

Perspectives on Root Causes of High Utilization that Extend Beyond the Patient

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Introduction

IN 2012, MERCY HEALTH SAINT MARY'S embarked on a journey to intervene on high-need, high-cost (HNHC) patients. Rather than following traditional approaches of hiring new care managers or creating new clinics, we focused on how we could change the system's response to complex patients. One of the key outcomes from this approach was implemented by a master's prepared clinical nurse leader, who developed a Complex Care Resource Center and coled an interprofessional complex care committee with an emergency department (ED) medical director to create a tool embedded in the electronic medical record (EMR) called Complex Care Maps (L. Hardin et al, unpublished data, 2016). The Center receives referrals from any provider who identifies a patient with high-frequency health care system access or complex unresolved needs. Intervention includes analysis of root cause drivers for patient instability, coordination with cross-continuum providers to develop a plan of care, and entry of the plan into a succinct Complex Care Map that equips providers in the moment of encounter with helpful information to improve outcomes.

After serving more than 1400 patients through the Center and developing more than 800 Complex Care Maps, we have had the opportunity to observe key themes driving high utilization in the population. Unexpectedly, the majority of patients referred to Complex Care are younger than 60 years old (L. Hardin et al, unpublished data, 2016). They represent a population that was previously invisible to us because of their lack of engagement with primary care services, lack of insurance, lack of participation in care management initiatives, or because of connection to a primary care system outside of our hospital network, despite using our system for their hospital care. They fall between the cracks of traditional data analysis sources such as commercial payer data, yet represent a significant portion of the hospital business (700 high-frequency patients represented 10% of the volume of hospital business in 2012). They are the face of the young dual eligible population, new Medicaid subscribers, and the uninsured, who have traditionally been left out of comprehensive population analysis data.

A core competency of the intervention provided by the Complex Care Center and embedded in the Complex Care Map tool is a 10-year review of the medical record and a comprehensive root cause analysis of what drives high frequency or instability in the patient's plan of care. Through this analysis, several themes have emerged that are rich with opportunities for policy change or system redesign (Table 1).

Policy Root Causes

The most common policy root cause driving instability in the patients we serve is overprescribing of narcotics or benzodiazepines. There is no policy standard to require physicians to check a State Prescription Monitoring system before adding an additional opioid or benzodiazepine to a patient's plan of care. Attempts at physician education have failed to broadly change this practice.¹ Requiring review of a patient's current verified prescriptions before adding additional Schedule II substances may facilitate an eye-opening experience for practitioners that could affect patient safety.

Policies allowing primary care and specialist physicians to "fire" patients comprise a second root cause of frequency. Once released from a medical practice, patients struggle to get into other physicians' or specialists' practices, and their primary care often shifts to the ED or to a clinic managed by resident physicians. The natural turnover of residents may not provide the consistent primary care that complex patients need for stability. The opportunity exists to provide teaching and resources to help practices manage complex behaviors.

Several patients with felony records alerted us to an unexpected policy root cause of their frequency—their inability to obtain employment and housing. With this awareness, we began to piece together a pattern within a subpopulation that appeared to frequently access the ED seeking narcotics. With urine drug screen results suggesting these patients did not take narcotics as often as expected, one could conclude this population was selling the narcotics. If employment is not possible, the health system may become part of an economy providing housing, care, and income.

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TABLE 1. ROOT CAUSES OF HIGH UTILIZATION THAT EXTEND BEYOND THE PATIENT

