not to write specifications unless they were required, unless by having the specification, we could get into competitive bidding. So it is just a difference in the mechanics of our practice on it.

We monitor this all the time so that if there is a patent expiring or a New Drug Application, we can come in over this and watch the economy of it. But we have not thought it was very meaningful just to write specifications when you knew there was only a single source available.

Mr. GORDON. Now, the Comptroller General told us that the VA administers the Federal Supply Schedule contracts under which Federal agencies can satisfy drug requirements by direct purchasing from drug manufacturers. In 1971, FSS purchases amounted to about $64 million. A comparison of the prices paid show that you pay almost twice as much through the FSS as through direct purchasing. In other words, you might have been able to save $32 million if you had bought it all through central purchasing.

Isn't it possible to get drugs more cheaply in some other way than your present alternative to central purchasing?

Dr. WELLS. As far as the purchase of the Federal Supply Schedules, this difference would seem to be overstated. There are single instances when the price differential is considerable, indeed, but it certainly would not amount to anything like a half of the total purchase. Now, there may be other elements of this that Mr. Cook would like to speak to.

Mr. GORDON. In fact, I spoke to Mr. Cook about this question.

Mr. COOK. Yes. The Federal Supply Schedules are made to be used for a variety of reasons, not just for drugs but for other commodities as well. One of them is to make drugs available to the small user, perhaps a health clinic, an employee health clinic in the Federal Government or something—who has no medical program of the scope of the VA or DOD or PHS, for example, so that his occasional need for items in small quantities can be met by ordering from that source. We only make these schedules where the price is less than is available to him in the community. This is one use.

Another is when we find that there is no advantage in price or not sufficient advantage in price in purchasing this for a central distribution system. And there are such instances as that, where the price is approximately the same whether you buy it and use the vendor's distribution system or whether you use your own.

Mr. GORDON. Well, I have some specific examples. For example, on diazepam, that is Valium, under direct purchasing, it is $18. Under FSS, it is $36; $33.34, $28.89, $33.44. Sodium cephalothin, which is Keflin, direct purchasing is $2.10. Under FSS, the Government is charged $2.70, $3.57 and it goes as high as $3.82.

Then here is Garamycin. $3.62 direct purchasing and $4.80 under the FSS, $4.41, $4.66 and going as high as $5.76. There is a substantial difference.

Here is Librium for $13 under direct purchasing. Under FSS, it is $27.72, or $31.50. There is a vast difference. It may not be 850 percent, but it is more than 50 percent in certain cases.

Mr. COOK. Mr. Gordon, I think the tables from which you are reading, the central purchase prices happen to be our own for our own central distribution system.

Mr. GORDON. Yes; this is data supplied by you.

Mr. COOK. Yes, sir. And that is the primary source for our hospitals. There is a variety of reasons why they may have used the Federal Supply Schedule, some of them not good reasons. But some of them, when we analyzed the data, showed that time was the essential factor. They needed something today, so they purchased it through a local distributor of the Federal Supply Schedule contract. In other instances, they should not have done so and we are taking steps to correct that.

Dr. WELLS. This group of purchases, you know, are monitored very carefully, both through the pharmacy and the supply services. This is the purpose of our periodically sending them letters and we have sent a great many of them all the time, asking them why this digression. So we try to watch this on a day-to-day basis. But it is a big system and occasionally, something will slip through.

Senator NELSON. Do you keep any comparative statistics on what is prescribed in each of the 168 hospitals?

Dr. WELLS. Yes. By trying to see what we have in the way of prescribing patterns at individual hospitals?

Senator NELSON. Yes.

Dr. WELLS. As a matter of fact, this is one of the studies that our central office therapeutics committee has been undertaking for quite some time. We try to make this comparison and see if it is rational, see if we can find out when differences lack explanation what goes here, what is the trouble.

Senator NELSON. When did you start that program?

Dr. WELLS. That particular kind of review has been about a year?

Mr. HARDING. About a year now since we began it.

Senator NELSON. Your objective is to be able to evaluate what the prescribing practices are within each one of the hospitals under your jurisdiction?

Mr. HARDING. Yes.

Senator NELSON. And that is a continuous, ongoing study?

Mr. HARDING. That is an ongoing continuous thing, yes.

Senator NELSON. What do you do with the information accumulated?

Mr. HARDING. The more information we get on this, the more we will be able to work toward developing some type of control on things that they are using or may be using in certain areas that we have found out our physicians have decided are not as important in other areas. So we are going to disseminate this information to all of the stations throughout the whole region, throughout the whole United States.

Senator NELSON. Thank you very much, gentlemen. We appreciate your statement and your taking the time to come here today.

We are recessed subject to call of the Chair.

(Whereupon, at 11:45 a.m., the subcommittee was adjourned, subject to the call of the Chair.)

(The letters referred to follow:)

VETERANS' ADMINISTRATION,
DEPARTMENT OF MEDICINE AND SURGERY,
Washington, D.C., June 19, 1972.

Professional services letter.

To: Directors of hospitals, domiciliary, outpatient clinics and regional offices with outpatient clinics and manager, marketing center.

Subject: FDA interim index to evaluations published in Federal Register for NAS/NRC reviewed drugs.

1. Three copies of Index to Evaluations, Volume II, December 31, 1971, have been forwarded to you in accordance with DM&S Circular 10–70–237, paragraph 3. Distribution should be made as follows: Chief of Staff or Chairman, Therapeutic Agents and Pharmacy Reviews Committee (1); Chief, Pharmacy Service (1) and Chief, Supply Service (1).

2. Pages 3–25 of the Index lists drug products classified by Food and Drug Administration as "Lacking Substantial Evidence of Efficacy" (Category 1). In accordance with DM&S Circular 10–72–92, VA funds may not be expended for drugs classified no higher than Category 1, except those for investigational use for which a protocol has been submitted to and approved by the Executive Committee on Therapeutic Agents and in accordance with FDA Regulations.

3. Category 2 drugs, classified by Food and Drug Administration as "Possibly Effective" are listed on pages 26–42 of the Index. In accordance with DM&S Circular 10–72–92, VA funds should not be expended for drug products in Category 2, with the following exceptions:

a. Investigational Drugs—Submission of protocol and approval by Executive Committee on Therapeutic Agents is required.

b. Drug products for which there is no appropriate alternate drug therapy available in Category 3 or 4, "Probably Effective" or "Effective". (Approval by the Chief of Staff or local Therapeutic Agents and Pharmacy Reviews Committee is required.)

4. Drug products in Category 3, classified by Food and Drug Administration as "Probably Effective" should be used only if, in the opinion of the prescribing physician, there is no appropriate alternate drug therapy available in Category 4, classified "Effective".

5. The attachment lists all drug products in the three categories, which were classified less than "Effective" in the Index to Evaluations. This list may be duplicated locally for distribution to fee-basis physicians. If prescriptions are to be filled at Veterans Administration expense, drugs prescribed by fee-basis physicians should be limited to those in the highest catgory which, in the opinion of the prescribing physician, will meet the treatment needs of the patient.

6. It is our desire to permit physicians as much professional freedom as possible in the treatment of veteran patients. Attention again is invited, however, to IL 11–71–44, paragraph 7: "Federal funds should be expended only to purchase the most effective drug product available for a given condition. Therapeutic committees must, therefore, assure themselves that sound professional reasons govern their selection of drugs."

LYNDON E. LEE, Jr., M.D.

Enclosure.

1. LACKS SUBSTANTIAL EVIDENCE OF EFFICACY

	Company	Type
Achrocidin	Lederle	Tab.
Do	do	Syr.
Achromycin Loz 15 mg	do	Loz.
Achromycin Sv	do	Cap.
Achromycin Troches	do	Trh.
Achromycin/Phenylephhc	do	Sus Nasal.
Achrostatin V	do	Pwr.
Do	do	Cap.
Aclor 5 gr	Cole	Cap.
Acromicina Sv	Lederle	Cap.
Acticort	Wilson Labs	Sol.
Actilamide	Broemmel	Mwh.
Do	do	Sol Nasal.
Actol	Massengill	Sol.
Afrodrin	BW Co	Sol Nasal.
Aerodrin	do	Spy Nasal.
Albamycin	Upjohn	Dis Diag.
Albamycin G U	do	Tab.

1. LACKS SUBSTANTIAL EVIDENCE OF EFFICACY—Continued

	Company	Type
Albamycin T	Upjohn	Dis Diag.
Do	do	Cap.
Do	do	Grn.
Alertonic	Merrell	Elx.
Alevaire	Breon	Sol Inh.
Do	Winthrop	Sol Inh.
Am Plus Improved	Roerig	Cap.
Ambistryn	Squibb	Pwr Im.
Amm I Dent	Block	Tpt.
Do	do	Tpr.
Ammozyl	High	Sol Im.
Amril	Amfre Grant	Tab.
Anergex	Lemmon	Sus Im.
Antivert	Pfizer Labs	Tab.
Antizyme	WC	Tpt.
Aristogesic	Lederle	Cap.
Airstomin	do	Cap.
Artamide HC	Wampole	Cap.
Atropine and Phenobarb	Cole	Tab.
Aureomycin 15 mg	Lederle	Trh.
Aureomycin Pharyngets	do	Trh.
Aureomycin Triple Sulf	do	Tab.
Azotrex	Bristol Labs	Cap.
Do	Bristol	Syr.
Bacimycin	Merrell	Tab.
Bicillimycin	Wyeth	Pwr Im.
Bicillin—Sulfa	do	Sus.
Bicillin—Sulfas	do	Tab.
Bilcain	Cole	Tab.
Biomydrin	Warner Chil	Sol Nasal.
Do	do	Spy Nasal.
Biomydrin F	W C	Spy Nasal.
Biosulfa 125 m	Upjohn	Tab.
Biosulfa 250 m	do	Tab.
Bistrimate 410 mg	Smithmillerpat	Tab.
Blutene Cl 100 mg	Abbott	Tab.
Bradosol	Ciba	Loz.
Brisk Activated w/Br85	Colgate	Tpt.
Bronkometer	Breon	Aer Inh.
Bronkospray	do	Sol Inh.
Buff Pen G Three Sulfa	Nysco	Pwr.
Candettes Cough	Pfizer	Jel.
Cer O Strep One	Upjohn	Pwr Im.
Cer O Strep One Half	do	Pwr Im.
Chymar	Armour Pharm	Sus Im.
Chymar Aqueous 5,000u/m	Armour	Sol Im.
Chymar L	Armour Pharm	Pwr Im.
Chymotrypsin	Wilson	Sol Im.
Chytrypsin 5,000 units	Conal	Sol Im.
Chytrypsin 5,000 units	Conal	Sol Im.
Coco-Sulfonamides Trip	Lilly	Sus.
Compocillin VK w/Sulfa	Abbott	Tab.
Compocillin VK Sulfa	do	Grn.
Comycin	Upjohn	Cap.
Do	do	Cap.
Coplexen	SKF	Liq.
Cremomycin	MSD	Sus.
Curad Med. Adhesive	Kendall	Dressing.
Cvp	U.S. Vitamin	Cap.
Do	do	Syr.
Cvp with Vitamin K	do	Syr.
Do	do	Tab.
Cyclex	MSD	Tab.
Cytran	Upjohn	Tab.
Decadron w/Xylocaine	MSC	Sol.
Decadron/Xylocaine Dil	MSD	Sol.
Declostatin	Lederle	Pwr.
Do	do	Cap.
Delfetased Plus T	Eastern	Srt.
Dexa Pyramine	Vitamix	Sol Im.
Di Ademil K	Squibb	Tab.
Dailose Plus	Stuart	Cap.
Diapec	Pfizer Labs	Sus.
Dihydrostreptomycin S	Phila Lab	Sol Im.
Do	Pfizer	Pwr Im.
Do	Squibb	Pwr Im.
Do	Pure	Pwr Im.
Do	do	Sol Im.
Donnagel with Neomycin	Robins	Sus.
Drilitol 0.2 pct	SKF	Sol Nasal.
Do	SKF	Spy Nasal.
Duo Cvp	U.S. Vitamin	Cap.

1. LACKS SUBSTANTIAL EVIDENCE OF EFFICACY—Continued

	Company	Type
Duo Cvp w/vit K	U.S. Vitamin	Cap.
Duo Strep	Merck	Pwr Im.
Duografin	Squibb	Sol Iv.
Durycin A S	Lilly	Sus Im.
Durycin F A 400/0.5	do	Pwr Im.
Dystrep	Merck	Pwr Im.
Emivan 20 mg	USV	Tab.
Emivan 60 mg	USV	Tab.
Equalysen	Wyeth	Tab.
Erythrosulfa	Upjohn	Tab.
Esidrix 25/500	Ciba	Ect.
Esidrix-K 50/1,000	do	Ect.
Eskay's Theranates	SKF	Sol.
Estrosed	Conal	Tab.
Ethylene Disulphonate	Spicer Ger	Sol Im.
Flanithin 325 mg	Table Rock Lab	Cap.
Flav Pen G w/Tri-Sulfa	Vitamix	Pwr.
Do	do	Pwr.
Flavocillin CS	Philadelphia	Pwr.
Flavoserp	Blue Line	Cap.
Frenquel 5 mg/cc	Merrell	Sol Iv.
Frenquel 20 mg	do	Tab.
Frenquel 100 mg	do	Tab.
Fulvicin	Schering	Tab.
Do	do	Tab.
Gantricillin 100	Roche	Tab.
Gantricillin 200	do	Tab.
Gantricillin 300	do	Tab.
Gantrisin	do	Sol Nasal.
Germicidal Det 2.5 Pct	Parke Davis	Liq.
Geroniazol	Phillps-Roxane	Sol.
Gluco-Fedrin W Sulzole	PD	Sus Nasal.
Grifulvin	McNeil	Tab.
Do	do	Sus.
Griseofulvin	Ayerst	Tab.
Do	do	Tab.
Guanidine Hcl 0.125 Gm	DaviesRoseHoyt	Tab.
Hexamethonium Chloride	Nysco	Tab.
Do	Richlyn	Tab.
Hormotone T 1,000 IU	Carnrick	Tab.
Hormotone T 5,000 IU	do	Tab.
Hydrodiuril KA	MSD	Tab.
Hydropres KA	MSD	Tab.
Hydrospray	MDS	Spy Nasal.
Ilosone Sulfa	Lilly	Pwr.
Do	do	Tab.
Ilotycin	do	Dco.
Ilotycin Gluceptate	do	Pwr Otic.
Ilotycin Sulfa	do	Tab.
Ilotycin/Sulfa Pediat	do	Sus.
Intromycin	Dow Rx Pharm	Pwr.
Isadoxol	Harvey	Tab.
Sorboquel w/Noemycin	Schering	Tab.
K-Cillin Sulfa	Mayrand	Pwr.
Do	do	Pwr.
Kaomycin	Upjohn	Sys.
Kasdenol	Guardian	Pwr.
Kectil	Bristol Labs	Sus.
Koagamin Parenteral	Chatham	Sol.
Koagamin Sh	do	Sol.
Kolynos Fluoride	Whitehall	Tpt.
Lavema	Winthrop	Pwr.
Do	do	Sol.
Ledercillin Im U/gm	Lederle	Ont.
Ledercillin 5,000 Units	do	Trh.
Lutrexin 3,000 Units	HWD	Tab.
Mannitrau	Richlyn	Tab.
Maxitate w/Rauwolf	Strasenburg	Tab.
Medrol with Orthoxine	Upjohn	Tab.
Menacyl	Lakeside	Tab.
Mephosal w/Hc	Talden-Yates	Tab.
Merdystrep	MSD	Pwr Im.
Mesulfin 250 mg	Ayerst	Tab.
Metreton	Schering	Tab.
Micrin	J J	Mwh.
Milprem 200, 200 mg	Wallace	Tab.
Milprem 400, 400 mg	do	Tab.
Mp Pentabs	Martin Phillip	Tab.
Mulsopaque 500 Pct	Lafayette	Eml.
Mycifradin	Upjohn	Dis Diag.
Mycifradin N 0.5 gm	do	Tab.
Mycillin	Maurry	Sus Im.
Myospaz	Nr Amer Pharm	Tab.

