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New Positioning System Facilitates Cancer Treatments

Agnesian HealthCare's Protura Robotic Patient Positioning System helps it provide precise radiation therapy to patients in its local community

ach year, community cancer centers treat about 85% of cancer patients in the United States. 1 Agnesian HealthCare Cancer Care Services brings exceptional cancer care closer to patients through its Central Wisconsin Cancer Program. Agnesian HealthCare's Fond du Lac location is one of a handful of image-guided radiation therapy (IGRT) and stereotactic body radiation therapy (SBRT) providers in the state, and it is the only facility in Wisconsin to have installed a robotic 6DOF patient positioning system.

The Protura robotic patient positioning system, a product of CIVCO Medical Solutions, is capable of positioning patients in 6DOF with sub-millimeter and sub-degree accuracy. Agnesian HealthCare has used it to facilitate IGRT and to implement SBRT treatment.

"SBRT requires highly conformal treatment planning as well as the tools to confidently deliver that treatment," said Tim Lemond, Agnesian HealthCare chief physicist. "That means sub-millimeter and sub-degree accuracy and a robotic 6DOF table with the ability to correct for translational and rotational errors. The Protura system meets these requirements and enables us to deliver high-quality SBRT treatments."

Agnesian HealthCare's Cancer Care Services sees patients from a wide area of East Central Wisconsin. The delivery of SBRT at a community center allows these patients to receive highly advanced treatment closer to home.

"With the addition of the 6DOF system, we are bringing the highest technology and the best treatment techniques to patients in our area,"

said Heather Bowen, MBA, RT (R)(T) (CT), radiation oncology supervisor at Agnesian HealthCare. "These patients get to receive treatment near their families and near their jobs. It's unique for us to be able to provide that without requiring our patients to travel." Agnesian HealthCare associates and providers are proud to provide this level of care.

Clinically, the addition of the robotic 6DOF system has improved treatment confidence and patient care. "Whether we are treating head and neck cases with intensity-modulated radiation therapy (IMRT) or delivering SBRT, accurately positioning the patient gives us clinical confidence that we are using the data from 3-D imaging to deliver treatment only to the tumor," said Dr.

Timothy Korytko, a board-certified radiation oncologist with Agnesian HealthCare. "We're able to use smaller margins and minimize the side effects of treatment. Using the Protura system provides the best results and care for our patients."

Through the addition of a 6DOF robotic patient positioning system, Agnesian HealthCare CWCP has brought cutting-edge radiation treatment technology into a community cancer care setting, providing an example for community cancer centers across the country.

Reference:

1. http://ncccp.cancer.gov/Media/FactSheet.htm

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