In order to accomplish such control, the department of medicine would provide a list of physicians who could authorize the use of the drugs under discussion. Other services may wish to provide a similar mechanism.

In 1972, $30,000 were expended for Tolbutamide, Phenformin, and Chlorpropamide. Substitution of insulin would be less costly.

The results of this educational reminder and form of control produced the results noted in table I.

Table II indirectly indicates that many of the patients previously receiving oral agents were started on insulin therapy. I would like to add that if we totaled the cost of the oral agents in 1970, it reached $56,000. By 1974, this was reduced 55 percent (sic) to $9,676. That information is not recorded on the table.

Continuous review of the use of the oral agents is in progress with the intent of further decreasing their use except under the circumstances noted in the letter of May 24, 1973. It is apparent that restriction of the use of these medications in a hospital can be accomplished by education of patients and physicians and by providing a method for control. The problem is unfortunately not as simple for a variety of reasons when one attempts to achieve similar results with patients who are under the care of private physicians. Among these reasons are: One, that the conclusions of the UGDP study are not accepted by some diabetologists.

Mr. GORDON. May I interrupt for just a moment?

Even the critics of the UGDP study admit that it is the best study conducted in this field. Other studies, including animal studies, have confirmed the validity of its conclusions.

Why, then, have some physicians—even some with prestigious names in the diabetes field—continued to attack these studies, even though they acknowledge lack of effectiveness of these drugs?

Dr. CHESTER. Mr. Gordon, this is extremely difficult to understand. I can envision that some of them believe that lowering the blood sugar may prevent the vascular disease. However, there is no evidence to support that contention.

Mr. GORDON. Would any other witnesses care to comment?

Dr. SIMS. Would you be willing, Dr. Chester, to add as a qualifying phrase in this group of noninsulin dependent, predominantly overweight diabetics? In other words, I am asking you, would you make the same statement for the juvenile diabetics?

Dr. CHESTER. Would I make a different statement for the juvenile diabetics? No.

I think that there are no data to support the concept that the control of diabetes, as we measure it, namely levels of blood sugar and quantities of sugar in the urine, will prevent the development of the vascular diseases that we see in the coronary arteries, the peripheral vessels, and in the eye.

Mr. GORDON. Dr. Felig, would you care to comment?

Dr. FELIG. I agree with Dr. Chester's remarks.

I think that the kinds of treatments available to us, be it insulin, oral agents, or diet, are such that we do not fully restore the patient's metabolism to normal, and I think that we can at least explain why we might not see the improvement in prevention of vascular disease.

I might comment on the point that you raised as to why people in the face of evidence of lack of effectiveness still criticize the UGDP.