1. LACKS SUBSTANTIAL EVIDENCE OF EFFICACY—Continued

	Company	Type
Mysteclin F	Squibb	Cap.
Do	do	Dps.
Do	do	Syr.
Mysteclin F 125	do	Cap.
Mysteclin V	do	Cap.
Naturetin w/K 5 mg	do	Tab.
Naturetin w/K 2.5 mg	do	Tab.
Neo-Cortef	Upjohn	Spy Nasal.
Do	do	Sus Nasal.
Do	do	Sus.
Neo Delta Cortef	do	Spy Nasal.
Neo Hydeltrasol 1 mg/ml	MSD	Spy Nasal.
Neo Semhyten	Massengill	Cap.
Neo Syneph Sulzolate	Winthrop	Sol Nasal.
Neocyclone	Central Pharm	Tab.
Neomycin Kaolin Pectin	Vitamix	Sus.
Neomycin Sul Kaol Pect	Heun	Sus.
Neoparbel	Central Pharca	Tab.
Neopenzine	Lilly	Pwr.
Neopenzine 150	do	Tab.
Neopenzine 300	do	Tab.
Neuro Centrine	Bristol Labs	Tab.
Nicozol w/Reserpine	Nysco	Tab.
Nisulfazole 10 Pct	Breon	Sus.
Noloc	Dumas-Wilson	Cap.
Novahistine/Penicillin	Dow Rx Pharm	Cap.
Octylan Compound	Baxter Don	Tab.
Onixol	Scholl	Sol.
Orabiotic	White Labs	Cgt.
Pabalate-Hc	Robins	Ect.
Pabicortal	Nysco	Tab.
Pabirin Ac	Dorsey	Cap.
Pabirin Ac Buffered	do	Tab.
Pactal 25 mg	WC	Tab.
Pactal 50 mg	WC	Tab.
Panalba	Upjohn	Cap.
Panalba Half Strength	do	Cap.
Panalba Km	do	Dps.
Do	do	Grn.
Panmycin	do	Dis Diag.
Paredrine Sulfathiazole	SKF	Sus Nasal.
Parenzyme 2 mg/gm	National Drug	Ont.
Parenzyme Aqueous	do	Pwr Im.
Pellbiotic 250	Pell	Tab.
Pen G Pot 1m U/Gm	Biocraft	Ont.
Pen G Pot 5m U/Gm	do	Ont.
Pen G Pot 5m U/Gm	Bryant Pharm	Ont.
Pen G Pot 500 U/Gm	Day Baldwin	Ont.
Pen G Pot 1m U/Gm	do	Ont.
Pen G Pot 1,000 U/Gm	do	Ont.
Pen G Pot 10 m U/Gm	Squibb	Ont.
Pen G Pot 1,000 U/Gm	Lilly	Ont.
Pen G Pot 10 M U/Gm	do	Ont.
Do	Squibb	Ont.
Pen G Pot 100 M U/Gm	Lilly	Ont.
Pen G Pot 1,000 U/Gm	do	Ont.
Pen Strep	MSD	Pwr Im.
Do	MSD	Pwr Im.
Pen Streptomycin	Upjohn	Sus Im.
Pen-Vee Sylfas	Wyeth	Tab.
Do	do	Pwr.
Pen-Vee Cidin	do	Cap.
Penicillin G	Abbott	Pwr Inh.
Penicillin Threesulfa	Nysco	Tab.
Do	do	Tab.
Penicillin Tri Sulfa	Richlyn	Tab.
Do	Zenith	Tab.
Penicillin w/Triplsulf	Supreme	Tab.
Penicillin w/3 Sulfas	Vitamix	Tab.
Do	Biocraft	Tab.
Penicillin 3	do	Pwr.
Penicillin 4	do	Pwr.
Penicillin/Strep Sod	Pure	Pwr Im.
Pentids-Sulfas	Squibb	Pwr.
Do	do	Tab.
Pentocin	Pure	Pwr Im.
Pepsodent	Lever	Mwh.
Perithiazide Sa	WC	Srt.
Pharycidin Conc	Purdue Fred	Liq.
Phemerol 1/750	PD	Sol.
Phemerol 1/500	PD	Tct.
Phermerol Top 3 Pct	Parke Davis	Sol.

1. LACKS SUBSTANTIAL EVIDENCE OF EFFICACY—Continued

	Company	Type
Piptal Ped w/Phenobarb	Lakeside	Dps.
Plimasin	Ciba	Tab.
Pmb-200	Ayerst	Tab.
Pmb-400	do	Tab.
Polanil	Schering	Tab.
Polycline w/Triple Sul	Bristol	Sus.
Polymagma	Wyeth	Sus.
Do	do	Tab.
Potass Pen G w/3 Sulfa	Phila	Tab.
Powdalator-Es	Abbott	Pwr Dent.
Prednaman	Dome Lab	Tab.
Prednisorb	Nysco	Tab.
Pree-Mt	Wallace	Tab.
Procaine Pen/Streptomy	Rohr	Sus Im.
Prodecadron Respihaler	MSD	Afr Inh.
Quertine	Abbott	Tab.
Quintess-N	Lilly	Sus.
Raumannite Compound	Nysco	Tab.
Raumannite 50	do	Tab.
Rautrax	Squibb	Tab.
Rautrax-N	do	Tab.
Rautrax-N Modified	do	Tab.
Rautrax Improved	do	Tab.
Rauwiloid and Hexamethon	Riker	Tab.
Rauwolfia Compound No. 2	Richlyn	Tab.
Remanden-250	Msd	Tab.
Reserthonium	Nysco	Tab.
Retrografin	Squibb	Sol.
Retropaque	Winthrop	Sol.
Rhinazine	Lederle	Sol.
Ritonic	Ciba	Cap.
Robaxisal	Robins	Tab.
Robaxisal-Ph	do	Tab.
Roniacol w/Aminophylli	Roche	Tab.
Ruhexatal	Lemmon	Tab.
Rutin	Abbott	Tab.
Do	Parke Davis	Tab.
Rutorbin	Squibb	Tab.
Salcort Delta 1 mg/Tab	Massengill	Tab.
Sergynol	Ascher	Tab.
Seromycin w/ Isoniazid	Lilly	Cap.
Sigmanycin	Pfizer	Dps.
Do	do	Syr.
Do	do	Cap.
Signemycin	Reorig	Dps.
Do	do	Syr.
Do	do	Cap.
Signemycin 375	do	Cap.
Siltrobarb	Cole	Tab.
Sinaxar 200 mg	Armour Pharm	Tab.
Skelaxin 400 mg	Robins	Tab.
Somacort	Wallace	Tab.
Spectrocin	Squibb	Spy Nasal.
Spectrocin-T	do	Trh.
Stenediol	Organon	Tab.
Sterisol	Warner Lambert	Nwh.
Strep-Combiotic	Pfizer	Pwr Im.
Do	do	Sus Im.
Strep-Dicrystin	Squibb	Pwr Im.
Strep-Distrycillin A.S.	do	Sus Im.
Streptomagma	Wyeth	Sus.
Streptomagmaattapulgte	do	Tab.
Strexate	Armour Pharm	Tab.
Strycin	Squibb	Syr.
Sufathiazole w/Tuamine	Lilly	Sus Nasal.
Sulfa-Sugracilln 125 M	Upjohn	Grn.
Sulfa-Sugracilln 250 M	do	Grn.
Sulfaguanidine	Lederle	Tab.
Sulfathiazole	Rowman Pharm	Tab.
Sulfathiazole 0.5 Gm	Lilly	Tab.
Sulfathiazole	Vale	Tab.
Sulfathiazole Gum	White	Cgt.
Sulfedex	Abbott	Sol.
Sulfel	Vale	Trh.
Sulfonamets	National	Loz.
Sulfonamides Triplex	Lilly	Tab.
Super Amm-I-Dent	Block	Tpt.
Super Anapac with Dmh	Rexall	Syr.
Synapoidin	Parke Davis	Pwr Im.
Syndecon	Bristol	Tab.
Do	do	Pwr.
Tace w/Ergonovine	Merrell	Cap.

1. LACKS SUBSTANTIAL EVIDENCE OF EFFICACY—Continued

	Company	Type
Tain	Dorsey	Tab.
Do	do	Sus.
Tao-Ac	Roerig	Cap.
Taomid	do	Sus.
Do	do	Tab.
Tergemist	Abbott	Sol Inh.
Terramycin	Pfizer	Dco Dent.
Do	do	Pas.
Terramycin S F	Pfizer Labs	Cap.
Terrastatin	Pfizer	Cap.
Do	do	Pwr.
Tetracydin	Roerig	Cap.
Tetrastatin	do	Cap.
Do	do	Pwr.
Tetrex Triple Sulfa	Bristol	Syr.
Tetrex-Ap	do	Syr.
Tetrex-Apc w/Bristamin	do	Cap.
Theoclycinate/Rutin	Brayten	Tab.
Thera-Cillin	Approved	Tab.
Thiosulfil	Ayerst	Sol.
Thizordrin	Lilly	Sol Nasal.
Toldex	Dow	Tab.
Triaminic Hc 50 mg	Dorsey Labs	Tab
Triple Hormone	Taylor	Sus Im.
Trisem-Pen	Massengill	Tab.
Trisem-Pen Pengpotass	do	Pwr.
Trisocort	SKF	Spy Nasal.
Trypsin	Wilson	Sol Im.
Tyrolaris	MSD	Mwh.
V-Cillin K Sulfa	Lilly	Pwr.
V-Cillin K Sulfas	do	Tab.
V-Cillin Sulfa	do	Pwr.
Do	do	Tab.
V-Kor	do	Tab.
Visciodol	Fougera	Sus.
Wolfinex	Westerfield	Tab.
Wybiotic	Wyeth	Trh.
Wycillin S M 400	do	Sus Im.
Wycillin S M 600	do	Sus Im.

2. POSSIBLY EFFECTIVE

	Company	Type
Achromycin	Lederle	Pwr.
Achromycin Ear Sol	do	Pwr Otic.
Achromycin w/Hc	do	Ont Opth.
Acr-Allantomide	National	Ont.
Adrenosem Salicylate	Massengill	Tab.
Do	do	Sol Inj.
Do	do	Syr.
Adrestat	Organon	Cap.
Adrestat-F 130 mg/cc	do	Sol Im.
Aerosporin	BW	Sol Otic.
Allantomide	National	Ont.
Aludrox SA	Wyeth	Tab.
Do	do	Sus.
Alulotion Sulfathiazle	do	Lot.
Alvinine	Wampole	Shp.
Amm. Cl 0.9 Pct Water	Baxter, Don	Sol.
Amphedroxyn Hcl	Lilly	Tab.
Analexin	Mallinckrodt	Syr.
Do	do	Tab.
Analexin-AF	do	Tab.
Analexin-400	do	Cap.
Ananase	Rorer	Ect.
Antistine	Ciba	Sol Opth.
Appetrol	Wallace	Tab.
Appetrol Sr	do	Scr.
Arlidin	USV	Tab.
Aureomycin	Davis Geck	Dre.
Do	Lederle	Pwr Otic.
Aureomycin Packing	Davis Geck	Dre.
Aureomycin Strip	do	Dre.
Aureomycin Surgical	Lederle	Pwr.
Avazyme	Wampole	Ect.
Bacimycin	Merrell	Ont

