IAP Abstract

Development of a customized patient communication tool to improve patient satisfaction and communication at the Maryland Proton Treatment Center (MPTC)

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**Background:** MPTC is a multi-room proton center for radiation therapy treatments with four matched treatment rooms. Our patient satisfaction scores are high however the area that needs most improvement is in communication for center downtime (delay or cancellation of treatments) and communication to patients regarding actual treatment time on operational days. This is a common problem at multi-room proton centers across the country and to date, there does not exist a vendor solution for this communication problem as these appointments reside outside hospital EMRs such as EPIC.

**Purpose:** The purpose of this project is to develop two custom tools for patient communication. The first will be a waiting room dashboard which will display each rooms’ schedule along with the estimated wait time using HIPAA-compliant displays. This will allow patients in the waiting room to know where they stand in the queue. It will also enable patients to know if there is a slight delay due to machine issues. The second will be to develop a customized text messaging platform for patients that can communicate customized messages for room and/or center treatment delays or cancellations.

**Methods:** Working with our IT team, we will develop two separate platforms. The waiting room display will be shown on a computer monitor. A customized script that pulls information out of ARIA (radiation oncology EMR) will be required. In the second platform we will use an existing script used for communication to staff and customize it further with integration into ARIA. We will develop an ‘opt-in’ workflow for our patients. We will conduct a staff and patient survey to be administered prior to implementation and after to see if communication scores improve and if staff efficiency and satisfaction are also improved. Once complete these tools they could be deployed to other proton centers in the United States.

**Results:** To date, we have successfully completed the build of the text messaging platform. We are in the process of developing the text messaging ‘opt-in’ workflow and the patient/staff survey. We have successfully built the waiting room dashboard, however as we finished that build, the Hospital system decided to change the medical ID number being used for patients therefore the dashboard has to be reconfigured to the new ID number. Once reconfigured, this project will also be ready for implementation.

**Discussion/Conclusion:** We feel that implementation of these two tools will improve both our patient and staff satisfaction. It also has the potential to improve efficiencies at the center due
to less radiation therapist disruption. Once successfully implemented it’s a tool that could be expanded to multi-room proton centers.