

delivered, and the kind of radiation equipment for which the computation is to be made.

The data is received at Sloan-Kettering, both in printed form and recorded on punched paper tape.

Since the teletypewriter is also equipped with the Data-Phone, the verbal communications can also be used when needed. The tape is fed into the computer, which is programed to prepare a complete treatment plan. The plan is then transmitted back to the hospital via teletypewriter. Total computer time for the complete treatment plan runs between 5 and 10 minutes, according to the complexities of the computations involved.

Representatives of Memorial Hospital state that before the advent of computers, radiation treatment planning was performed to the best of the ability of the professional making the computations. However, the plans had to be much more grossly calculated, because the time required for highly refined figures would have delayed the treatment of the patient. But even with computer computation, it previously took approximately 4 days for hospitals outside of the New York area to avail themselves of this service by mailing or bringing pertinent patient data to Memorial Hospital.

The two hospitals who have already availed themselves of the program are St. Luke's Hospital in New York, and Mount Zion Hospital in San Francisco.

This program will make Memorial Hospital's advanced computerized system and technical staff available to other hospitals, avoiding costly duplication of staff and equipment. Thus Memorial Hospital, functioning as a regional cancer center, will service institutions across the country. It is planned that this service will include guiding and advising collaborating hospitals via education and staff exchange programs.

As more and more of such regional cancer centers are developed, technical information will be transmitted from one center to another, thus assuring every patient accurate quality radiation treatment whenever and wherever indicated.

The radiation center service will make possible the practical and rapid diagnosis and determination of treatment planning that is so vital to the treatment of cancer patients by radiation.

I have asked Dr. John Laughlin, Attending Physicist at Memorial Hospital for Cancer and Allied Diseases, to describe for us the kind of treatment the computer prescribed. Dr. Laughlin has been associated with Memorial Hospital for Cancer and Allied Diseases for many years. To augment his Telelecture communication, Dr. Laughlin will also use some telewriting. Telewriting with Data-Phone data communication service makes it possible for a speaker to supplement his telephone presentation with handwritten notes or drawings projected on to a screen.

(The telewriting illustration performed in New York follows:)