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Analysis of Primary Providers' Role in Healthcare Efficiency

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Introduction

Often the core issue in healthcare inefficiency can be narrowed down to either miscommunication or lack of communication. Potentially Preventable Emergency Department Visits (PPEDVs) are recognized as a major hindrance to efficiency in the healthcare industry and one of the many problems driving changes in healthcare management. Potential solutions are hotly debated, but to date no unifying models have emerged. The economic impact is well-documented and unsustainable; both the personal and professional impact on individual physicians is underscored by the increasingly common migration to a Pay-for-Performance system. Understanding the causes of these visits, including the role of health disparities, leads to the undeniable fact that the human element of healthcare management is falling out of favor. Patient Navigation by Community Health Workers (CHWs) are proposed as a potential intervention, discussing both their capabilities and what might hold back widespread implementation.

Keywords: Ambulatory Care-Sensitive Condition; Community Health Workers; Emergency Departments; Primary Care; Healthcare Management; Health Disparities; Patient Navigation; Different Terms Featured in Articles on This Topic: Potentially Preventable ED Visits; Non-Emergent ED Visits; Primary Care-Related ED Visit.

Part 1: Patient Care as a Business

Most of us did not set out to become physicians thinking of healthcare as a business. In 2012, the American Medical Association Practice Management Center published a guide to evaluating and negotiating emerging payment options. Still, physicians are concerned that the technical details of ever-changing contracts, claims, and coding are too time-consuming, and frankly confusing, for many to manage themselves [1]. Most of us were not trained in business or financial management. Nevertheless, metrics are undeniably creeping into our professional lives more and more each day. The unfortunate reality is that for facilities and insurance

companies to survive financially, someone must simplify each encounter into statistically meaningful data. It can be frustrating, because every patient is unique, and no visit is simple enough to translate into code. Of note, the AAFP recognizes the advantages (increased payment from insurance companies, improved efficiency and quality of care) and disadvantages (cost of acquiring information technology, multiple programs and guidelines, barriers to data collection) to Pay-for-Performance healthcare but are very specific about their conditions of support [2].

The industry is starting to catch up with the pressure from insurance companies, but this has not been a quick transition. A 1982 report in Health Services Research showed quality audits of physicians are marginally effective because of limited promise of providers changing their behavior [3]. However, as the cost of healthcare continued to rise, Primary Care Physicians started to understand their role in industry efficiency. In a 2006 study of a Primary Care-based research network in Washington, DC published by the Annals of Family Medicine, physicians reported discussing insurance with 62.6% of patients, and 88% of physicians reported making at least one change in clinical management based on their insurance status [4]. They know that whether you are in a private practice or hospital, insurance companies are watching.

Part 2: Understanding the Causes of Non-Emergent Emergency Department Visits

The primary conditions that could be managed at urgent care and retail clinics are minor acute illnesses, strains, and fractures [5]. Reasons for self-referral to Emergency Departments can be categorized into seven themes: health concerns [1], expected investigations [2], convenience of ED relative to that of primary care (long wait time for appointments, limited after hours care, lack of transportation), lack of confidence or dissatisfaction with PCPs, advice from others, and financial considerations. Dissatisfaction is a less common cause but could have significant emotional effects on the patient. I recall one patient in the ED who presented because she was just so frustrated by the doctors she had seen because neither they nor the studies they ordered gave her a diagnosis. Unfortunately, she left dissatisfied by this visit as well. EM physicians are taught not to order studies that can be safely done outpatient, manage chronic conditions, or to give advice best left to a specialist. She did not understand that Emergency Departments are concerned with ruling out life threatening conditions, not necessarily a diagnosis. As one EM physician said to me, “we evaluate and treat things that could kill or maim you.”

Researchers at Memorial Hermann Health System (Houston, TX) defined Primary Care-Related Emergency Department visits as those whom medical care was not required within 12 hours, required immediate care but could be treated in a primary care setting, or required immediate care but the emergent nature of the condition was potentially preventable with timely and appropriate primary care [6].

On a higher level discussion, health literacy has been shown to be a significant factor in patients deciding to come to the ED for non-emergent complaints; A 2017 cross-sectional study published by the American Academy of Emergency Medicine reported that (compared to patients with adequate health literacy) patients with limited health literacy had 2.3x the number

[1] *Health concerns* refers to factors such as perceived severity of the condition, opinion that will be sent to the ED by PCP anyway.

of potentially preventable ED visits requiring admission, 1.4x the number of treat and release visits, and 1.9x total number of preventable visits [7].

The Agency for Healthcare Research Quality Chartbook on Care Coordination cites some more specific causes: a principle diagnosis related to mental health, alcohol, or substance abuse, a principle diagnosis of dental conditions, asthma in those aged 2 to 17 as well as 18 to 39 [8]. Worldwide, the most important reasons for self-referral are health concerns and expected investigations. Financial considerations mainly play a role in the US [9]. A 2013 systematic review of literature on decisions to visit the ED in a non-emergency, published by the American Journal of Managed Care, found conflicting evidence for trends related to age, gender, race, insurance status, or social support of the patient [10].

