Reducing Avoidable Hospitalizations for Nursing Home Residents

Role of the Missouri Quality Initiative Intervention Support Team

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Hospitalization for nursing home residents is a national concern. Studies suggest the majority of hospital transfers are avoidable,[1-3] often resulting from poor care processes such as lack of early illness detection, adverse event occurrences, and poor communication between nursing home staff, providers, and residents/families about goals of care.[1,2,4] Efforts supported by the Centers for Medicare and Medicaid Services are underway in the United States to reduce avoidable hospitalizations for nursing home residents.[5] In 2012, the University of Missouri Sinclair School of Nursing was one of 7 sites across the United States selected for their evidence-based model called the Missouri Quality Initiative (MOQI), based on the nationally recognized Quality Improvement Program of Missouri (QIPMO).[6] The goal of the MOQI was to work with 16 nursing homes in the Midwestern United States who had higher than national averages of hospitalization rates to change their systems of care delivery so that reduced hospital transfers could be achieved.[6] Since 2012, the MOQI has achieved a 30% reduction in all-cause admissions following full implementation.[7]

The MOQI method of reducing hospitalizations embeds a full-time advanced practice registered nurse (APRN) in each nursing home to implement early illness identification strategies including using Interventions to Reduce Acute Care Transitions (INTERACT) tools,[8] managing acute and chronic conditions, initiating advance directives/advance health care planning, and facilitating the use of health information technology. APRNs use data to drive systems-level change including the use of monthly feedback reports showing the number of hospital transfers and changes of condition that provide longitudinal performance data to the APRN and nursing home team. Additionally, APRNs complete root cause analyses of all hospital transfers to help identify underlying causes. These root cause analyses are reviewed monthly with the project supervisor who is a member of the multidisciplinary intervention team.

The multidisciplinary intervention team has expertise in nursing home practice, geriatric medicine, advance care planning, end-of-life care, health information technology, and systems/quality improvement (QI). This team provides support to each MOQI APRN, hereafter referred to as APRN, to ensure achievement of successful outcomes. The APRN and the intervention team work closely with nursing home leaders and staff to facilitate system-level change to sustain lower hospital transfer rates. The purpose of this article is to describe the critical

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role of the multidisciplinary intervention team of clinical experts in supporting improved processes and sustained outcomes.

MOQI INTERVENTION TEAM

While the overall MOQI goal is to reduce avoidable hospital transfers, to have a sustainable impact at the system-level, multiple facets of nursing home care delivery processes need to be evaluated for effectiveness, modified as needed, and monitored to assure improvement is achieved. Thus, a multipronged, multidisciplinary approach has been a critical component to support the embedded APRN as well as nursing home leaders and staff. Key members of the MOQI intervention team include a medical director, APRN project supervisor, care transitions coach, health information coordinator, QI/INTERACT coach, and a database manager. Each role is unique, yet together provides a synergistic focus on facility-wide QI. The team is illustrated in the MOQI intervention model, first published in 2014.[6] The model has been modified to clarify team member roles and the important component of feedback reports of primary outcomes provided monthly to the participating nursing homes (Figure).

MOQI medical director

The medical director is a physician with experience in geriatrics and long-term care and provides medical guidance to clinicians who provide services to study-eligible nursing home residents. The medical director works closely with the APRNs to support their work in identifying and managing ill residents and changing nursing home systems. Frequently, the medical director also provides educational sessions on topics related to the care and treatment of older adults to the APRNs, facility medical directors, other medical providers, and leaders in MOQI facilities. These frequent educationally focused communications help build relationships with other providers to facilitate easier adoption of advances in evidence-based practice and improve willingness to treat more conditions within the nursing home, thus reducing hospital transfers. This person has a working knowledge of applied and evaluative research designs, as well as implementation of evidence-based practice, particularly as it relates to value-based care systems and the need for overall improvement.

