The role of a pharmacist in a super-utilizer care coordination team

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ABSTRACT

Background: Super-utilizer patients have costly and often preventable encounters with the health care system. Our super-utilizer care coordination program consists of an interprofessional team that works to enhance care coordination, improve quality of care, develop patient autonomy, and ultimately reduce utilization and cost.
Purpose: To describe the processes of one super-utilizer team and detail the role and responsibilities of a pharmacist in this team.
Program process: Patients are considered for enrollment if they are ≥18 years of age with at least two hospital admissions in 6 months. Pharmacist procedures through the program include medication reconciliation, home visits, and transition of care services.
Results: Since 2012, the pharmacist has participated in the care of 21 super-utilizer patients. A total of 144 pharmacist interventions occurred, and 98 medication discrepancies were detected and addressed.
Conclusion: These results highlight the utility of a pharmacist in preventing and addressing medication errors for super-utilizer patients.

Introduction

The United States continues to lead the world in health care expenditures.[1] Spending is highly disproportionate, with the top 5% of the population accounting for nearly 50% of the costs. The highest 1% consumes a substantial 21.4% share of the resources, with an annual mean health care expenditure of $87,570 per person.[2,3]

To target health care spending meaningfully, care and attention must be given to these outlier patients. Known as high- or super-utilizers (SU), patients with the highest costs are also those with the most needs. While definitions vary, generally super-utilizers are patients with frequent, costly, and often preventable encounters with the health care system. They typically have numerous chronic conditions and behavioral health co-morbidities. Many experience great stressors such as poor housing or social support. Together, these factors contribute to their disparate use of health care resources. Despite their spending, rising costs have not translated to better outcomes for SU patients, creating a devastating cycle of further spending with worsening conditions.[3,4]

The term "super-utilizer" implies the blame lies solely with the patient when in fact much of the responsibility is with the health care delivery system's failures. There is fragmented coordination across providers, whether medical, behavioral, or social. Patients receive little guidance on managing their own health or navigating services available to them, leading to uninformed decisions.[3,4]

Our super-utilizer program is a data-driven, high-intensity, community-based, patient-centered service specific to the needs of SU patients. It consists of a dedicated interprofessional team that works to engage patients to deliver comprehensive coordinated care. The team encourages self-advocacy and accountability, helping to develop autonomy in patients' own health. The goal is to meet all needs — not just medical — by bridging knowledge gaps and coaching patients to undertake services and habits that improve the quality of their care while reducing costs.[3,4] Members of these teams commonly involve physicians, nurse case managers, and social workers.

Pharmacists have a natural role within these SU teams.[5] Adverse drug events (ADEs), drug interactions, and poor adherence are leading causes of disease progression and hospital admissions.[6–8] Pharmacists have the skill set to address these pitfalls and have repeatedly shown effectiveness in reducing disease progression, drug-related problems, hospitalizations, and consequently cost.[9–14] The purpose of this paper is to describe the extension of these pharmacist roles in a super-utilizer program.

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The super-utilizer team

Dr. Jeffery Brenner is credited with first recognizing the need to target the highest utilizing patients with his work through the Camden Coalition of Healthcare Providers in New Jersey.[15] The program's success inspired others to develop similar programs. In 2012, the South Central Pennsylvania High-Utilizer Learning Collaborative formed between practices in the region to share their innovations with high-utilizer programs.

One such practice is the SU team of Crozer-Keystone Health System (CKHS) of Delaware County, Pennsylvania. CKHS is a multi-hospital health system with outpatient family medicine clinics. The SU program is based out of a Level 3 patient-centered medical home practice that trains family medicine residents – the Center for Family Health (CFH). By sharing the network's electronic medical record, the team can use utilization and cost data to identify potential candidates, view provider notes, and communicate directly to providers in the network. Our program does not replace primary care, but rather provides intensive care coordination services by partnering with patients, providers, and other community entities.

