New 'Smart Rounds' improves safety of radiation therapy

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The North Shore-LIJ Health System Department of Radiation Medicine has developed a novel process to optimize the safety and efficacy of radiation therapy and is presenting this data at the 55th Annual Meeting of in American Society of Radiation Oncology (ASTRO) in Atlanta, GA.

At most hospitals, when a patient is treated with radiation therapy, the treatment plan is usually quickly and superficially reviewed by other physicians immediately after treatment begins, leaving no time to catch errors or provide feedback on a complex treatment. Review at this late stage can lead to medical errors, and any changes that are identified can lead to harmful delays in patient treatments and costly use of medical resources to fix.

To address these problems, the North Shore-LIJ Department of Radiation Medicine started a pilot program called "Smart Rounds," in which a comprehensive, multidisciplinary, peer-to-peer review occurs at the beginning of the treatment planning process. This allows for a more meaningful review of the patient's treatment plan by formalizing discussions about patient care among physicians, medical physicists, radiation therapists and nurses before any planning starts. This leads to safer, more individualized radiation treatment plans and better utilization of medical resources.

As presented today at ASTRO, a six-month evaluation of the Smart Rounds program demonstrates striking improvements in the quality of

care, with the percentage of timely, errorless radiation treatment plans steadily increasing since initiation of the process.

"Smart Rounds is an essential tool to minimize errors and inefficiencies in the radiation therapy treatment planning process," said Brett Cox, MD, chief of brachytherapy in the Department of Radiation Medicine at North Shore-LIJ, and lead author of the study. "More than one out of three patients reviewed at Smart Rounds needed modification of their radiation treatment plan or treatment schedule to provide optimal care."

According to the study's senior author, Ajay Kapur, PhD, director of medical Physics research and education in the Department of Radiation Medicine, "Being able to deploy departmental resources in a prospective and focused manner maximizes the efficiency of the radiation treatment planning process and improves quality of care. Smart Rounds makes that possible."

"Smart Rounds is a powerful tool to optimize quality patient care," noted Louis Potters, MD, North Shore-LIJ's chair of radiation medicine. "We look forward to providing further innovations to maximize the quality of care our institution provides to our patients."

Provided by North Shore-Long Island Jewish Health System