MOQI project supervisor

The project supervisor provides oversight and coordination of the MOQI intervention team

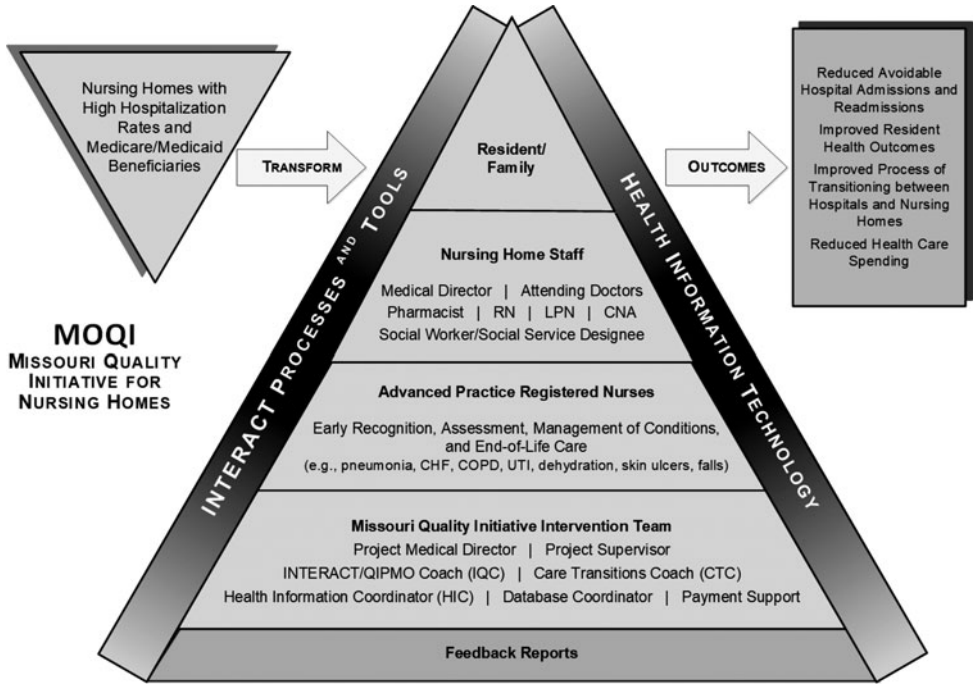

Figure. MOQI intervention model.

and oversight of the APRNs. In addition to reviewing root cause of analyses of each hospital transfer, the project supervisor plans and/or provides educational offerings for the APRNs and nursing home staff. Critical to the success of this role is the capacity of the project supervisor to maintain a working relationship with each facility's leadership team, medical director, and attending physicians. At the beginning of the project, the project supervisor had strong long-term care advanced practice skills and experience; later in the project, as the skill set of the APRNs excelled, a PhD-prepared RN became the supervisor. The project supervisor has a solid working knowledge of INTERACT tools, QI practices, long-term care evidence-based practices, and evidence-based organizational improvement practices. These skills are essential to coaching the APRNs in day-to-day activities to meet project goals.

Care transitions coach

The care transitions coach (CTC) is a master's prepared social worker who is responsible to work with facility social services staff to ensure that care plan processes follow best practices regarding the development of resident-centered goals of care and advance directives. A critical component of the CTC's job is to increase staff awareness about the importance of referring to advance directives when making care decisions and developing residents' goals of care. The CTC works with the APRN and nursing home staff to ensure systems are in place for timely completion and updating of advance directive documents. Additionally, the CTC assists facility staff to implement INTERACT processes and serves as a liaison between hospitals and nursing homes to enhance communication about care transitions.

Health information coordinator

The health information coordinator (HIC) works directly with the APRNs, nursing homes' corporate and facility leadership, clinical staff, and information technology (IT) partners to facilitate acceptance and usage of technologies. The HIC promotes the use of technology by providing care management education, supporting data reporting activities, and providing input on technical architectures, frameworks, and strategies for smooth flow of information among stakeholders. Additionally, the HIC collaborates with nursing homes' health care partners to identify opportunities to improve health information exchange and implement change. The HIC also collaborates on QI initiatives within each nursing home related to health information exchange. The person working in the HIC role is an RN with a bachelor's degree, has a health informatics background, and is well-versed in health information exchange. This blend of skills has proven effective to increase the use of health IT and health information exchange.

