Interprofessional Collaboration to Optimize Intrathecal Chemotherapy Administration

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Introduction

- 1.5 million U.S citizens diagnosed with cancer annually.
- Institute of Medicine (2013) delineated barriers and ways of optimizing oncologic care across the spectrum...diagnosis through treatment and beyond:
  - Training staff and coordinating the workforce.
  - Incorporating evidence-based practice (EBP).
  - Integrating an information technology system.
  - Translating relevant evidence into practice.
  - Providing accessible and relatively inexpensive care.
  - Engaging patients.

Purpose

- An interprofessional team initiated an evidence-based practice project in order to develop a comprehensive program for interdisciplinary and multi-institutional staff to ameliorate care for patients receiving chemotherapeutic agents through intrathecal administration.

Implementation

- Johns Hopkins Nursing Practice Model used as framework.
- Team composition: 1) nurse managers, 2) nurse clinicians, 3) physicians (hematologist, oncologist, radiologist), 4) pharmacists, and 5) information technologists.
- Multi-pronged approach used to optimize structures and processes for ITC administration.
- Strategies included: 1) Buy-in from key stakeholders (at Harris Health System sites, medical schools, and MD Anderson), 2) Consensus regarding staff education across disciplines, 3) Integration of new IT processes to facilitate drug acquisition from pharmacy and EHR documentation.
- Used problem-based learning, case studies, peer coaching, simulation, and EHR documentation in educating staff.

Results / Implications for Practice

- Multi-faceted, evidence-based protocol resulted in more efficient structures and processes for:
  - Staff education.
  - Reducing barriers in oncology care.
  - Allowing patients time to process diagnosis, understand treatment options, and obtain guidance regarding plan of care.
  - Enhanced pharmacy acquisition and administration of ITC.
  - Strengthened alliances across hospital systems and two medical schools.
  - Providing patients a voice in planning their trajectory of oncologic care.

Gaps in Practice

- Special Procedures / Interventional Radiology (SP/IR) at Ben Taub and Lyndon B. Johnson Hospitals and two infusion centers are responsible for administering chemotherapeutic agents via intrathecal routes.
- Anecdotal reports indicated that structures and processes for chemotherapy administration, procedural support, and documentation varied at the four sites.
- Retrospective chart audits initiated to determine if current practices optimized or impeded intrathecal chemotherapy (ITC) administration, adhered to the CMS mandates, and positively or negatively impacted patient outcomes.
- Audits showed that physicians administer the medications; however, RNs documented the ITC administration due to documentation limitations in the electronic health record (EHR).

References