2. POSSIBLY EFFECTIVE—Continued

	Company	Type
Bacitracin 2,500 U	Lilly	Sot.
Bacitracin-Neomycin	Biocraft	Ont.
Bacitracin-Polymyxin	do	Ont
Do	Kasco	Ont.
Do	do	Ont.
Bacitracin-Polymyxin-B	Pfizer	Ont.
Do	Day-Baldwin	Ont.
Balarsen	Endo	Tab.
Bamadex	Lederle	Src.
Do	do	Tab.
Barbicaine	Cutter	Sol.
Benacine	Parke Davis	Tab.
Benadryl	do	Crm.
Benoquin	Elder	Ont.
Do	do	Lot.
Benulone	Merrell	Sus.
Betadine	Purdue	Shp.
Bike Anti-Fungal	Kendall	Asp.
Bike Foot and Body Pwr	do	Pwr.
Bio Dyne	Sperti	Ont.
Biomydrin	Warner Chil	Sol Opth.
Biozyme-Hc	Armour	Ont.
Biphetamine	Strasenburg	Cap.
Do	do	Cap.
Do	do	Cap.
Bipietamine-T 10 mg	do	Src.
Biphetamine-T 6.25 mg	do	Src.
Bismakaolin	Vale	Sus.
Blue Jay Corn Plaster	Kendall	Dressing.
Bornate	Wyeth	Lot.
Brandenfels Scalp and Hair	Brandelfels	Sol.
Brandenfels Scalp and Hair	Brandenfels	Sol.
Do	do	Sol.
Breck Banish Cream	Breck	Shp.
Breck Banish Liquid	do	Shp.
Bristamin	Bristol	Lot.
Buclamase 10 mg	Rystan	Tab.
Ca Disod Versenate	Riker	Tab.
Caladryl	Parke Davis	Lot.
Do	do	Crm.
Caldesene	Strasenburgh	Ont.
Do	do	Pwr.
Caligesic	Msd	Ont.
Candettes	Pfizer	Loz.
Capla	Wallace	Tab.
Carbrital	Parke Davis	Flx.
Do	do	Cap.
Carbrital ½ Strength	do	Cap.
Cartrax 10	Roerig	Tab.
Cartrax 20	do	Tab.
Cerosal	Kahlenberg	Ont.
Chloromycetin	Parke Davis	Pwr Opth.
Do	do	Sol Otic.
Chlorosalicylate Ont	Kremers Urban	Ont.
Choline Dihydrogen Cit	Lilly	Tab.
Chymar 10,000 Units	Armour Pharm	Tab.
Chymolase	Warren Teed	Ect.
Chymoral	Armour	Ect.
Co-Pyronil	Lilly	Cap.
Do	do	Sus.
Co-Pyronil Pediatric	do	Cap.
Combid	SKF	Src.
Correctol	Pharmaco	Tab.
Corticloron	Schering	Sus.
Cortisporin	BW	Sus Opth.
Cremosuxidine	MSD	Sus.
Curad Med Bandage	Kendall Co	Dressing.
Cyclamycin	Wyeth	Sus.
Do	do	Cap.
Cyclospasmol	Ives	Cap.
Do	do	Tab.
Cytolov 7,000 Units	Armour Pharm	Cap.
D-O-E	Tilden-Yates	Tab.
Dactil-Ob	Lakeside	Tab.
Daritran	Pfizer	Tab.
Darvo-Tran	Lilly	Cap.
Deaner	Riker	Tab.
Declomycin	Lederle	Ont.
Decupryl	Tilden Yates	Sol.
Do	do	Crm.
Delfeta-Sed	Eastern Resear	Srt.
Delfetamine	do	Srt.
Deprol	Wallace	Tab.

2. POSSIBLY EFFECTIVE—Continued

	Company	Type
Dermaval	Vale	Crm.
Desenex	Strasenburgh	Pwer.
Do	do	Ont.
Desoxyn	Abbott	Tab.
Dexserpine 5	Nusco	Tab.
Dihydrin	Broemmel	Sol Opth.
Diagnex Blue	Squibb	Kit.
Diaparene	Breon	Ont.
Diaparene Diaper Rinse	do	Tab.
Diothane	Merrell	Ont.
Dormison	Schering	Cap.
Do	do	Cap.
Drinalfa	Squibb	Tab.
Du-Oria	Ascher	Tab.
Dyclone	Dow	Crm.
Emivan	USV	Sol IV.
Enarax 10	Roerig	Tab.
Enarax 5	do	Tab.
Enzactin	Ayerst	Pwr.
Do	do	Asp.
Do	do	Crm.
Enzo-Cal	Tilden Yates	Crm.
Equagesic	Wyeth	Tab.
Equanitrate 10	do	Tab.
Equanitrate 20	do	Tab.
Erythrocin	Abbott	Ont.
Eskatrol	SKF	Src.
Etamon 100 mg/cc	PD	Sol.
Eterna 27	Revlon	Crm.
Fenarol 100 mg	Winthrop	Tab.
Fenarol 200 mg	do	Tab.
Fling	Kendall	Pwr.
Florinef-S	Squibb	Ont Opth.
Do	do	Sus Opth.
Fungacetin	Harvey	Pwr.
Do	do	Sol.
Do	do	Ont.
Gantrisin	Roche	Sol Otic.
Glutavene	Tilden Yates	Sol IV.
Glutavene-K	do	Sol IV.
Gravidox	Lederle	Sol Inj.
Haugase	Madland	Ect.
HcAcetate w/Neomycin	Biocraft	Ont Opth.
Do	do	Ont Opth.
Do	Day Baldwin	Ont Opth.
Hexathricin Aerospra	Lincoln	Asp.
Hista-Clopane	Lilly	Cap.
Histacalma	Rexall	Crm.
Histadyl	Lilly	Crm.
Do	do	Ont Opth.
Histadyl and Ephed 2	do	Cap.
Histadyl and Ephed 1	do	Cap.
Histamine Phosphate	do	Sol.
Humacort	PD	Ont.
Hydrocortisone/Neomycin	Day Baldwin	Ont.
Hyrocain	Amer Pharm	Crm.
Ilotycin	Lilly	Ont.
Imadyl Unction	Roche Lab	Ont.
Infrarub Analgesic	Whitehall Lab	Crm.
Ionamin	Strasenburgh	Src.
Isodine	Isodine	Shp.
Isodine Athlete's Foot	do	Pwr.
Do	do	Sol.
Isopto P H N 0.5 percent	Alcon	Sus Opth.
Isopto P H N 1.5 percent	do	Sus Opth.
Keralac	Salem	Sol.
Kryl Tab	Ayerst	Tab.
Lactated Potassic Salt	Don Baxter	Sol Inj.
Lauron 150 mg/cc	Endo Labs	Sus Im.
Lauron 50 mg/cc	do	Sus Im.
Lembrose	Wyeth	Ont.
Lenetran	Lakeside	Tab.
Levanil 300 mg	Upjohn	Tab.
Lidosporin	BW	Sol Otic.
Listica	Armour Pharm	Tab.
Malglyn	Brayten	Sol.
Do	do	Tab.
Masse	Ortho	Crm.
Matromycin 100 mg	Pfizer	Cap.
Matromycin 250 mg	do	Cap.
Medrol	Upjohn	Src.
Do	do	Src.
Megimide	Abbott	Sol IV.
Meloxine	Upjohn	Tab.

2. POSSIBLY EFFECTIVE—Continued

	Company	Type
Meonine	Ives	Tab.
Meratran 1 mg	Merrell	Tab.
Meratran 2.5 mg	do	Tab.
Methamphetamine Hcl, R	High	Tab.
Methedrine	BW	Tab.
Metimyd w/Neomycin	Schering	Ont Opth.
Metreton	do	Sus Opth.
Do	do	Sp Nasal.
Mikedimide	Panray	Sol IV.
Miller-Drine	Smp	Tab.
Milpath 200	Wallace	Tab.
Milpath 400	do	Tab.
Miltrate	do	Tab.
Modumate	Abbott	Sol IV.
Monichol	Ives	Sol.
Morumide	Massengill	Ont.
Mucilose-Super	Winthrop	Pwr.
Murel	Aherst	Tab.
Do	do	Sol.
Murel S A	do	Tab.
Murel w/Phenobarbital	do	Tab.
Do	do	Srt.
Mycitracin	Upjohn	Ont Opth.
NTZ	Winthrop	Sol Nasal.
Naprylate	Strasemburgh	Ont.
Nardri	WC	Tab.
NDK Dentifrice	NDK	Sol Dent.
Neo-Deltef	Upjohn	Sol Opth.
Neo-Mantle	Dome	Crm.
Do	do	Lot.
Neo-Poylcin	Dow	Sol Opth.
Do	do	Ont Opth.
Neo-Polycin HC	Pitman-Moore	Ont Opth.
Neo-Synephrine Thenfad	Winthrop	Sol Nasal.
Neo-Vagisol	Dorsey	Sup Vag.
Neom cin Sulfate	Kasco	Ont Opth.
Do	do	Ont Opth.
Do	do	Ont Opth.
Neosone	Upjohn	Ont Opth.
Neosporin	BW	Sol Opth.
Do	BW	Ont Opth.
Do	do	Sup Vag.
Neothalidine		Grn.
Nescuta	Philips Roxane	Ont.
Neutrapen	Riker	Pw .
Niamid 100 mg	Pfizer Labs	Tab.
Niamid 25 mg	do	Tab.
Nitralox	Doresey	Tab.
Norflex	Riker	Tab.
Norflex Inj. 60 mg/2cc	do	Sol.
Norodin	Endo	Tab.
Numorphan 2 mg	do	Sup.
Numorphan 5 mg	do	Sup.
Obetrol–10	Obetrol	Tab.
Obetrol–20	do	Tab.
Oleandomycin 200 mg	Roerig	Pwr IM.
Oleandomycin 500 mg	do	Pwr.
Onycho-Phytex	Wynlit	Sol.
Op-Hydrin	Broemmel	Sus Opth.
Op-Isophrin	do	Sol Opth.
Do	do	Sol Opth.
Op-Predrim	do	Sol Opth.
Opthocort	Parke Davis	Ont Opth.
Orenzyme	National Drug	Ezt.
Otamylon	Winthrop	Sol Otic.
Otodyne	White	Sol Otic.
Otomide	do	Sol Otic.
Oxaine 10 mg/5 cc	Wyeth	Sus.
Oxaine M 10 mg/5cc	do	Sus.
Oxsoralen	Elder	Cap.
Do	do	Lot.
P–A–D	Upjohn	Tab.
Panparnit	Geigy	Tab.
Pantho–F 0.2 Pct	USV	Crm.
Pantho–F 1 Pct	USV	Crm.
Papase	WC	Tab.
Paraflex	McNeil	Tab.
Parafon	do	Tab.
Parafon Forte	do	Tab.
Parafon w/Prednisolone	do	Tab.
Parafon with Codeine	do	Tab.
Pathibamate–200	Lederle	Tab.
Pathibamate–400	do	Tab.
Paveril Phosphate	Lilly	Pwr.

2. POSSIBLY EFFECTIVE—Continued

	Company	Type
Do	Lilly	Tab.
Do	do	Tab.
Pentaserpine	Nysco	Tab.
Pentaserpine 20	do	Tab.
Pentoxylon	Riker	Tab.
Perazil	BW	Crm.
Persantine 25 mg	Geigy	Tab.
Phenergan	Wyeth	Crim.
Phytex	Wynlit	Liq.
Pontalin 500 mg	Winthrop	Tab.
Do	do	Tab.
Potaba 0.5 bm	Glenwood	Cap.
Do	do	Tab.
Potaba 100 bm/Bulk	do	Pwr.
Potaba 2.0 gm/Packet	do	Pwr.
Pranone	Schering	Tab.
Prantal	do	Tab.
Do	do	Crm.
Do	do	Srt.
Prantal with Phenobarb	do	Tab.
Predmycin Opth Sol	Allergan	Sol Opth.
Predmycin P	do	Sus Opth.
Prednefrin	do	Sus Opth.
Prednefrin Forte	do	Sus Opth.
Prednefrin-S 0.2 pct	do	Sol Opth.
Prednicidin Opth Sus	Tilden Yates	Sus Opth.
Prefrin-A	Allergan	Sol Opth.
Prelu-Vite	Geigy	Cap.
Pro-Banthine w/Dartal	Dearle	Tab.
Procaine Hcl	Baxter Don	Sol IV.
Do	do	Sol IV.
Do	do	Sol IV.
Procaine Hcl 0.1 Pct	Travenol	Sol IV.
Progestoral	Organon	Tab.
Propion	Wyeth	Sol Opth.
Protamide	Sherman	Sol Im.
Protef Rectal Supp	Upjohn	Sup.
Proternol	Key Pharcal	Srt.
Pyribenzamine	Ciba	Crm.
Do	do	Ont.
Do	do	Crm.
Qed	Winarick	Crm.
Quiactin 400 mg	Merrell	Tab.
Quotane	SKF	Lot.
Do	SKF	Ont.
R-Gene	Cutter	Sol IV.
Reflexol Cough Loz	Isodine	Loz.
Reflexol Forte Loz	do	Loz.
Rela 350 mg	Schering	Tab.
Resdan	Whitehall	Shp.
Resion	National Drug	Sus.
Respet	Westerfield	Tab.
Rhulicream	Lederle	Crm.
Rhulitol	do	Sol.
Ritalin	Ciba	Sol.
Robaxin 500 mg	Robins	Tab.
Robaxin 100 mg/ml	do	Sol.
Robaxin-750 750 mg	do	Tab.
Rolicton	Searle	Tab.
Roniacol	Roche	Srt.
Do	do	Elx.
Do	do	Tab.
Rubiguent	Ives Lab	Crm.
Sanoma 350 mg	Pfizer	Tab
Scopalamine 7.5 mg	Richlyn	Src.
Sebb	Max Factor	Lot.
Sedulon	Roche	Syr.
Selsunef	Abbott	Ont.
Singoserp	Ciba	Tab.
Soma 250 mg	Wallace	Cap.
Soma 350 mg	do	Tab.
Soma Compound	do	Tab.
Soma w/Codeine	do	Tab.
Sopronol	Wyeth	Pwr.
Do	do	Sol.
Do	do	Ont.
Sorboquel	White	Tab.
Soropon	Purdue	Sol.
Spartase	Wyeth	Tab.
Spectrocin	Squibb	Ont Opth.
Sporostacin	Ortho	Sol.
Sporostacin Lotion	do	Lot.
Stratrol	Alcon	Sol Opth.

