The pharmacy also prepares many medications in multiple dose vials and manufactures certain liquid preparations, detergents, ointments, and creams. The types of items manufactured by the hospital pharmacy are listed in exhibit D. (See exhibit D: Items Manufactured by the Los Angeles County General Hospital Pharmacy.4)

Many ointments and creams are formulated by the hospital staff and are not available commercially. Other ointments are very expensive and are available only in small containers, such as 5-gram, or 15gram tubes—these items are prepared by the pharmacy and packaged in amounts usually ordered by the physicians.

When new treatment programs are initiated, the pharmaceutical materials specified by the staff are often unavailable commercially; 0.5 percent silver nitrate solution was recently found to be very beneficial in the treatment of burns. Our burn service requires 200 gallons of this solution per week. The pharmacy prepared this because there was no other way of doing it; when the solution became commercially available, we continued to manufacture it because of cost saving. Another example of this service to the physicians was in the peritoneal dialysis program for renal failure. The chief pharmacist formulated the necessary solutions and manufactured them.

It is estimated that \$1,130,000 is saved annually by our manufactur-

ing division.

Senator Nelson. As I recall it, in the first part of your statement you stated that you spend \$2 million a year on drugs?

Dr. McCarron. Yes.

Senator Nelson. And you calculate then, if you were not manufac-

turing that you would be spending \$3 million?

Dr. McCarron. Yes; definitely. And we can show that just by multiplying the cost of what we make by the retail cost, or rather the wholesale cost.

SUMMARY

In summary, the drug formulary system at the Los Angeles County General Hospital provides the staff with standard, familiar medications and enough information to use the drugs intelligently. It has improved the teaching of physicians and nurses and thus affords an added degree of protection for the patients.

It has eliminated from the drug supply at the hospital those items with little or no therapeutic effectiveness, has substituted some toxic agents with less toxic ones, has replaced some very expensive items with less costly ones, and has allowed the pharmacy to maintain a

manageable inventory.

The manufacturing division of the pharmacy improves service to the patients and the staff and has contributed to the overall saving in the hospital drug budget.

Senator Nelson. I notice, Doctor, referring back now to your for-

mulary, that this is a representative excerpt?

Dr. McCarron. This is a printed front and back of one page. I had it Xeroxed. The formulary sheet is a half-sized page. You can see that this would be the formulary, printed front and back.

⁴ See p. 598.