Policy root causes	
Overprescription of controlled substances	Some patients receive narcotics and benzodiazepines from multiple providers, yet there is no policy standard for physicians to evaluate prescription refill patterns, nor is there sufficient oversight of whether physician prescribing patterns integrate with evidence-based guidelines. Widespread undertreatment and overtreatment of pain and anxiety are problems that remain to be solved.
Patient-initiated misconduct	A pattern of unattended appointments hinders a provider's ability to meet value-based outcome requirements, and thus patients may be fired from care. In addition, complex patients with behavioral health conditions can communicate in ways that result in being dismissed from a practice because of inappropriate behavior. Although patients should be accountable for keeping commitments and respectful interaction, behavioral patterns are at times rooted in unmet needs. Dismissal exacerbates the fragmentation they experience in the system, ultimately contributing to inappropriate utilization and health care expenditures. We are working to develop an early identification and intervention system for patients at risk of dismissal from care.
Felony records and unemployment	Several patients have identified felony records and the consequential inability to obtain employment as a root cause driver of high-frequency health care access. Lack of employment results in limited access to insurance, so the hospital system and ED become the primary care and specialty care provider. Overprescription of narcotics from the ED also has been identified by patients as a driver of frequent access because narcotics are a commodity that can be sold for income.
Housing First	In certain markets, housing is inaccessible to those with a history of criminal sexual conduct, arson, felony record, or current active substance abuse. Patients without stable housing have minimal chance of consistent chronic disease management and are often integrated in communities where threats to safety and substance abuse are common. Housing first policies provide housing as a core stabilization factor to impact health care utilization. ²
Clinical root causes	
Evidence-based disease management	Four key subpopulations of HNHC patients had high frequency because of lack of evidence-based disease management: diabetics with gastroparesis, sickle cell patients with frequent transfusions and iron overload, COPD patients with conflicting disease management plans from primary care and specialist physicians, and patients with migraines taking high-dose narcotics as treatment.
Symptom management	A contributing factor to frequency for some of the patients was a lack of evidence-based or proactive symptom management plans. This was common in patients with chronic migraines and COPD.
End of life	A small number of patients had high frequency because they were at the end stage of a chronic disease process but were not ready to choose hospice. This was common with young (age 50–60 years) end-stage COPD patients and young cancer patients.
System root causes	
Lack of integrated medical record	Mental health and substance abuse records are separated from other records because of interpretations of confidentiality regulations such as HIPAA and CFR Title 42 Part 2, yet understanding a patient's complexity of needs often hinges on the combination of these records. ⁵
Lack of emphasis on key information in medical record	Key pieces of information for driving stabilization can be lost or omitted from the medical record, including advance directives, guardian identification, and decision maker contacts. Social determinants of health information are not consistently built into the EMR or collected as a part of routine care, including housing, transportation, employment, safety, trauma history, literacy, or access to food. ⁶
EMR design un conducive to efficient review of complex patients' histories	Providers do not consistently look at the medical record beyond a limited number of visits because of the burden of disjointed patient information. This provider phenomenon contributes to fragmentation because relevant patient data are not carried forward (psychiatric diagnoses, substance abuse information, and recent trauma) in the current plan of care.
Inadequate provider compensation for history review of complex patients	Not all complex patients are created equal: some have histories that require much more time to understand than others, even for the most experienced clinician. Because of time constraints and lack of incentives in an environment where physicians are pressured to do more in less time, shortcuts are made such as copying diagnoses rather completing a new comprehensive H&P. This contributes to the cycle of propagating incomplete or incorrect patient data in the EMR.

COPD, chronic obstructive pulmonary disease; EMR, electronic medical record; ED, emergency department; H&P, history and physical; HIPAA, Health Insurance Portability and Accountability Act; HNHC, high-need, high-cost.

A fourth opportunity for policy investment is in Housing First practices. Being homeless does not create high-frequency health care access in our market, but having a health condition with a substance use problem and a personality disorder or a psychiatric diagnosis makes it extremely difficult to obtain or sustain safe and stable housing. Not only have we observed high-frequency ED visits in this population, but also long inpatient lengths of stay because of the inability to place complex patients in a residential setting. Policies that promote housing regardless of current substance use, behavior, or history of felony records have been shown to reduce frequent health care access.²

Clinical Root Causes

We found several symptom groups that unexpectedly drove high frequency. These conditions did not show up in traditional coding reports on volume because there were multiple codes that could be used for the corresponding visits. Gastroparesis, chronic pain from sickle cell disease, chronic obstructive pulmonary disease patients without integrated care and action plans, and patients with migraines requiring high-dose narcotics for treatment were noted in the population. We worked on several evidence-based tools and practices to embed change in care delivery for these populations in our system.

Integration of palliative care or advanced illness care is an opportunity for enhancement in the health care system, especially for younger people who have limited prognosis yet are not ready for hospice. Having home-based symptom management and proactive and interprofessional support to address the complex needs of this population is a gap in current care delivery. Policy and reimbursement changes that allow for advanced illness management in the home are promising practices to address this need.³

System Root Causes

Integration of medical and behavioral health information in the EMR is a current focus of the national dialogue for HNHC patients.⁴ Many of our complex patients had behavioral health issues that were not translated across encounters because of this barrier. Collaboration across organizations also was hindered by interpretations of regulations for sharing patient information for coordination of care. Integrated consent forms for medical and behavioral health information are beginning to address this problem, yet much remains to be done to create a seamless comprehensive system of care.⁴

HNHC patients often have frequency drivers that are not consistently captured in the EMR. Housing, transportation, access, safety, literacy, and decision makers are frequently missed in assessment and documentation, and yet can be the linchpin that determines success or failure in a plan of care. In addition, our EMR does not include fields to capture the cross-continuum care team serving the patient, which hinders efficient collaboration across settings.

Fragmentation in design of the EMR has been cited as key barrier for practitioners to comprehensively review a patient's history (L. Hardin et al, unpublished data, 2016). Practitioners with an inability to access or view a complete

picture of the patient are unlikely to resolve the issues of HNHC patients in a 15- to 20-minute encounter. An additional barrier to capturing the complete patient story is the lack of reimbursement for comprehensive record review and time constraints in the moment of encounter. New reimbursement codes for complex patients may offer new incentives to overcome this barrier.

Conclusion

Although these observations are not presented in a qualitative research format, we felt it was important to bring forward the themes for additional national dialogue. The experience of having served such a large population of complex patients over 4 years, including patients who are completely unengaged with care management, has given us a unique window to see opportunities to prepare for comprehensive population health. As health care systems shift strategy to more risk-based contracts, focusing on root causes beyond the patient offers opportunity for enhancement of quality and safety in care.

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