2. POSSIBLY EFFECTIVE—Continued

	Company	Type
Sterosan	Geigy	Ont.
Do	do	Crm.
Strascogesic	Strasenburgh	Tab.
Striatran	MSD	Tab.
Strontolac	Wyeth	Cap.
Suavitil	MSD	Tab.
Sulamyd	Schering	Tab.
Sulfadiazine	Lilly	Ont.
Sulfallantoin	Schylkill	Pwr.
Sulfamylon Hcl	Winthrop	Sol.
Sulfamylon/Streptomycin	do	Sol.
Sulfasuxidine Bulk	MSD	Pwr.
Sulfasuxidine 0.5 gm	MSD	Tab.
Sulfathalidine	MSD	Tab.
Sulfathiazole	Abbott	Crm.
Do	Durst	Crm.
Sulfo-Van	Westerfield	Ont.
Surfacaine	Lilly	Afr.
Do	do	Crm.
Do	do	Ont.
Surfacaine Compound	do	Crm.
Surfadil	do	Crm.
Surfadil Lotion	do	Lot.
Suvren	Ayerst	Tab.
Do	do	Tab.
Synalgos	Ives	Cap.
Synalgos DC	do	Cap.
Tao 100 mg/cc	Roering	Dps.
Tao 125 mg	do	Cap.
Tao 125 mg/5cc	do	Sus.
Tao 250 mg	do	Cap.
Teles 2.5 percent	Torch	Sus.
Tenuate Dospan	Merrell	Srt.
Terramycin	Pfizer	Pwr.
Do	do	Pwr Inh
Thalmyd	Schering	Tab.
Thephorin	Roche	Lot.
Do	do	Ont.
Theratuss	Squibb	Tab.
Do	do	Tab.
Thora-Dex No. 1	SKF	Tab.
Thora-Dex No. 2	SKF	Tab.
Thylox	Shulton	Pwr.
Do	do	Ont.
Tigacol	Roche	Cap.
Timofax	BW	Ont.
Do	BW	Pwr.
Tolseram 0.5 gm tab	Squibb	Tab.
Tolseram 16 m/5cc	do	Sus.
Tolserol	do	Elx.
Tolserol 0.5 gm	do	Tab.
Tolserol 0 5 5cc	do	Sol.
Tolserol w/Codeine	do	Tab.
Trancogesic	Winthorp	Tab.
Trancopal 100 mg	do	Tab.
Trancopal 200 mg	do	Tab.
Trancoprin	do	Tab.
Trasentine-Phenobarbit	Ciba	Tab.
Trepidone	Lederle	Tab.
Trexinest	Hynson	Tab.
Triburon	Roche	Ont.
Do	do	Crm.
Tridal	Lakeside	Tab.
Tronolen	Abbott	Lot.
Tronothane	do	Jel.
Do	do	Crm.
Trydecyl	SMP	Crm.
Trypp	USV	Pwr Nasal.
Ultimycin	Walker	Crm.
Ultra Fem. Beauty Oil	Rubenstein	Liq.
Untra Feminine	do	Crm.
Ultran	Lilly	Cap.
Ultran 200 mg Tab	do	Tab.
Valenol	Vale	Pwr.
Vasocort	SKF	Spy Nasal.
Vicks Vaposteam	Vick Chem	Liq Inh.
Wilzyme	Wilson	Ect.
Wyanoids Hc	Wyeth	Sup.
Xylocaine 2.5 percent	Astra	Ont.
Zactane	Wyeth	Tab.
Zactirin	do	Tab.
Ziradryl	Parke Davis	Lot.
Do	do	Crm.
Zirnox	Bristol	Lot.

3. PROBABLY EFFECTIVE

	Company	Type
Abbocillin 800 m	Abbott	Pwr Im.
Do	do	Pwr Im.
Actidil	BW	Tab.
Do	do	Syr.
Adhesive Ease	Durst	Liq.
Adroyd 2.5mg/Tab	Parke Davis	Tab.
Adroyd 5.0mg/Tab	do	Tab.
Adroyd 10.0 mg/Tab	do	Tab.
Aerosporin	BW	Tab.
Allecur	Roerig	Tab.
Anadrol	Syntex	Tab.
Artane	Lederle	Src.
Bacitracin 10,000U	Upjohn	Pwr.
Bacitracin 50,000U	do	Pwr.
Do	Pfizer	Pwr Im.
Do	Phila Labs	Pwr.
Do	do	Pwr Im.
Bicillin All-Purpose	Wyeth	Pwr Im.
Bicillin C-R	do	Sus Im.
Bicillin C-R 600	do	Sus Im.
Bicillin P-A-B	do	Sus Im.
Bipencillin 2/3 Specia	Pure	Pwr Im.
Bipenicillin 500	do	Pwr Im.
Camoprim	Parke Davis	Ctb.
Capsebon	Pitman Moore	Shp.
Chloromycetin	Parke-Davis	Crm.
Clistin	McNeil	Tab.
Do	do	Flx.
Clistin R-A	do	Srt.
Colymycin S Pediatric	WC	Pwr.
Crystifor	Squibb	Pwr Im.
Crystifor 400	do	Pwr Im.
Deca-Durabolin	Organon	Sol Im.
Decapryn 12.5 mg	Merrell	Tab.
Decapryn 25 mg	do	Tab.
Depo-Penicillin Fort	Upjohn	Sus Im.
Do	do	Sus Im.
Dianabol 5 mg	Ciba	Tab.
Dianabol 2.5 mg	do	Tab.
Dimetane	Robins	Tab.
Do	do	Srt.
Do	do	Tab.
Direct Sky Blue	Wyeth	Sol.
Disomer	White	Srt.
Do	do	Tab.
Do	do	Srt.
Do	do	Syr.
Diurnal-Penicillin for	Upjohn	Pwr Im.
Dormin	Dormin	Cap.
Dornavac 10,000 Units	MSD	Pwr.
Durabolin 25 mg/cc	Organon	Sol Im.
Durabolin-50 50 mg/cc	do	Sol Im.
Duracillin FA	Lilly	Pwr Im.
Do	do	Pwr Im.
Duracillin Fortified	do	Pwr Im.
Eskaserp	SKF	Src.
Do	SKF	Src.
Forhistal	Ciba	Dps.
Do	do	Syr.
Do	do	Tab.
Do	do	Srt.
Halodrin	Upjohn	Tab.
Harmonyl	Abbott	Tab.
Do	do	Tab.
Hispril	SKF	Src.
Histadyl	Lilly	Cap.
Do	do	Cap.
Do	do	Syr.
Hydantal	Sandoz	Tab.
Lentopen 400 AP	Wyeth	Sus Im.
Methapyrilene Hcl	Blue Line	Tab.
Methyl Androstenediol	Maurry	Sus Im.
Do	do	Sus Im.
Mycifradin 0.5 gm	Upjohn	Pwr Im.
Mycifradin 5 gm	do	Pow.
Mycifradin 10 gm	do	Pow.
Neomycin Sulf 0.5 gm	Squibb	Pwr Im.
Do	Pure	Pwr Im.
Neomycin Sulf 5 gm	do	Pwr.
Neomycin Sulfate	Phila Labs	Pwr.
Do	do	Pwr.
Do	Phils Labs	Pwr.
Neotopanol	Cook-Waite	Sol.

3. PROBABLY EFFECTIVE—Continued

	Company	Type
Nilevar	Searle	Tab.
Nilevar 25 mg/ml	do	Sol Im.
Nilevar 8.3 mg/cc	do	Dps.
Ox cel Cotton	Parke Davis	Dressing.
Ox cel Fole Cone	do	Dressing.
Ox cel Gauze	do	Dressing.
Paredrine Tab		Tab.
Parnate		Tab.
Pathilon	Lederle	Src.
Pen Produral		Pwr.
Percorten 2 mg	Ciba	Tab.
Percorten 5 mg	do	Tab.
Perin	Endo	Syr.
Polygyl	Schieffelin	Sol.
Polymixin Sulfate	Pfizer	Sot.
Polymixin B Sulfate	do	Ont.
Povan	Parke Davis	Tab.
Pronapen	Pfizen	Pwr Im.
Pro Pen G/Pot Pen G	Pure	Sus Im.
Do	Philadelphia	Sus Im.
Reactrol	Purdue Fred	Tab.
Rescinnamine	Nysco	Src.
Do	do	Src.
Reserpine	do	Src.
Do	do	Src.
Do	do	Src.
Do	Richlyn	Src.
Semikon Hel	Massengill	Tab.
Solusponge Cone	Panra	Dressing.
Solusponge Strip	do	Dressing.
Sotradecol	Philadelphia	Sol IV.
Do	do	Sol IV.
Stenediol 25 mg/cc	Organon	Sus Im.
Stenediol 50 mg/cc	do	Sus Im.
Supertah H–C	Purdue Fred	Ont.
Surgicel	J J	Dressing.
Synophylate	Central	Sol IV.
Taractan	Roche	Tab.
Do	do	Sol Im.
Do	do	Tab.
Do	do	Tab.
Do	do	Tab.
Tarcortin	Reed Carnrick	Crm.
Thephorin	Roche	Tab.
Do	do	Syr.
Tigan Cap 250 mg	Roche Lab	Cap.
Tigan Cap 100 mg	do	Cap.
Tigan Sol	do	Sol Im.
Tigan Supp	do	Sup.
Tral	Abbott	Srt.
Do	do	Art.
Trib Vaginal Crm	Roche Lab	Crm Vag.
Trib Vaginal Supp	do	Sup Vag.
Urecholine	MSD	Tab.
Do	do	Tab.
Do	do	Tab.
Vermizine	Chicago Pharm	Syr.
Vosol	Wampole	Sol Otic.
Vosol Hc	do	Sol Otic.
Winsteroid	Winthrop	Tab.
Winstrol	do	Tab.
Wyamine	Wyeth	Elx.
Do	do	Tab.
Do	do	Tab.
Wycillin Fortified	do	Pwr Im.
Do	do	Pwr Im.

VETERANS' ADMINISTRATION,
OFFICE OF THE CHIEF MEDICAL DIRECTOR,
DEPARTMENT OF MEDICINE AND SURGERY,
Washington, D.C., March 14, 1972.

Memorandum No. 10–72–7.

Subject: Executive committee on therapeutic agents.

1. The purpose of this memorandum is to restate the functions of this Committee and designate its membership.

2. The Executive Committee on Therapeutic Agents will:

a. Develop, recommend and disseminate policy and information on safe, effective and rational use of drugs in VA.

b. Conduct epidemiological studies on drug utilization, drug usage and utilization patterns for Field Station and Central Office use.

c. Review and act on requests from VA hospitals and clinics for use of drugs not available in interstate commerce and for which an FDA New Drug Application has not been effected (investigational drugs), for clinical treatment in a specific patient.

d. Evaluate reports of Adverse Drug Reactions and Drug Interactions prior to forwarding them to FDA. (Veterans Administration reports are combined with reports from all hospitals, Government and non-government, sending such information to FDA and resulting compilation prepared by FDA is furnished to all VA hospitals and clinics.)

e. Review significant actions of Therapeutic Agents and Pharmacy Reviews Committees to determine appropriateness of policies on drug usage and to identify and recommend needed changes.

f. Review and act on Quality Improvement Reports submitted by VA hospitals and clinics which indicate dissatisfaction with the quality of drug products. Appropriate information will be coordinated with concerned officials of FDA, USP and NF.

g. Review proposed marketing and administrative actions on drug items; recommend appropriate action to Supply Service.

h. Perform such other functions as may be assigned.

3. The Committee is composed of the following:

ACMD for professional services, chairman (11).
Deputy for dentistry, member (16A).
Special assistant to ACMD for research and education in medicine, member (15B).
Director, medical administration service, member (136).
Director, supply service, member (134).
Director, nursing service, member (111B).
Director, medical service, member (112B).
Director, surgical service, member (112C).
Director, pathology and allied sciences service, member (112D).
Director, psychiatry, neurology and Psychology service, member (112F).
Director, alcohol and drug dependence service, member (112I).
Director, ambulatory care service, member (112K).
Director, pharmacy service, secretary, member (111F).

Each member will designate an alternate to serve in his absence if necessary. Other Service Directors and specialists will be invited to participate in meetings as required.

4. The Committee will meet quarterly, and at other times as necessary at the call of the Chairman.

5. The Committee will establish procedures for performing the assigned functions and may authorize the Secretary to coordinate actions not requiring attention by the Committee as a whole.

6. DM&S Memorandum No. 10–65–23 is rescinded.

M. J. MUSSER, M.D.,
Chief Medical Director.

PROJECTED EXECUTIVE COMMITTEE ON THERAPEUTIC AGENTS MEETINGS

FOURTH QUARTER FISCAL YEAR 1972, ROOM 817

April 10, 1972—10:00–11:00 a.m.: (1) Agenda attached.

April 20, 1972—1:00–2:00 p.m. (Room 817): (1) Report of April 10, 1972 Meeting—Dr. Lee. (2) Report of Subcommittee on Ambulatory Care (Fee-Basis) Program—Dr. Haber. (3) Manual deviation for authorizing prescriptions for certain medical supplies for issuance to eligible beneficiaries—Dr. Francke. (4) New Business.

May 17, 1972—10:00–11:00 a.m. (Room 937): (1) Report of April 18, 1972 Meeting—Dr. Lee. (2) Report of Subcommittee on Bureau of Biologics Standards (Report on PPD—Tuberculin and other recent developments)—Dr. Williams. (3) Report of Subcommittee on Surveillance of Field Stations and their Committees on Therapeutic Agents and Pharmacy Reviews—Mr. Harding. (4) New Business.

June 13, 1972—9:00–10:00 a.m. (Room 937): (1) Report on May 23, 1972 Meeting—Dr. Lee. (2) Report of Subcommittee on Use of Investigational Drugs,

BNDD Schedule I items and other investigational drug usage—Dr. Bailar. (3) Bureau of Narcotics and Dangerous Drugs Controlled Drug Procedures—Update Circular 10–70–90—Dr. Francke. (4) Protocol for dispensing Methadone and other drug abuse items—Dr. Kaim—Dr. Francke. (5) New Business.

June 27, 1972—10:00–11:00 a.m. (Room 937): (1) Report of June 13, 1972 Meeting—Dr. Lee. (2) Report of Subcommittee on Regionalization—Mr. Boehm. (3) Report of Subcommittee on a National Drug Index (Formulary Service)—Dr. Francke. (4) New Business.

SUBCOMMITTEES

April 10, 1972: (1) Efficacy of Coronary Vasodilators With Policy for Continued Usage—Dr. Rosenberg.

April 20, 1972: (2) Ambulatory Care (Fee-Basis) Program—Dr. Haber, Dr. Klein, Dr. Stage, Miss Quandt and Mr. Murphree.

May 17, 1972: (3) Bureau of Biologics Standards—Dr. Williams and Staff—Dr. Matthews. Report on PPD—Tuberculin and Other Recent Developments.

May 17, 1972: (4) Field Station Committees on Therapeutic Agents and Pharmacy Reviews Surveillance—Mr. Harding.

June 13, 1972: (5) Use of Investigational Drugs, BNDD Schedule I Items, etc.—Dr. Pittman, Dr. Matthews and Dr. Bailar.

June 13, 1972: (6) Drug Dependence Service—Dr. Kaim and Dr. Francke.

June 27, 1972: (7) Regionalization As It Effects Distribution Of Drugs—Mr. Boehm and RMD. (8) National Drug Index—Formulary Service—Dr. Francke, Mr. Whitworth, Mr. Harding. (9) Automation of Pharmacy Service—Mr. Linder and Mr. Shaughnessy. (10) Adverse Drug Reports—Mr. Harding, Dr. Christianson, Dr. Green.

