Gotham Health Network Virtual Infusion -Special Innovation Project

Rural oncology programs need to design and test cost-efficient quality improvement and staff training models to provide valuable oncology care, utilizing telemedicine, and improving patient care outcomes, all while maintaining accountability for the care delivered.

Telemedicine is a useful and efficient way to provide real-time expert medical care for patients residing in rural communities. The oncology literature is bereft in models that describe the use of telemedicine services to provide oncology support for rural hospitals administering oncology therapies. Although many rural hospitals have infusion centers that administer chemotherapy, those facilities do not have direct oversight by an oncologist or oncology-trained certified nurse practitioner (CNP). Due to the high risk associated with chemotherapy agents and the potential for infusion reactions, oncologists have a limited list of agents administered off-site. Patients must travel to the tertiary care setting to receive their prescribed treatment.

Nurses in the rural infusion centers based in three consortia hospitals will become oncology trained through a partnership with a larger tertiary hospital, Ackee City Hospital, located in the metro city of Ackee. However, the nurses will not have ongoing exposure to many of the complex treatments ordered by the oncologists. If questions arise regarding lab work, the treatment plan, or the symptoms the patient is reporting, the rural nurses would contact the oncology specialists at the larger hospital by phone. They will pass from the receptionists to the triage nurse who in turn, will relay the question to an oncology provider. Oncologist can address questions in a timely fashion between office visits for the patient and orders received return calls (video or voice) made to the rural site. This process will not cause delays and dissatisfaction for the patient.

A family practice or internal medicine physician from Ackee City Hospital will provide direct oversite of rural hospitals administering chemotherapy and properly trained nurses. Rural hospitals may have limited oncology experience or knowledge regarding the treatments. Uncertainty regarding the management of complex symptoms or infusion reactions often lead to the cancellation of the patient's treatment until they could travel to the tertiary care center for further evaluation.

Oncology-trained CNPs of Gotham Hospital will review lab work, sign orders, manage side effects of treatment and manage infusion reactions. These activities will decrease interruptions to the oncologists' schedules. Direct oversight provided by the CNP will also decrease delays and interruptions in patient's treatments as well as emergency rooms visits due infusion reactions. The CNP will be well-versed in the standards of care and practice guidelines that needed to be followed so that treatments will be covered by payers, will also decrease the patients' and institution's financial risk and improve quality of services.

Value-added: SHIP funds will provide for staff training to enhance quality services. Funds can also support hardware and software necessary to support this project. The purpose of the Gotham Hospitals Virtual Infusion Project is to determine if appropriately **trained** CNP staff can provide direct oversight to hospital-based rural infusion centers with necessary telemedicine **hardware and software**. Additionally, this project will result in a **cost savings** generated by collaborating with a larger hospital.

Measures: Cost savings (annual reporting)

Patients served (annual reporting)

Staff trained (annual reporting)

Budget: \$36,000 annually for 3 participating hospitals