Culture of safety key to reducing chances for medical errors

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Radiation oncologists can enhance patient safety in their clinics by further developing a culture of safety in which all team members are alerted to the possibility of errors and can work together to maximize safety, according to an invited article in the inaugural issue of *Practical Radiation Oncology* (PRO), a new medical journal whose mission is to improve the quality of radiation oncology practice. PRO is an official journal of the American Society for Radiation Oncology (ASTRO).

Each year, radiation therapy is used safely and effective to cure cancer and provide pain relief to millions of people living with a diagnosis of cancer. Advances in the field have allows doctors to dramatically improve the effectiveness of the treatment, extending lives and significantly reducing side effects. Unfortunately, some of these changes have also increased the potential for errors. While errors are rare and usually do not harm the health and safety of the patient, any error is too many.

"The advent of newer, more complex treatments has somewhat altered the treatment team's responsibilities, in some cases, instilling an unwarranted perception of infallibility," Lawrence B. Marks, M.D., professor and chair of radiation oncology at the University of North Carolina in Chapel Hill, N.C., and lead author of the article, said. "Our field needs to better understand the frequency and causes of errors, especially those with the potential to do harm. We also need to incorporate basic human-factors principles that minimize risks, into the design of our workspaces and services."

According to the article, basic principles that can maximize safety include automation, standardization, checklists, workflow improvement and redundancy for high-risk procedures.

"We need to develop a culture of safety in which all of the team members are working together to maximize safety and in which safety initiatives acknowledge the 'heirarchy of effectiveness,'" Dr. Marks said.

Provided by American Society for Radiation Oncology