VETERANS' ADMINISTRATION,
DEPARTMENT OF MEDICINE AND SURGERY,
Washington, D.C., May 4, 1972.

Circular No. 10–72–92.

Subject: Policy for prescribing drugs classified no higher than "possibly effective."
To: Directors of hospitals, domiciliary, outpatient clinics and regional offices with outpatient clinics.

1. It is the policy of the VA that funds will not be expended for purchasing drugs classified by the Food and Drug Administration as "ineffective" or "possibly effective" with the following exceptions: (a) VA funds may be expended to purchase "ineffective" and "possibly effective" drug products for investigational use in veteran patients. (b) VA funds may be used to purchase "possibly effective" drug products when no appropriate alternate means of drug therapy is available.

2. We want to emphasize our desire to make every effort to treat all VA patients with the most effective therapeutic agents at the most favorable prices available.

BENJAMIN B. WELLS, M.D.,
Deputy Chief Medical Director.

Circular expires May 3, 1973.

U.S. GOVERNMENT,
April 19, 1972.

Memorandum, VA marketing center.
To: Chief, drugs and chemicals (134L).
Through: Director, supply service (134).
From: Chairman, executive committee on therapeutic agents (11).
Subject: Depot stocking of possibly effective drug items.

1. The Executive Committee on Thereapeutic Agents has prepared the following suggested policy statement. "VA funds may be used to purchase 'possibly effective' drug products when no appropriate alternate means of drug therapy is available."

2. An effort is being made to encourage all physicians, both Staff and Fee-Basis, to prescribe the "most effective" drug product available to treat veteran patients.

3. In view of the above statements, Marketing Center has been alerted to hold down procurement of any of the drug products classified as "possibly effective". This does not mean to discontinue procurement of the item completely.

4. The ECTA would like for Marketing Center to set up the following procedure:

a. Flag each "possibly effective" drug product.

b. Do not reorder until stock level nears the minimum quantity (1 and 2 months).

c. Notify the ECTA in Central Office of amount on hand and the latest usage experience from field station orders.

d. The ECTA will decide if the item should be deleted or the minimum requirements reordered. Normal replenishment of depot inventories will not exceed a current four month requirement based on the last six months demands by field stations.

e. All orders on these items will contain the following justification: "This 'possibly effective' drug item is being purchased by Marketing Center because of the economy involved in Central procurement and due to the fact there is not an appropriate alternate drug item available."

f. When the volume requirements of any of these items falls below the economic advantage level, the item will be discontinued from depot stock.

LYNDON E. LEE, Jr., M.D.

TRADE NAME VERSUS GENERIC NAME PRESCRIBING

Prescribing drug products by their trade names is one method by which physicians outside of hospitals attempt to control the quality of medication for their patient. Such control is necessary for several reasons. For example, a recent report by FDA's National Center for Drug Analysis indicated that 47 percent of the batches of digoxin tested did not meet the standards of the USP even though all of them were labeled as being of USP quality. In the case of digoxin, a large percentage of physicians assure that their patients will not receive a substandard product by writing a trade name for it. So it is with Dilantin, Gantrisin, Chloromycetin, tetracycline and a host of other drug products. Writing prescriptions by trade name has become a standard of medical practice because in an uncontrolled situation outside of the hospital, it is the one way in which the physician can exercise some control over the quality of the drug product.

If we are going to encourage physicians to prescribe using nonproprietary or generic names, we must offer them some assurance about the quality of the drug product. Telling them that the product is labeled USP and all USP products are equivalent is no good; they won't buy that statement because they have good reason to believe otherwise. In an article entitled "Generic Equivalence and Inequivalence of Oral Products" Wagner has summarized the work to January 1971 on bioavailability studies on drug products.

Several controlled studies in man have shown significant and even large differences in bioavailability of active drug principle between drug products that are chemically equivalent. These are a few of the many examples:

1. All sixteen generic products of OXYTETRACYCLINE showed serum levels significantly lower than the original product and 7 had levels below the minimum therapeutic concentration (Brice, G.W. and Hammer, H.F.: *JAMA 208*:1189–1190, 1969);

2. Similar tests by Blair using sixteen lots of OXYTETRACYCLINE from eleven different manufacturers gave almost identical results (Blair, et al: *JAMA 215*:251–254 (Jan. 11) 1971);

3. Two different formulations of TOLBUTAMIDE, chemically identical but slightly different in excipient formulation, were found to be clearly not equivalent as measured by availability of the drug to the patient. (Varley, A.B.: *JAMA 206*: 1745–1748 (Nov. 18) 1968);

4. Twelve TETRACYCLINE products demonstrated peak blood levels of 1 mcg/ml to 2 mcg/ml, a difference of 100 percent (Banes, D: Therapeutic Equivalence of Drugs—FDA Viewpoint, *APhA Acad. Sci.*, Nov. 17–20, 1968);

5. Wide variations were noted in the availability of PHENYLBUTAZONE in vivo and in vitro when 23 different brands were studied (Searl R.D. and Pernarowski, M: *Can Med. Assoc. J. 96:* 1513–20, 1967);

6. Tests on four CHLORAMPHENICOL products including the original, showed blood levels of the three competing brands to be only one-quarter to one-half that of the original (Glazko, et al: *Clin. Pharmacol. Therap., 9:* 472–483, 1968);

7. Wide differences in absorption rates of DIPHENYLHYDANTOIN when the original brand and two generic products were tested (Martin, et al: *Pharmacologist 10* 167, 1968; also *JAMA 204:* 23–24 (Aug. 26) 1968);

8. Granules of p-AMINOSALICYLIC acid were shown to be less than 50 percent available when compared with the pure drug and compressed tablets of the sodium and calcium salt (Middleton, et al: *J. Can Pharm. Sci., 3:* 97–101, 1968);

9. The absorption of ASPIRIN was shown to be significantly different in tests between the seven leading brands (Levy G.: *J. Pharm. Sci., 50:* 388–392, 1961);

10. RIBOFLAVIN'S bioavailability was found to be directly related to tablet disintegration time, and there were large differences between several formulations (Morrison, et al: *J. Amer. Pharm. Assoc. Sci. Ed., 48:* 634–647, 1959).

There have been several other studies involving drugs such as ephedrine, warfarin, dicoumarol and others, showing similar results of wide variations in availability of the drug at the physiological level. In a total of twenty-four scientifically controlled studies in man, eighteen (75 percent) show definite discrepancies with therapeutic implications and an additional four have equivocal results. Thus, 91 percent of controlled studies in which the microbiological, chemical and physical tests meet established standards demonstrate physiologic inequivalency.

B. CLINICAL REPORTS

The clinical evidence of physiological inequivalency is likewise compelling. There have been reports of clinical observations where two or more products containing the same drug in the same dosage form did not result in equal therapeutic results. For example:

1. Campagna relates an incident where his patient was maintained on a standard dose of PREDNISONE. When the patient was admitted to the hospital for another matter he received a different brand of prednisone resulting in an exacerbation of the original condition and hence an extended hospital stay. When the patient was returned to the original brand of prednisone, the condition was again brought under control; (Campagna, et al: *J. Pharm. Sci. 52:* 605–606, 1963);

2. In another example, reported in the *Canadian Medical Association Journal,* a patient requested his physician permit the pharmacist to dispense a cheaper brand of TOLBUTAMIDE. The patient's diabetes promptly became uncontrollable, the FBS shot up to 287 mg percent, and whole tablets were recovered in the stool; (Carminetsky, S.: *Can. Med. Assoc. J. 88:* 950, 1963; also Carter, A. K. *Can. Med. Assoc. J. 88:* 98, 1963);

3. Catz and coworkers have published reports of THYROID tablets that meet U.S.P. specifications but were ineffective clinically according to PBI determinations. (Catz, et al: *New Engl. J. Med. 266:* 136–37, 1962, et seq.);

4. Several epileptic patients who had been stabilized on DILANTIN dosage suddenly showed signs of toxic overdosage. The cause was directly traceable to a change in the inert filler in the capsule from calcium sulfate to loctose which resulted in an increase in absorption of the active ingredient (Rail, L.: *Med. J. Australia 2:* 339 (Aug. 10) 1968, et seq);

These reports, both scientific and clinical, are no cause to indict all drug products. But it does seem abundantly clear that clinical equivalency, or bioavailability or whatever identification it has, is of significant practical importance to the physician and to the pharmacist and, ultimately of course, to the patient.

Some people claim that this small number of examples out of the thousands of drugs available are, in themselves, a measure of the relative insignificance of the problem. The implication is that we should accept that a certain small percentage of our drugs will be ineffective and prescribe all drugs by their official name. Others, however, point out that we really don't know the magnitude of the problem because too few studies have been done. To assume that there is no problem without studying its magnitude, is not rational. It is within this dichotomy of opinion that physicians continue to prescribe by trade names in order to assure themselves that their patients will obtain effective drug products. We cannot ask them to change their practice unless we are prepared to assure them by other means that the quality of the medication their patient receives is satisfactory.

This matter cannot be dismissed lightly by saying that all USP drugs are equivalent and that the physician has only to prescribe by the USP name and thus great savings will be made. There are too many prestigious organizations deeply concerned about the question of bioavailability. The interest of the Division of Medical Sciences of the NAS/NRC in the problem of bioavailability testing tends to support the current practice of physicians to prescribe by trade

names. Efforts by the USP and the NF to incorporate bioavailability parameters into their official compendia implies that physicians prescribing by trade names in an uncontrolled situation may have a justifiable point.

At a Conference on Bioavailability of Drugs sponsored by the USP and the Drug Research Board of NAS/NRC on November 22 and 23, 1971 (quote from papers).

At a meeting of the Drug Research Board held March 10, 1972, the position of the FDA and the USP on bioavailability testing was set forth as follows (quote from paper when available).

The Veterans Administration, with its large network of clinical facilities, has under study a plan to develop a medication quality assurance program for drug products to treat veteran patients.

A program leading to the assurance of the bioavailability and quality of drug products administered and dispensed in VA installations was discussed at a meeting held in VACO under the Chairmanship of the ACMD for Professional Services, Dr. Lyndon E. Lee, Jr., with Dr. Benjamin B. Wells, Deputy Chief Medical Director present. This program could be the most comprehensive of its type in the world and its results may have a far-reaching impact on improving the bioavailability and efficacy of drug products. It could be of immeasurable value to the VA in obtaining the permission of fee-basis physicians to dispense the brand of drug commonly available in VA hospitals and thus reduce costs.

The VA Drug Quality Assurance program would be based on a plan to monitor the blood or urine level of drugs in selected volunteers or patients. The plan will concentrate initially on the 100 most frequently prescribed drugs purchased competitively. These drugs, together with those which are available from only one source of supply, represent over 90 per cent of the dollar value of drugs purchased by the Veterans Administration.

Present at the meeting were Dr. T. G. Vitti representing the Food and Drug Administration. Dr. Daniel Azarnoff of the National Academy of Sciences-National Research Council, Dr. William M. Heller of the U.S. Pharmacopeial Convention, Incorporated, and Dr. John Bergen of the National Formulary. Others attending included Mr. Max Feinberg of Defense Personnel Support Center, Dr. Paul L. Haber, Deputy for Clinical Services, Dr. Edward Dunner, Special Assistant to ACMD for Research and Education in Medicine, Mr. Donald P. Whitworth, Director, Supply Service, Dr. Donald E. Francke, Acting Director of Pharmacy Service and Mr. Roland F. Harding, Deputy Director of Pharmacy Service. Also three experts in the field of biopharmaceutics and pharmacokinetics, Professors Milo Gibaldi of the State University of New York at Buffalo, W. A. Ritschel of the University of Cincinnati and Marvin Meyer of the University of Tennessee, attended.

There was agreement that a medication quality assurance program is desirable and that the VA, because of its clinical facilities, is an ideal organization to conduct it. At the next meeting scheduled for March 9th, the group will appoint a Scientific Advisory Panel to recommend drug products to which priority should be given, to develop protocols for studies, and to identify related areas of scientific research related to drugs.

According to this plan, the bioavailability of drug products will be measured by examining blood levels and/or urinary excretion levels in volunteers or patients. Drug products of the same dosage form and purchased competitively will be selected as follows: (1) The three products with the lowest unit price on the most recent bid obtained by VA or other government procurement agency (2) The product VA is now using and (3) The innovator's product. (Some of these may be the same). Dissolution tests will be done on all products, where applicable. Other or additional *in vitro* tests will be done when appropriate, such as friability testing, determination of particle size and particle size ranges, viscosity, etc. The products would then be compared using carefully controlled clinical studies in which plasma levels and/or urinary excretion of unchanged drug would be measured at several sampling times after administration of equivalent single doses on a body weight basis or by other parameters. The samples would be analyzed by specific methods and the data subjected to statistical analysis. The objective would be to determine the comparative biological availability of the products tests. If all three of the lowest priced products and the product VA is currently using showed unfavorable comparison with the original product, then similar tests would be performed on the three drug products which ranked 4th to 6th in price from the bottom of the bid list. If, on the other hand, one or more of the

lowest priced products showed greatest bioavailability, the lowest priced product would be selected for use.

While this plan sounds simple, it is in fact, quite complex. While methods are now available to determine the bioavailability of some drug products, development of others would take time and talent; development of methods for a few drugs may be impossible. But there is no other acceptable way to gauge the quality of most drug products other than by measuring the release of the active drug from the dosage form and its absorption and distribution into the blood stream. Methodology for such studies is of recent development.

When this plan is implemented, it will be supportive of this Committee's effort to achieve quality drug products at the lowest price. Great emphasis will be placed in testing the quality of the lowest priced drugs and the product meeting the bioavailability standard and at the same time was lowest in cost would be the one of choice.

We believe, however, that it is essential to monitor the quality of each batch of drug product by bioavailability studies for the same reason that VA now has FDA assay each of its items purchased competitively. To do otherwise would offer no assurance to the physician regarding the quality of the drug. The drug is now labeled as meeting USP standards but that provides no assurance to him; neither would a statement added by the manufacturer that this product meets bioavailability standards. In the absence of a proper monitoring system, no one can be assured.

You may well ask: Why is the VA thinking of doing this? Isn't this job the responsibility of the FDA? Our answer is that no one is now doing it, yet there is a great and growing demand to lower the price of drugs. The state of Tennessee, through its colleges of medicine and pharmacy is prepared to put up matching funds in order to make VA's program available to its citizens. The college of pharmacy has responsibility for the purchase of quality drugs at the lowest price for the State of Tennessee.