INTERACT/QIPMO coach

The primary role of the INTERACT/QIPMO coach (IQC) is to coordinate with the APRN and nursing home leadership to provide educational programs to help facility staff integrate the INTERACT tools into their care processes and support QI goals of the MOQI. Ongoing support of the APRN and nursing home by the IQC is central to the sustainability of early illness recognition through the use of Stop and Watch and Situation, Behavior, Assessment, and Review (SBAR) tools.[8] This RN position requires a working knowledge of the INTERACT model, QI practices, evidence-based long-term care clinical practices, and evidence-based organizational improvement practices. The IQC and the CTC share responsibilities for participating in QI meetings and related projects in the 16 facilities.

Database manager/coordinator

A relational database is essential to the MOQI project for continuously monitoring outcomes, supporting data analysis and required reporting, and most importantly, preparing monthly performance feedback reports to facilities. One major part of the role is as a primary database manager, responsible for coordinating data reporting activities and maintaining the MOQI database (eg, hospital transfers and changes in condition). The second major part of the role is that of the database coordinator who works in the nursing homes with the project's HIC, APRNs, and nursing home staff to facilitate use of technology, as it relates to project data reporting. Feedback reports are prepared by the database manager/coordinator from monthly data extractions from the database to help participating facilities visualize their performance as compared with other facilities in the MOQI project. The database manager/coordinator engages and educates facility staff on their role in accurate,

timely data submission, and management so that monthly feedback reports can guide each facility and reinforce their progress toward the project goals of improving resident outcomes and reducing hospitalizations.

ROLES COME TOGETHER FORMING THE SUPPORT TEAM

The intervention team has purposeful and frequent contact with the embedded APRNs as well as nursing home leaders and staff. Onsite visits to the nursing home by members of the intervention team range from monthly to every 3 months. In addition, frequent communication by email, phone, and videoconferencing occurs as needed between visits. The strong collaboration between the intervention team and APRNs makes for effective working relationships with positive outcomes.

Additionally, the intervention team members have developed strong relationships with nursing home staff associated with their area of work. These relationships are sustained through regular contact, primarily in-person site visits, along with email and phone follow-up. For example, the database coordinator has an effective relationship with the admissions and business office staff. While not directly impacting care, this relationship promotes positive attitudes regarding the MOQI project and ensures timely collection of data so that feedback reports are also timely.

The intervention team is highly collaborative with excellent communication among the team members. The team meets face to face monthly to discuss successes and challenges in each nursing home and reach out to each other as needed in between formal meetings. For example, during a routine site visit the project supervisor was informed by an APRN that there was a particularly challenging patient situation related to advance care planning. The project supervisor quickly contacted the CTC who subsequently visited the facility and met with the resident and social services department. The result was a family conference where goals of care were discussed and the resident's code status was appropriately changed.

IMPLICATIONS FOR NURSING HOME PRACTICE

Achieving improved outcomes such as reduced avoidable hospital transfers requires systems-level change.[7] However, many nursing homes, especially those in need of improvement, are often challenged with sustaining efforts necessary for complex systems-level change. Rantz and colleagues[9] identified that challenges such as leadership turnover, lack of staff engagement, and competing staff demands were barriers to sustain team efforts for improvement. Often a champion is called upon to carry the charge forward for improvement efforts; however, champions can become challenged when other organizational members are not aligned with the goals of a program. A single champion can readily be overwhelmed with other demands or lost to the organization in turnover. A multidisciplinary team can sustain the change effort, each contributing at a critical time when needed by the APRN and the nursing home.

The primary focus of the intervention team is to work closely with the APRN and nursing home leadership team to successfully reduce hospitalizations and emergency department visits by systematically improving care processes.[7] The APRN is essential to facilitating change within the nursing home by coaching and mentoring staff in evidence-based resident care and QI efforts. However, the support of the multidisciplinary intervention team is required to strengthen areas of weakness or to support critical elements of the work required to achieve success. Together with the intervention team, the APRN and facility leadership and staff are able to partner to achieve the MOQI goals.

CONCLUSION

The MOQI multidisciplinary intervention team of clinical experts plays a critical role in helping nursing homes achieve and sustain reduced hospital transfers. The intervention team's sole focus on QI and achieving systems level change is a necessary complement to the onsite work of the APRNs. The whole of the team with the APRN combines the strengths of individuals into a force that can persist through the change effort—a team is truly more than the sum of its members.

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