activities we have made considerable progress in developing a small computer system to be used in the hospital laboratories.

We certainly agree that "research is good, but results are better." Those of us who minister to the ill have always looked for ways to apply the products of basic research to patient care. Some of the greatest recent advances have been made in the area of chemistry and biology of disease processes. Through testing procedures, the clinical laboratory can give physicians information which help them apply these newer medical developments to the care of their patients.

For the most part our activities have centered on providing physicians with more and higher quality data. One simple and inexpensive way is to perform a battery of "screening" tests on every patient as soon after admission as possible. Admitted patients come to an admission lounge where a chart is generated, physical measurements are taken, and blood specimens are drawn by a technologist. Then the patient proceeds through X-ray and EKG to the ward. Through the use of automated data processing, results of tests on specimens collected in early afternoon or evening are reported on the patient's chart by 11 p.m. the same day. This could just as easily be reported to any neighboring hospital by Data-Phone.

There are 12 chemical tests that comprise our basic "screening" program. In addition to this, a complete blood count, a test for syphilis, and a urinalysis are done on all adult patients. If patients are scheduled for surgery, a bleeding time, a partial thromboplastin time, and a tourniquet test are performed to rule out any bleeding tendency.

This encompasses our multiphasic screening program on inpatients. Often data is available to the physican by the time he sees his patient for the first time in the hospital. This eliminates a great deal of the piecemeal collection of data that usually goes on in hospitals and often gives only a piecemeal picture of the patient's condition. One recent report, in fact, shows that one out of 14 patients who undergo a battery of screening tests such as ours revealed a condition which would not otherwise have been diagnosed. So you see, biochemical screeening can establish a diagnosis more rapidly in order to help the physician evaluate his patient more accurately. We hope that, as a result, this effort will shorten the patient's stay in the hospital. It is quite possible that application of this principle on a nationwide basis could lead to more efficient utilization of already overcrowded hospital facilities.

In order to gather this laboratory data in our hospital, we have introduced a number of automated analytical instruments. The instrument you see in this slide simultaneously performs 12 chemical tests on a patient's serum. Other pieces of automated apparatus do the hematology testing. Many laboratories throughout the country are using automated equipment of this type right now and there is really nothing unique about it. What is unique about our system, however, is the fact that we have linked these instruments directly to a computer.

(The illustration referred to follows:)