PROFESSIONAL SERVICES LETTER,
May 20, 1972.

To: Director of VA hospitals, domiciliary, VA outpatient clinics and directors of regional offices with outpatient clinics.

Subject: Recent information on effectiveness of drugs used as coronary vasodilators.

1. Recent research has established that the use of nitrates administered orally for the prophylaxis of angina is a questionable practice. The drugs have been found to be destroyed by an enzyme secreted into the small intestine by the liver. The enzyme is recognized to be glutathione organic nitrate reductase.

2. The use of sublingual nitroglycerin tablets is, therefore, the theory of choice for the management of anginal pain. The Medical Service recommends that this method be used whenever practical.

3. It would also be noted that nitroglycerin tends to lose potency when it is stored in plastic containers which are not sealed against the atmosphere. Therefore, it is recommended that all nitroglycerin supplies should be stored in tightly capped glass containers.

LYNDON E. LEE, Jr., M.D.,
ACMD for Professional Services.

VETERANS' ADMINISTRATION,
OFFICE OF THE ADMINISTRATOR OF VETERANS' AFFAIRS,
Washington, D.C., February 17, 1972.

Hon. GAYLORD NELSON,
Chairman, Monopoly Subcommittee, Select Committee on Small Business, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: I am pleased to furnish information for Fiscal Year 1971 to update material furnished you in 1970 as requested in your letter of January 5, 1972. Our hospital at San Juan and Outpatient Clinics at Manila and Honolulu are not included in the data furnished. Also, this report excludes our Los Angeles Extended Care Hospital because an emergency major patient relocation required full time of the staff at that station.

The enclosures are identified corresponding to your request number.

1. Total dollar volume of drug expenditures for FY 1971 by major therapeutic categories as identified in American Hospital Formularly (See enclosure). (a) Total drug expenditures: $70,569,820. (1) Purchases for Veterans Administration: $57,952,296. (2) Purchases for other government agencies: $12,617,524.

2. Total dollar volume of centralized purchases (these expenditures are included in item 1): $39,829,329.

3. Total dollar purchases of drugs made by VA Hospitals locally for FY 1971: (a) Purchases from Federal Supply Schedules: $24,392,406. (b) Local suppliers (i.e., wholesalers, drug warehouses, and retail pharmacists: $6,291,097. (c) Prescriptions filled by independent retail pharmacists for which reimbursement was made by VA: $3,152,981.

4. The leading 50 centrally purchased drugs for VA, showing prices paid, amount bought, names of sellers, unsuccessful bidders (See enclosure).

5. Local purchases of these same 50 items showing item, quantity bought, unit, price paid per unit, name of seller, showing purchases from Federal Supply Schedules or wholesaler or local pharmacy. These items were purchased at the hospitals to meet an immediate requirement (See enclosure).

6. Total dollar volume of the 50 leading centrally purchased drugs is $16,741,618. Of this quantity only $1,230,432 could have been purchased competitively. The balance of these items are sole source or items not manufactured by small business. The amount of purchases going to small business was $189,281. This amounts to 15.4% of the competitive purchases going to the following small business firms:

Halsey Drug Co., Brooklyn, N.Y., tetracycline capsules (250 mg, 100s)	$44,254.00
Milan Pharmaceuticals, Morgantown, W. Va., tetracycline capsules, (250 mg, 100s)	87,497.00
Clifford Chemical, Newark, N.J., quinidine sulfate tablets, USP, (200 mg, 100s)	57,530.00

7. During FY 1971 the Chief Medical Director has taken the following actions to eliminate the purchase of unsafe or less than effective drugs, the combination drugs reviewed by the National Academy of Sciences/National Research Council, and expensive brand name products when cheaper and equally effective lower priced drugs are available.

(a) DM&S Circular 10–70–237, December 4, 1970, Subject: "Implementation of NAS/NRC Drug Efficacy Studies Information" was published to prescribe removal from the hospital formulary and eliminate purchase of drugs lacking substantial evidence of effectiveness or having an unfavorable benefit to risk ratio. Additionally, DM&S Circular 10–71–3, January 13, 1971, Subject: "Rational Drug Use" was published reemphasizing selection of drugs for rational use and providing more specific information to non-VA physicians concerning drugs available in VA pharmacies. These directives were followed up with DM&S Circular 10–71–16, January 20, 1971, alerting hospitals to be aware of the addition of individual items published in the Federal Register. The FDA's Index to the Federal Register decisions for NAS/NRC reviewed drugs was transmitted to our field stations July 13, 1971, by Professional Services Letter IL 11–71–44 together with all Supplements through April 30, 1971. Our Executive Committee on Therapeutic Agents has been studying these drugs for a more positive conclusion as to their efficacy in accordance with the time frame published in the Federal Register.

(b) Single source, sole source and generic listings are available to field stations for use by the prescribing physician. These drugs, depending on demand, are made available in the VA centralized distribution system at the lowest possible cost, or put in a Federal Supply Schedule contract.

8. List of drugs removed from VA's purchasing program during FY 1971. All stations were instructed to remove unsafe or ineffective drugs from their formulary, therefore, precluding purchase of these items. Many of these items were not in their formulary. Of those drugs listed as ineffective 186 were not stocked in the VA system. Items listed were removed from formularies by one or more stations (See enclosure).

9. The general principles of the Federal Procurement Regulations are followed in evaluating the reasonableness of prices offered under negotiated or advertised procurements. Prices offered are evaluated against published commercial price lists, institutional catalogs, price lists applicable to indefinite quantity

term contracts, prices published in the 1971 Blue Book and any other available resource that has pricing data on the items being procured. Also considered are price trends to adjust quantities both upward and downward resulting from variation in demand histories, new wage contracts, transportation cost, and other factors bearing on normal manufacturing costs.

10. Each year the VA coordinates with the Defense Department the anticipated annual volume of our drug purchases, emphasizing those categories we potentially may ask them to buy for us. Whenever there is indication that we can obtain our requirements from DoD at a lower total cost than available to us by direct procurement, we ask DoD to furnish us with the item. All those drugs which we buy in significant dollar volume, we routinely compare DoD prices before initiating procurement action and initiate actual purchase only when there is reason to believe that we will obtain the item at lower cost. In addition we make available to other federal agencies who have requirements for drugs, our catalog and other publications regarding the availability of drug items from our central purchasing system. Also, we make available to those agencies the total cost of the item which includes our costs for administrative overhead. A number of agencies procure drugs from us and we base our projections for items to be procured in volume quantities on the record of past history supplemented by information from them on known program changes. We use the same system in developing projected requirements for items contracted for by this agency under Federal Supply Schedules, which are available for use by all federal agencies. Agencies having unusual volume requirements for items appearing on those Federal Supply Schedules are required by the Federal Property Management Regulations and instructions in the Federal Supply Schedules to identify those volume requirements to the VA. The Veterans Administration is the assigned procurement agency under the Federal Property and Administrative Services Act for procurement and distribution of drugs, biologicals, chemicals and reagents required by all Federal civilian agencies.

11. The therapeutic category report reflects a larger total figure than the source report because some stations included whole blood in the category report. The whole blood source is from a VA decentralized contract with the American Red Cross.

Sincerely,

DONALD E. JOHNSON, *Administrator.*

Enclosures (omitted).

COMPETITIVE PROBLEMS IN THE DRUG INDUSTRY

(Present Status of Competition in the Pharmaceutical Industry)

WEDNESDAY, JULY 19, 1972

U.S. SENATE,
SUBCOMMITTEE ON MONOPOLY OF THE
SELECT COMMITTEE ON SMALL BUSINESS,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 4221, New Senate Office Building, Senator Gaylor Nelson (chairman of the subcommittee) presiding.

Present: Senator Nelson.

Also present: Benjamin Gordon, staff economist; and Elaine C. Dye, clerical assistant.

Senator NELSON. The hearing of the subcommittee will open.

This is a continuation of the hearings of the Small Business Committee's Subcommittee on Monopoly on Drug Procurement Policies of Federal Agencies.

This hearing was to have been held on June 20, but was postponed at that time because the OEO bill was on the floor of the Senate, and I was responsible for managing it. So, I apologize for any inconvenience caused by having to change the date.

Our first witness is Mr. Richard Seggel, Deputy Assistant Secretary for Health Policy Implementation.

Mr. Seggel, you are accompanied by your associates. Perhaps it would be helpful if you identified each of them for the purposes of the record, so the reporter will have their names, and if at any time any of them wishes to comment on any aspect, I would hope he would identify himself so that the reporter would have the right name.

Your statement will be printed in full in the record.

You may proceed to present it any way you desire. If you wish to elaborate on it at any time, or ask for any comments by any of your associates, feel free to do so.

STATEMENT OF RICHARD L. SEGGEL, DEPUTY ASSISTANT SECRETARY FOR HEALTH POLICY IMPLEMENTATION, OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH AND SCIENTIFIC AFFAIRS, DHEW; ACCOMPANIED BY ALBERT J. RICHTER, ASSOCIATE COMMISSIONER, MEDICAL SERVICES ADMINISTRATION, SOCIAL AND REHABILITATION SERVICE; MARION J. FINKEL, M.D., DEPUTY DIRECTOR, BUREAU OF DRUGS, FOOD AND DRUG ADMINISTRATION; MORRIS OLDER, DEPUTY ASSISTANT BUREAU DIRECTOR, DIVISION OF PROVIDER REIMBURSEMENT AND ACCOUNTING POLICY, BUREAU OF HEALTH INSURANCE, SOCIAL SECURITY ADMINISTRATION; ALLEN J. BRANDS, CHIEF PHARMACY OFFICER, PUBLIC HEALTH SERVICE; AND JONAS ROSE, PHARMACEUTICAL CONSULTANT, MEDICAL SERVICES ADMINISTRATION, SOCIAL AND REHABILITATION SERVICES

Mr. SEGGEL. Thank you very much, Senator Nelson.

First of all, I would like to introduce my colleagues who represent the agencies having primary concern with this subject in HEW.

On my left is Dr. Marion Finkel, Deputy Director of the Bureau of Drugs, Food and Drug Administration.

And on her left is Mr. Albert J. Richter, Associate Commissioner, Medical Services Administration, Social and Rehabilitation Service.

And on his left, Morris Older, Deputy Assistant Bureau Director, Bureau of Provider Reimbursement and Accounting Policy, Bureau of Health Insurance, Social Security Administration.

And on my right is Mr. Allen J. Brands, Pharmacy Liaison Officer, Office of the Administrator, Health Services and Mental Health Administration.

And I ask them, as you suggested, Mr. Chairman, to comment as they wish on some of the points, because they are the experts in this area.

I am here to present the general policy position of the Department in response to your request, Mr. Chairman. And we are most pleased to be here to do this.

In order to effect economies in drug purchasing, it is the Department's policy that drugs shall be purchased at the lowest possible cost consistent with acceptable standards of identity, strength, purity, safety, and effectiveness, with due regard for the welfare of the patient and the professional judgment of the prescriber. Reimbursement program policies seek similar ends.

In the course of my testimony I will describe further in detail this general policy, relate the steps undertaken to demonstrate methods for improving rational use of drugs, and summarize the efforts of the Department in advancing practitioner education and information in this area.

The first subject I would like to discuss is the drug efficacy policy.

The overriding Federal policy is to remove ineffective drugs from the market. As you know FDA has this responsibility and has received great assistance from the Drug Efficacy Study of the National Academy of Sciences-National Research Council. The Drug Efficacy

Study has led to a continuing series of actions and policy determinations. The following will illustrate FDA actions impacting on drug usage.

First, the NAS/NRC study clearly reflected the existence of a number of irrational, fixed combination drug products. To effectuate a more rational approach to drug usage, the FDA, after consulting widely with professional groups, has established guidelines for such products. A large number of widely prescribed antibiotic combinations were removed from the market after a major legal contest through the courts.

Incidentally, Mr. Chairman, that number I am advised is about 120 systemic antibiotic combinations, and irrational drug products continue to be removed as the individual items are evaluated.

Senator NELSON. These weren't all different entities?

Dr. FINKEL. No, they weren't all different entities; they largely include penicillin and streptomycin combinations.

Mr. SEGGEL. Irrational drug products continue to be removed as the individual items are evaluated.

Senator NELSON. May I ask a further question on that?

Mr. SEGGEL. Yes, sir.

Senator NELSON. Does your department have a list of those 120 drugs?

Dr. FINKEL. Yes; it does.

Senator NELSON. And does the department know what the total annual sales of those fixed combinations and anti-infectives were?

Dr. FINKEL. I think we probably don't, because for some of them we haven't received records and reports on for quite a while.

Senator NELSON. Do you happen to know whether the Food and Drug Administration has the amount of the total sales of those drugs?

Dr. FINKEL. I don't think so. Our figures relate to amount of drug distributed but we can certainly attempt to extrapolate sales figures from that information as well as obtain hard sale data on the most popular of the drugs.

Senator NELSON. Could you submit for the record the figures you do have on the total sale of the fixed combinations and anti-infectives.

Mr. SEGGEL. Yes, sir.

Senator NELSON. Thank you.

(The subsequent information was received and follows:)

FDA does not have accurate sales data for all the 120 systemic antibiotic combinations which have been removed from the market. However, for 51 of these 120 combinations, data are available which show an approximate whole value of $17,200,000 as of the year prior to their removal from the market.

Mr. SEGGEL. The second category which I would like to mention is labeling. The labeling of a large number of drugs is being updated to delete indications evaluated as ineffective. A requirement became effective on May 15, 1972, which requires package inserts and advertisements to reflect indications evaluated as "probably" or "possibly" effective while clinical evidence is being sought to establish whether the drug is effective. This is to inform the prescriber of the best available scientific evaluation of these drugs.

Three, the abbreviated New Drug Application concept has simplified the procedures for manufacturers to obtain approvals to market certain new drugs. This procedure is designed to establish a mecha-

nism for marketing new drugs for which only limited data, for example, bioavailability data are necessary to establish their safety and effectiveness. It will at the same time have the ancillary effect of providing a means by which competitive drugs can be marketed. This may have an advantageous effect on drug prices and will make available to the prescriber a wider selection of generic drugs.

I wish to emphasize that when a drug is classified and listed as "ineffective," it has been classified as "ineffective" for each indication.

Mr. GORDON. May I ask a question at this point?

Mr. SEGGEL. Yes.

