explore item 4 in the suggestions to find out where this drug is really

going.

I would also like to urge you to think very carefully about the statement that most injectables are used in hospitals. There are some conspicuous drugs which don't follow this pattern. I cite particularly benzathine penicillin. Benzathine penicillin is one with a very long action. Intermediate doses provide low levels of penicillin for a period of 2 weeks approximately and larger doses for a period of about a month. This is a most popular drug for outpatient use in the treatment of streptococcal pharyngitis and in the prevention of rheumatic fever for the short and the longer periods respectively.

Senator Nelson. I was using the injectable cases applying solely to

chloramphenicol.

Dr. Wehrle. I would certainly agree.

Senator Nelson. I suppose there is some confusion about it. We have had testimony here from people like Dr. Lepper, Dr. Best, Dr. Dameshek and others, all of whom have stated it is widely overused, and I think Dr. Dameshek said it only ought to be administered in hospitals. If, in fact, it is used for the purposes, the limited purposes indicated, that is, in general that the disease must be very serious, no other antibiotic is effective, and chloramphenicol is effective against a particular organism, if that is the case, then you have, you probably have a patient who is or ought to be in the hospital. And hospital administration conforms much more consistently to the indicated use than outside the hospital. I believe the testimony was that Johns Hopkins, for quite some time, has simply had a rule that anytime it is prescribed, it has to be countersigned by the head of the service or someone else.

This is a difficult state to get to, but in any event, my statement, based on conversations with some of the doctors, referred only to

chloramphenicol as to injectables.

Dr. Wehrle. Yes.

Senator Nelson. We had testimony from the doctors I just mentioned and some others, all of whom estimated that chloramphenicol was much more widely used than it should have been and their estimates were that 90 to 99 percent of the chloramphenicol administered was in their judgment administered for a nonindicated case. Do you have any judgment or view on the administration of chloramphenicol in this respect?

Dr. Wehrle. Yes, sir. I think I would like, though, to qualify this very carefully by indicating that it is difficult for a physician in one particular field to be completely comfortable about all of the indica-

tions and concerns that people in other fields have.

Now, the best estimate that I can come up with concerns an extrapolation of the pattern of usage in our particular institution. We might approach this from the standpoint of current usage and consider this drug to be used predominantly in inpatients. If we begin by indicating that the average of 1967–1968 usage was some 27,000 grams, about half parenteral and half oral, in the 798,000 patient visits to our hospital during the single year, this would work out to approximately 35 milligrams per patient visit. Obviously, relatively few patients are receiving this drug.

Now, if you further restrict this to only inpatients, these would average 188,000 patients for each of these 2 years. If all chloramphenical