In 2012, CKHS, the Camden Coalition, and Cooper University Health Care collaborated to form the nation's first SU Fellowship, which trains physicians to develop and manage SU programs. Originally, only patients from CFH were targeted. In 2014, a health insurance company funded a nurse case manager position for a proof-of-concept of the program's ability to improve care while reducing utilization and costs for SU patients. This expanded the target population to the entire network who has a Medicare Advantage policy with the payer. Besides the differences in patient pool and time in existence, the CFH SU program and the proof-of-concept did not differ in how they operated. The SU team consists of two fellows, an RN case manager, a psychologist, a Doctor of Psychology student, a Master of Social Work student, and a pharmacist. Besides the fellows and case manager who were hired specifically for SU work, the team members divide their time between SU work and other clinical responsibilities of the family medicine center. The team meets regularly in "huddles" to discuss each patient and develop action items for the week. Outside of these huddles, team members often consult each other based on their respective areas of expertise.

Program processes

The SU program targets patients who are ≥18 years of age with 2 or more inpatient admissions in 6 months. Exclusion criteria include pregnancy, active cancer, high utilization from a single catastrophic event, or serious mental health diagnosis without other chronic medical problems.

If a patient agrees to enroll, an initial intake on the patient's complete medical, psychological, and social history is completed. Patients identify goals they hope to achieve with the program and a shared care agreement is developed and signed by both parties. The patient signs a HIPAA release so other providers can share information and coordination of care can occur.

Patients eventually "graduate" from the program after meeting the goals in the care agreement. They then continue with a primary care provider (PCP) for ongoing care. Less often, patients have been discharged from the program for several reasons, including dropping out, loss to follow-up, failure to engage, or death.

Clinical pharmacist role

Owing to the complexity of SU patients, delivery and coordination of care must be individualized. Though a pharmacist's relationship may differ between each patient, there are standard procedures built into the pharmacist's role that every patient experiences. Equally important as the pharmacist's relationship with the patient is her ability to integrate her services as a medication expert within the team. The following description of services highlights the pharmacist's ability to enhance the efforts of the rest of the team by providing comprehensive care from the standpoint of medication usage.

Medication Reconciliation (MR)

The pharmacist completes MR for every SU patient. She reviews each medication with the patient and completes a standardized MR form. Medications are assessed for indication, appropriateness, effectiveness, and safety,[16] and are verified against the patient's chart or discharge instructions for any discrepancies. Additionally, the patient is asked about their medication-related goals such as addressing undertreated conditions or decreasing cost and pill burden. Prior experiences and preferences concerning medications are also noted. Reasons for poor adherence, perceived barriers, and behaviors associated with poor adherence are documented.

Based on the MR, the pharmacist works with the team to develop an action plan to optimize the patient's medications and resolve discrepancies. This may involve patient counseling or discussion with providers. A revised medication list is updated in the patient's chart. The patient is also given the list and asked to keep copies in their home and on their person. Because of the ever-changing nature of SU patients' health status, MR should be a reiterative process.

Home visits

Pharmacist home visits are uncommonly reported in the literature, however the limited evidence shows benefits to conducting home-based MR. After pharmacist home intervention, medication problems decrease,[17] patients' perceived knowledge increases, and patients report satisfaction with the service.[18] After hospitalization, home MR led to reduced cost and utilization in one study of a pharmacist-driven program.[19] Other studies show reduction of medication errors,[20] readmissions,[21,22] ER visits, length of stay, and out-of-hospital death.[21]

Home visits are a core component of SU programs and vital to the success of our program. They give an authentic context of the patient's lifestyle, support system, and nutrition habits that may otherwise be unclear through a remote MR. The pharmacist visits with other members of the team to visualize how their medical conditions affect their everyday life. The home is an excellent venue for patient education and provides a setting to bolster the relationship between the patient and providers. We therefore adopted the philosophy that an MR was not accomplished until the pharmacist visited the patient's home.

Patient education

Following MR and home visits, the pharmacist inevitably identifies areas for education. Understandably overwhelmed by their medical conditions, SU patients often exhibit poor understanding of therapies. Described as health literacy, these skills relate to the capacity to obtain, process, and understand basic health information needed to make appropriate health decisions.[23,24] Patients may not understand the consequences of non-adherence, leading to hospitalizations and higher health care costs.[8,25–27]

Our pharmacist advises patients on proper administration, how medications improve disease states, ADE management, and self-care behaviors to improve adherence.[28,29] She has been trained in