Mr. GORDON. How many of these abbreviated NDA's have been approved up to now?

Dr. FINKEL. I will have to supply the figure for the record. But there have been over a hundred.

(The subsequent information was received and follows:)

There have been 267 abbreviated NDA's approved as of July 31, 1972.

Mr. SEGGEL. I would like to turn to policy implementation in procurement and reimbursement programs.

A notice was published in the Federal Register on October 8, 1971, stating that it is the policy of the Department that Federal funds will not be expended for purchasing drug products classified as "ineffective" and "possibly effective" for use in its direct care programs with two exceptions: (1) Funds may be expended to purchase "ineffective" and "possibly effective" drug products for use in approved clinical research projects, and (2) Federal funds may be expended to purchase a "possibly effective" drug product when no alternative means of therapy with drug products in the "probably effective" or "effective" classification are available.

Senator NELSON. Where would the ineffective drugs be purchased since they are supposed to have been removed from the market?

Mr. SEGGEL. That would be true of some. While they are in a transition status, presumably they would still be available.

Mr. Brands may wish to comment on it.

Mr. BRANDS. That is true. Before the final order is published in the Federal Register there is usually a 30-day period before the final order is published. During that time ineffective drugs would not be purchased unless it was for an approved research project to obtain additional evidence of effectiveness.

Mr. GORDON. Are you saying also that there are right now many ineffective drugs on the market?

Mr. BRANDS. No.

Dr. FINKEL. There are only about 60 prescription ineffective drugs that are still on the market. Of those, most of them are in the final stages before they will be removed. Some of them have been reformulated to remove an ineffective ingredient, and are going to be republished as possibly effective. Some are undergoing litigation.

Mr. GORDON. Is the public aware that they may be using ineffective drugs?

Dr. FINKEL. Yes. As of May 15 the firms were required to put a box on the package insert which gives the NAS/NRC ratings, and those which are ineffective must say that they have been considered ineffective by the NAS/NRC and the FDA.

Senator NELSON. And these are not anti-infectives?

Dr. FINKEL. There are about 14 anti-infective combinations that are in their final stages to be removed from the market. But the rest are not anti-infectives.

Mr. BRANDS. Mr. Chairman, let me try to clarify this. Drugs that have been removed from the market, and Dr. Finkel can correct me, could be considered investigational drugs, and a company could re-institute their investigation of them.

Mr. GORDON. But they would have to get an IND, an Investigational New Drug exemption?

Mr. BRANDS. Yes, sir.

Dr. FINKEL. If I might amplify my previous remarks. There are, in addition to the 60, a number of drugs whose ratings have not yet been published, and we have reason to think that some of those will be considered ineffective. They are under re-review by the National Academy of Sciences. But of the ones that have been published, there are 60 remaining.

Mr. GORDON. How many are unpublished yet?

Dr. FINKEL. Not too many. There might be a hundred or a little over, something like that. That is out of the 4,000 drugs.

Mr. GORDON. If they are ineffective, why are they being re-reviewed?

Dr. FINKEL. Well, these were drugs—we don't know that they were all ineffective, but this was a batch of drugs that was called "effective, but" by the National Academy of Sciences. They usually were combinations. And they were sent back to the Academy. They then called many of them ineffective, but they requested to see them once more to be sure that they really meant that they were ineffective. And they should be on their way back to us very shortly.

Mr. SEGGEL. With respect to our direct care program, this policy that has just been mentioned is implemented through the hospital or clinic pharmacy, through therapeutics committees, and through reviews of formularies and the addition of drugs to formularies by headquarters staff. The contract outpatient prescriptions are reviewed for compliance.

Lists of drugs classified as to effectiveness published by the Food and Drug Administration are sent to each direct care facility and to each grantee. In addition, these lists are sent to the deans of each medical school and pharmacy school, the medical and pharmacy associations, State health departments, and State welfare deprtments. There is also a mailing list of individuals and State and other health programs that have requested lists of the drug classification. In all, about 3,000 lists are mailed.

The Department issues advance notices to the direct care programs and the officials in other Federal agencies of drugs that have been classified as "ineffective" or "possibly effective" prior to publication in the Federal Register.

The Social Security Administration published in the Federal Register on October 16, 1971, a notice of Proposed Rule Making wherein drugs classified by the Food and Drug Administration as "ineffective" or "possibly effective" were defined as not medically "reasonable and necessary" and hence not eligible for reimbursement under the program. This proposal would provide an exception that a "possibly effective" drug may be reimbursed if there is no alternative means of

therapy. Extensive comments are currently being reviewed. In similar fashion, the Social and Rehabilitation Service has under development proposed regulations prohibiting the use of grant funds under the medicaid and vocational rehabilitation programs for the payment of drugs classified as "ineffective" or "possible effective." A latent problem is assuring effective administration of this policy on a patient-by-patient and claim-by-claim basis.

The Social Security Administration instructed its intermediaries in April 1970 to assure reasonableness of drug cost reimbursements by a comparison of prices paid by each provider with prices at which the drugs are available in the provider's areas for a random sampling of charges.

Title XIX of the Social Security Act states that the State plan for medical assistance must assure that payments for drugs are not in excess of reasonable charges consistent with efficiency, economy, and quality of care. Some 20 States have developed formularies which list eligible drugs and the maximum amounts that will be paid for such drugs. The regulations on reasonable charges for drugs require a State plan under title XIX to include a description of the reasonable charge policy and the methods to be used in the State's medical assistance plan. They require the State agency to take whatever measures are necessary to assure the appropriate audits of records. In addition to the State audits, Department audit teams and General Accounting Office audit teams have reviewed State programs to determine the reasonableness of reimbursements.

Senator NELSON. When were these formularies developed? Do you know during what period of time these formularies were developed by the 20 States?

Mr. RICHTER. Since the beginning, perhaps in January 1966. I don't know when most of them were put into effect.

Senator NELSON. Does the Department have copies of the formularies that these States have designed?

Mr. RICHTER. I believe we can get them, I think we have some of them in our files.

Senator NELSON. Has the Department made any evaluation of the quality of these formularies?

Mr. RICHTER. May I ask our drug man to comment on that.

Mr. Rose, did you hear the question the Senator asked?

Mr. ROSE. What is the question, please.

Senator NELSON. My question was: Has the Department made any evaluation of the quality of the formularies that have been developed by the 20 States that have adopted formularies since 1966?

Mr. ROSE. The States have various methods of assuring quality for the drugs under formularies. One State in particular has requested all the manufacturers to submit an application before the drugs can be included in their formulary. That State is Pennsylvania. They have to submit their compliance with the FDA's manufacturing procedures, et cetera. Since drugs is an optional service, formularies and generic drugs are also optional, but where either is employed, they must be under the supervision of professional personnel, in assuring the quality and safety of drugs.

At the Federal level, of course, it is the responsibility of the FDA to assure that drugs are safe and effective; and each State has its own

responsibility for seeing that the drugs included in formularies are effective and safe.

Senator NELSON. As you know, there are all kinds of ways to design a formulary. My question was: Has the Department made any evaluation of the quality of the formularies adopted by the 20 various States? Anything can be called a formulary. You can put all the drugs on the marketplace on there if you wanted to, I suppose.

Mr. ROSE. That is true. Formularies serve the purposes of different States. Some were limited to only the items that were paid for and determined by the formulary committee. And other States in effect listed all drugs available, and they just had code numbers and unit prices which expedited the handling, not necessarily the assurance that the drugs are of the required quality.

Senator NELSON. Thank you.

I suppose I could ask this question at just about any point. On December 11, 1970, 1½ years ago, the Surgeon General, Jesse Steinfeld, issued a memorandum to all components of the Department of Health, Education, and Welfare that: "It is the policy of the Department that Federal funds will not be expended for purchasing drug products classified 'ineffective,' or 'possibly effective' by the Food and Drug Administration for use in its direct care programs, its contract care programs under the direct care progams, its Federal grant programs, and the medicare and medicaid programs for inpatients and outpatients with two exceptions."

In addition, on the same day the Surgeon General directed HEW agencies to establish the necessary procedures within 45 days to implement departmental policy prohibiting the use of Federal funds for the purchase of drug products classified as "ineffective" and "possibly effective" by the Food and Drug Administration.

On January 1971 the Medical Services Administration notified all Associate Regional Commissioners for Medical Services of the Departmental policy relating to purchases of "ineffective" and "possibly effective" drugs. The Medical Services Administration stated that the program regulations were being amended to implement this policy for medicaid.

On May 10, 1972, almost 1½ years later, the Comptroller General of the United States reported that regulations have not been issued to implement the revised Federal drug policy for medicaid.

I will ask that the memorandum from Jesse Steinfeld dated December 11, 1970, be printed at this point in the record, and that a letter from the General Accounting Office signed by Mr. John D. Heller, Associate Director, written to Mr. John D. Twiname, Administrator, Social and Rehabilitation Service, Department of Health, Education, and Welfare be printed in full at this point in the record.

(The information referred to follows:)

[Memorandum]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
Washington, D.C., December 11, 1970.

Subject: Drug Products Declared as "Ineffective" and "Possibly Effective" by the Food and Drug Administration.
To: All Department Agencies.

1. The National Academy of Sciences/National Research Council, after a review of the clinical data of drug products approved by the FDA between 1938 and 1962, has classified some drug products "ineffective" and some, "possibly effective". Notices concerning these drugs are published in the Federal Register by the FDA after a review and concurrence with the NAS/NRC findings.

The criteria for classifying the drug products and the definitions of the four categories of effectiveness are in paragraph three below.

2. It is the policy of the Department that Federal funds will not be expended for purchasing drug products classified "ineffective", or "possibly effective" by the Food and Drug Administration for use in its direct care programs, its contract care programs under the direct care programs, its Federal grant programs and the Medicare and Medicaid programs for inpatients and outpatients with the following two exceptions:

a. Federal funds may be expended to purchase "ineffective" and "possibly effective" drug products for use in the pursuit of approved clinical research projects.

b. Federal funds may be expended to purchase a "possibly effective" drug product when no alternate means of therapy with drug products in the "probably effective" or "effective" classification is available.

3. In arriving at its decision in determining the effectiveness of a drug product the judgements of the NAS/NRC Panel were based on the following criteria:

a. Factual information that is freely available in the scientific literature.

b. Factual information that is available from the FDA, from the manufacturer or other sources, or

c. On the experience and informed judgement of the members of the Panels.

Definitions of the four categories of effectiveness are as follows:

a. Category A—*Effective.* For the presented indication, the drug is effective on the basis of the criteria stated above.

b. Category B—*Probably Effective.* For the indication presented, effectiveness of the drug is probable on the basis of the criteria stated above, but additional evidence is required before it can be assigned to Category A. The recommendation to the FDA could be for further research or for modification of claims or both.

c. Category C—*Possibly Effective.* In relation to the indication in question, there is little evidence of effectiveness under any of the criteria stated above. The possibility that additional supporting evidence might be developed should not be ruled out, however. The recommendations to the FDA could be that unless it is informed that studies are being initiated promptly with the object of developing substantial evidence of effectiveness, the indication in question should be considered inappropriate.

d. Category D—*Ineffective.* In relation to the indication in question, the Panel concludes that there is no acceptable evidence under any of the criteria stated above to support a claim of effectiveness. If there is clear evidence of ineffectiveness, the Panel should cite it. The recommendations to the FDA could be that no useful purpose is served by continuing to make this product available for the indication in question, and the immediate administrative action would appear to be justified. The number of completely worthless drugs is probably not large, and these are probably concentrated primarily among certain drug groups. The major use of this category, therefore, would probably be in relation to ancillary indications claimed for a larger number of basically useful drugs.

The indications referred to in these definitions corresponds with the reference that is made in the law to "the effect the drug purports or is represented to have under the conditions of use prescribed, recommended or suggested in the proposed labeling". This is to say that the indications are the claims that are cited in the labeling of a given drug.

4. The drug products listed as "ineffective" have been classified as "ineffective" for all indications. The drug products listed as "possibly effective" have been classified as either "ineffective" or "possibly effective" for each indication.

5. Lists of the drug products that have been declared "ineffective" and "possibly effective" are attached.

6. This policy is to be effective immediately for the direct purchasing of drugs by PHS hospitals and clinics.

7. Those agencies and programs that reimburse community hospitals, extended care facilities, nursing homes and community pharmacies for drugs and health services are requested to establish the necessary procedure to implement this policy within 45 days.

8. The Office of the Pharmacy Liaison Representative, Public Health Service has responsibility for distributing information on these drugs to the Agencies. Each Agency will be advised by telephone of drug products classified as "ineffective" or "possibly effective" prior to publication in the Federal Register, and a list of such drug products will be forwarded to each Agency monthly following publication in the Federal Register.

JESSE L. STEINFELD, M.D.
Surgeon General,
Deputy Assistant Secretary for Health and Scientific Affairs.

Enclosures.

Addressees: Commissioner, Office of Education; Administrator, Environmental Health Service; Commissioner, Food and Drug Administration; Administrator, Health Services and Mental Health Administration; Director, National Institutes of Health; Administrator, Social and Rehabilitation Service; Commissioner, Social Security Administration.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
OFFICE OF PHARMACY LIAISON REPRESENTATIVE
5600 Fishers Lane
Rockville, Maryland 20852

October 7, 1970

POSSIBLY EFFECTIVE DRUGS

The following drugs have been evaluated by the National Academy of Sciences/National Research Council, Drug Efficacy Study Group. The Food and Drug Administration finds that there is little evidence of effectiveness as defined in the Federal Food, Drug and Cosmetic Act. Accordingly on the date shown these drugs were published in the Federal Register and so classified by FDA. The announcement is intended to apply also to similar drug products marketed by the same or other firms.

Each drug listed has been judged as possibly effective or possibly effective for some, and ineffective for the remaining indications claimed.

No drug on the list has been judged effective or probably effective for any indication claimed.

NAME OF DRUG	COMPANY NAME	DATE
Achromycin Surgical Powder	Lederle Laboratories	9-23-70
ACR - Allantomide Ointment	National Drug Company	9-25-70
Adrenosem Salicylate Syrup	S. E. Massengill Co.	1-10-70
Adrenosem Salicylate Tablets	S. E. Massengill Co.	1-10-70
Adrenosen Salicylate Solution	S. E. Massengill Co.	1-10-70
Adrestat F Solution	Organon, Inc.	1-10-70
Allantomide Ointment	National Drug Company	9-25-70
Alulotion Sulfathiazole	Wyeth Laboratories	9-25-70
Alvinine Shampoo	Wampole Laboratories	10-2-69
Ammonium Chloride 0.9% in Distilled Water	Don Baxter	8-26-70
Amphedroxyn Hydrochloride	Eli Lilly & Co.	8-8-70

This is a republication of the original list of October 7, 1970, to include the dates published in the Federal Register and a rewording of the opening paragraphs for clarification.

Appetrol Tablets	Wallace Pharmaceutical	8-8-70
Appetrol - S. R.	Wallace Pharmaceutical	8-8-70
Aureomycin Strip Dressing	Davis & Geck Division	9-23-70
Aureomycin Dressing	Lederle Laboratories	9-23-70
Aureomycin Sterilized Packing	Lederle Laboratories	9-23-70
Aureomycin for Ear Solution	Lederle Laboratories	9-23-70
Aureomycin Surgical Powder	Lederle Laboratories	9-23-70
Bacitracin Solvets	Eli Lilly & Co.	9-23-70
Bamadex Sequels	Lederle Laboratories	8-8-70
Bamadex Tablets	Lederle Laboratories	8-8-70
Betadine Shampoo	The Purdue Frederick Co.	10-2-69
Biphetamine "7½" Capsules	Strasenburgh Laboratories	8-8-70
Biphetamine "12½" Capsules	Strasenburgh Laboratories	8-8-70
Biphetamine - T "20" Capsules	Strasenburgh Laboratories	8-8-70
Brandenfels Scalp & Hair Application & Massage	Carl Brandenfels	9-25-70
Capla Tablets	Wallace Pharmaceuticals	4-10-70
Cerosal Ointment	Kahlenberg Laboratories	8-26-70
Choline Dihydrogen Citrate Tablets	Eli Lilly & Co.	1-10-70
Cremosuxidine Suspension	Merck, Sharpe & Dohme	7-22-70
Cyclamycin Capsules	Wyeth Laboratories	2-12-70
Cyclamycin Oral Suspension	Wyeth Laboratories	2-12-70
Darvo-Tran	Eli Lilly & Co.	5-13-70
Deaner Tablets	Riker Laboratories	5-15-70
Delfetamine Stedytabs	Eastern Research Labs., Inc.	8-8-70
Delfeta-Sed Stedytabs	Eastern Research Labs., Inc.	8-8-70

Deprol Tablets	Wallace Laboratories	5-13-70
Desoxyn Tablets	Abbott Laboratories	8-8-70
Desoxyn Gradumet	Abbott Laboratories	8-8-70
Desoxyn Elixir	Abbott Laboratories	8-8-70
Dexserpine "5" Tablets	Nysco Labs., Inc.	8-8-70
D-O-E Tablets	Tilden-Yates Laboratories	8-8-70
Dormison Capsules	Schering Corp.	8-26-70
Drinalfa Tablets	E. R. Squibb & Sons., Inc.	8-8-70
Du-oria Tablets	B. F. Ascher & Co.	8-8-70
Emivan Parenteral	U.S.V. Pharmaceutical Corp.	4-10-70
Enzo-Cal Topical Cream	Crookes-Barnes Labs., Inc.	4-10-70
Equagesic Tablets	Wyeth Laboratories	1-10-70
Eskatrol Spansule	Smith, Kline & French	8-8-70
Fenarol Tablets	Winthrop Laboratories	6-25-70
Gantrisin Ear Solution	Roche Laboratories	9-25-70
Gravidox Parenteral	Lederle Laboratories	5-13-70
Humacort Ointment	Parke, Davis & Co.	9-23-70
Ionamin "15" Capsules	Strasenburgh Laboratories	8-8-70
Ionamin "30" Capsules	Strasenburgh Laboratories	8-8-70
Keralac Nail Lacquer	Salem Pharmacal	8-26-70
Lactated Potassic Saline Injection	Don Baxter	8-26-70
Lenetran Tablets	Lakeside Laboratories	6-25-70
Levanil Tablets	The Upjohn Co.	6-25-70
* Lidocaine Ointment (Xylocaine Ointment) 2.5%	Astro Pharmaceutical Products Inc.	9-3-70
Listica Tablets	Armour Pharmaceutical Co.	6-25-70
Megimide	Abbott Laboratories	1-10-70

* The percent was omitted from the orignal listing.

Meonine Tablets	Ives Laboratories	1-10-70
Meratran Tablets	William S. Merrell & Co.	5-15-70
Methedrine Tablets	Burroughts-Wellcome & Co.	8-8-70
Metreton Nasal Spray	Schering Corporation	9-17-70
Miller-Drine Tablets	Smith, Miller & Patch	8-8-70
Mikedimide Tablets	Panray Corp.	1-10-70
Monichol	Ives Laboratories	1-10-70
Morumide Ointment	The S.E. Massengill Co.	9-25-70
Nardil Tablets	Warner-Chilcott Labs.	5-15-70
Neothalidine Granules	Merck Co.	5-13-70
Neutrapen	Ricker Labs.	8-26-70
Niamid Tablets	Pfizer Laboratories	5-15-70
Norodin Tablets	Endo Laboratories	8-8-70
Norflex Tablets	Ricker Laboratories	6-25-70
Norflex Injectable	Ricker Laboratories	6-25-70
Numorphan-Hydrochloride Rectal Suppositories	Endo Laboratories	8-26-70
Obetrol - 10	Obetrol Pharmaceutical	8-8-70
Obetrol - 20	Obetrol Pharmaceutical	8-8-70
Onycho-Phytex Solution	Wynlit Pharmaceutical	6-23-70
Otamylon Ear Drops	Winthrop Laboratories	9-25-70
* Op-Hydrin Ophthalmic Suspension	Broemmel Pharmaceutical	9-17-70
Otodyne Otic-Solution	White Laboratories	9-17-70
Otomide Otic Solution	White Laboratories	9-25-70
P-A-D Tablets	The Upjohn Company	1-10-70
Parafon w/Codeine	McNeil Laboratories	9-11-69
Parafon w/Prednisolone	McNeil Laboratories	9-11-69

* Changed to show the correct manufacturer.

Paraflex Tablets 250 mg	McNeil Laboratories	9-11-69
Phytex Liquid	Wynlit Pharmaceutical	6-23-70
Potaba Capsules	Glenwood Labs., Inc.	8-28-70
Potaba Tablets	Glenwood Labs., Inc.	8-28-70
Potaba Envils	Glenwood Labs., Inc.	8-28-70
Prelu-Vite Capsules	Geigy Chemical Corp.	8-8-70
Prednefrin 0.12% Ophthalmic Suspension	Allergan Pharmaceutical	9-17-70
Prednefrin Forte 1% Ophthalmic Suspension	Allergan Pharmaceutical	9-17-70
Prednefrin-S 0.2% Ophthalmic Solution	Allergan Pharmaceutical	9-17-70
Propion Ophthalmic Solution	Wyeth Laboratories, Inc.	9-17-70
Proternol Tablets	Key Pharmaceutical, Inc.	8-27-70
Quiactine	The William S. Merrell Co.	6-25-70
Racemic Desoxyephedrine Hydro-Chloride	High Chemical Co.	8-8-70
Rela	Schering Corp.	9-1-70
Resion Suspension	The National Drug Co.	7-22-70
Robaxin Tablets 500 mg	H. R. Robins Co.	6-25-70
Robaxin Injection 100 mg/ml	H. R. Robins Co.	6-25-70
Rhulitol Solution	Lederle Laboratories	4-10-70
Sanoma	Charles Pfizer & Co.	9-1-70
Selsunef Ointment	Abbott Laboratories	7-30-70
Soboquel Tablets	White Laboratories, Inc.	7-22-70
Soma	Wallace Pharmaceutical	9-1-70
Soma Compound w/Codeine	Wallace Pharmaceutical	9-1-70

Soma Compound	Wallace Pharmaceutical	9-1-70
Soropon Pediatric Solution	Wallace Pharmaceutical	9-25-70
Spartase	Wyeth Laboratories	1-10-70
Sporostacin Solution	Ortho Pharmaceutical	8-26-70
Sulfallantoin Ointment 2%	S. F. Durst & Co.	9-25-70
Suavitil Tablets	Merck, Sharpe & Dohme	6-25-70
Sulamyd Tablets	Schering Corp.	7-9-70
Sulfallantoin Powder 2%	Merck, Sharpe & Dohme	9-25-70
Sulfathiazide Cream 5%	Abbott Laboratories	9-25-70
Sulfathiazole Cream 5%	S. F. Durst & Co.	9-25-70
Sulfamylon Hydrochloride Solution 5%	Winthrop Laboratories	9-25-70
Sulfamylon Hydrochloride w/Streptomycin Sulfate	Winthrop Laboratories	9-25-70
Sulfadiazine Ointment	Eli Lilly & Co.	9-25-70
Surfacaine Aerosol	Eli Lilly & Co.	7-2-70
Strascogesic Tablets	Strasenburgh Labs.	1-10-70
Sterosan Cream & Ointment	Geigy Chemical Corp.	8-26-70
Straitran Tablets	Merck, Sharpe & Dohme	6-25-70
Suvren Tablets	Ayerest Labs.	9-1-70
Synalgos Capsules	Ives Laboratories	1-10-70
Synalgos-DC Capsules	Ives Laboratories	1-10-70
TAO Pediatric Drops	J. B. Roerig & Co.	2-12-70
TAO Ready-Mixed-Oral Suspension	J. B. Roerig & Co.	2-12-70
TAO Capsules	J. B . Roerig & Co.	2-12-70
Teles Suspension	Torch Laboratories	7-30-70
Tenuate Dospan Tablets	The William Merrell & Co.	8-8-70

Thora-Dex Tablets	Smith, Kline & French	5-13-70
Tolserol Tablets	E. R. Squibb & Sons, Inc.	6-25-70
Tolserol Elixir	E. R. Squibb & Sons, Inc.	6-25-70
Tolserol Injection	E. R. Squibb & Sons, Inc.	6-25-70
Tolseram Tablets	E. R. Squibb & Sons, Inc.	6-25-70
Tolseram Suspension	E. R. Squibb & Sons, Inc.	6-25-70
Tranco-gesic Tablets	Winthrop Laboratories	6-25-70
Trancopol Caplets	Winthrop Laboratories	6-25-70
Trancoprin Tablets	Winthrop Laboratories	6-25-70
Trepidone Tablets	Lederle Laboratories	6-25-70
Triburon Cream	Roche Laboratories	8-26-70
Triburon Ointment	Roche Laboratories	8-26-70
Ultran	Eli Lilly & Co.	5-13-70
Zactane Tablets	Wyeth Laboratories	1-10-70
Zirnox Topical Lotion	Bristol Laboratories	4-10-70
Zactirin Tablets	Wyeth Laboratories	1-10-70

Food and Drug Administration
Bureau of Drugs
5600 Fishers Lane
Rockville, Maryland 20852

November 1, 1970

This list represents those drug products which the Food and Drug Administration has decided, after evaluations by the National Academy of Sciences-National Research Council Drug Efficacy Study Group, lack substantial evidence of effectiveness*, or that an unfavorable benefit to risk ratio exists. Accordingly, on the dates shown, FDA published in the Federal Register announcements of intention to initiate proceedings to withdraw approval of the new drug applications or to repeal the antibiotic regulations. These announcements are intended to apply also to similar drug products marketed by the same or other firms.

Some of the products have been removed from the market; others are the subjects of actions contesting our findings. In other cases the applicants are submitting data in an attempt to establish efficacy, or making changes to render the product acceptable.

NAME OF DRUG	COMPANY	DATE
Achrocidin Compound Syrup	Lederle Laboratories	9/12/69
Achrocidin Compound Tablets	Lederle Laboratories	9/12/69
Achromycin Pharyngets	Lederle Laboratories	9/19/70
Achromycin SV Capsules	Lederle Laboratories	4/2/69
Achromycin Troches	Lederle Laboratories	9/19/70
Achromycin with Phenylephrine HCl and HC	Lederle Laboratories	12/24/68
Achrostatin V Capsules	Lederle Laboratories	4/2/69
Achrostatin V for Oral Suspension	Lederle Laboratories	4/2/69
Aclor Capsules	Cole Pharmacal Co., Inc.	9/12/69
Acticort	Wilson Laboratories	9/25/70
Actilamide Nose Drops	Broemmel Pharmaceuticals	11/6/68
Actilamide Oral Gargle	Broemmel Pharmaceuticals	11/6/68
Actilamide Throat Spray	Broemmel Pharmaceuticals	11/6/68
Actol Solution	The S.E. Massengill Co.	5/16/70

*As [illegible]ned in the Federal Food, Drug and Cosmetic Act

NAME OF DRUG	COMPANY	DATE
Adrestat	Organon, Inc.	7/10/68
Aerodrin Nasal Solution & Spray	Burroughs Wellcome & Co.	8/21/70
Albamycin G.U. Tablets	The Upjohn Company	12/24/68
Albamycin-T Capsules	The Upjohn Company	12/24/68
Albamycin-T Flavored Granules for Suspension	The Upjohn Company	12/24/68
Alertonic	The Wm. S. Merrell Co.	9/12/69
Alevaire (Tyloxapol 0.125 percent)	Winthrop Products, Inc.	7/17/68
Allergosil (Ethylene Disulphonate) Solution for Injection	Spicer-Gerhart Co.	9/12/69
Amm-I-Dent Toothpaste	Block Drug Co.	7/21/70
Amm-I-Dent Tooth Powder	Block Drug Co.	7/21/70
Ammozyl	High Chemical Co.	11/22/68
Am Plus Improved Capsules	J. B. Roerig & Co.	9/12/69
Amril Tablets	Amfre-Grant Inc.	9/27/69
Analexin 400 Capsules	Mallinckrodt Chemical Works	11/21/69
Analexin Syrup	Mallinckrodt Chemical Works	11/21/69
Analexin Tablets	Mallinckrodt Chemical Works	11/21/69
Analexin-HF Tablets	Mallinckrodt Chemical Works	11/21/69
Anergex (Poison Oak Extract for Injection)	Lemmon Pharmacal Co.	9/5/68
Antivert Tablets	Chas. Pfizer & Co., Inc.	3/27/70
Antizyme Toothpaste	Lambert Pharmacal Co.	7/21/70
Artamide-HC Capsules	Wampole Laboratories	3/28/70
Aristogesic Steriod - Analgesic Compound Cap.	Lederle Laboratories	3/28/70