Part 3: The Impact of Potentially Preventable Emergency Department Visits

Quite simply, ED visits for conditions that are preventable or treatable with appropriate primary care lower health system efficiency and raises costs [6]. An estimated 13-27% of ED visits in the US could be managed in physician offices, clinics, and urgent care centers, saving $4.4 billion annually [5]. Non-emergency visits contribute to ED crowding; a meta-analysis in a 2008 issue of the Annals of Emergency Medicine concluded ED crowding leads to (among other things) increased patient mortality, treatment delay, transport delay, ambulance diversion, patient elopement, and a necessarily increased risk of acquiring an infection while there [11].

These visits can affect primary care physicians professionally as well. The American Journal of Medical Quality published an article in 2014 posing ED utilization as a measure of physician performance, stating that a high rate of ED utilization may indicate poor care management, inadequate access to care, or poor patient choices [12]. The former, poor care management is of importance to physicians because of the Pay-for-Performance model of insurance. A 2018 article by Harvard Health Publishing cited lower pay and greater hours as one of several causes of physician burnout [13]. Results of a 2015 study published in Frontiers in Psychology suggested that emotional exhaustion among intensive care physicians predicted a higher mortality rate among the patients they cared for [14]. In the 2001 report on healthcare quality, published by the Institute of Medicine, the organization stated that problems in patient-physician relationships and gaps in communication are significant contributors to avoidable medical errors, even death [15]. If there is a similar cause and effect pattern observed in primary care physicians, the financial stress of penalties for patients PPEDVs would only feed into risk of burnout.

Part 4: Discussing Emergency Department Visits with Patients

Patient encounters are typically short, and it is easy to overlook these kinds of instructions, but it is time to make this a priority. Part of the AAFP Performance Measures Criteria, in association with the American Medical Association lists (among other things) “practical behavior given variations of systems and resources available across practice settings” [16]. An important aspect of the physician’s role is incorporating patient education on using healthcare resources efficiently. For patients with chronic conditions, physicians should educate them on when and where to seek care for their specific conditions. A proactive discussion, that is, one with healthy patients, is beneficial as well [7]. Out of pocket costs to treat an upper respiratory condition averaged $41 at a retail clinic and $650 in the ED [17].

Part 5: Basics of Patient Navigation and Potential Impact on PPEDVs

Of course, there are some patients who will continue to return to the ED despite our best efforts. I aim to discuss common barriers that patients face, and what we can do to prevent patients with potential for intervention from falling through the cracks. A 2014 study in Medical Care concluded that en masse interventions to all patients in the healthcare system is financially infeasible, but timely interventions on identified high risk patients is more sustainable; the article provides a predictive model for physicians to identify such patients [18]. Of note, the authors also referred to hospitalizations due to Ambulatory Care-Sensitive Conditions (ACSCs) as an indicator of primary care access and effectiveness.

Patient Navigators represent their organizations as skilled, culturally competent care coordinators who can effectively communicate with providers and other stakeholders within and across the institution while serving patients as knowledgeable, caring peers and allies to have an inside track to the health system [19].

Patient Navigation was introduced in 1990 and refers to efforts of eliminating barriers to timely cancer screening, diagnosis, treatment, and supportive care for poor and uninsured patients [6]. The navigators attempt to bridge gaps between the system and the patient that may lead to avoidance of health problems or noncompliance with treatment regimens [20]. Gaps range from communication (literacy, cultural differences, language), psychosocial (fear, distrust), financial (applying for assistance programs, discount programs), health system related (scheduling, referrals, care coordination), to social support (transportation and child care) [20]. The concept of navigation has now spread to include interventions throughout the healthcare system-preventative care, screening, early diagnosis and treatment, and end-of-life care. They may work in health or community organizations and may be trained within the organization or licensed professionals such as nurses and social workers [6]. Community Health Workers are navigators with extensive ties to the community; they are uniquely equipped to build patient trust by demonstrating their knowledge of cultural and linguistic differences and then extend that trust further into the health system [19].

Community Health Workers are trained in peer-to-peer counseling and connect medically underserved patients with medical homes and related support services. They also provide education about the importance of primary care, assist with scheduling, and follow-up to monitor and address additional barriers [6]. Racial, cultural, and socioeconomic disparities in access, utilization, and delivery of services are major contributors to the disparities in health outcomes [20].

Comparison of programs around the country have suggested that patient navigation intervention was associated with lowered odds of returning to the ED among less frequent primary care-related emergency department visitors, and that the savings associated with this reduction is greater than the cost to implement the navigation program [6]. A 2017 cost-benefit analysis published in Medical Care described the quantitative parameters required to achieve cost neutrality or benefit: [21]

“CHWs assigned to patients with uncontrolled hypertension and congestive heart failure, as compared to other common conditions, achieve cost neutrality with the lowest number of

averted visits to the ED. To achieve cost neutrality, 4 to 5 visits to the ED need to be averted per year by a CWH assigned a panel of 70 patients with uncontrolled hypertension or CHF-approximately 3-4% of typical ED visits among such patient. Most other chronic conditions would require between 7 and 12% of ED visits to be averted to achieve cost savings."

Studies included in a more recent systematic review on the subject, however, stated that the potential impact depends heavily on the diagnosis, but that it is possible to reduce care utilizations and achieve an economic benefit by integrating Community Health Workers into chronic care management, although variations in cost and utilization outcomes limited their conclusions [22].

Further research may be able to rectify some of the conflicting study results, but the current lack of consensus to date hinders the necessary resource acquisition for development and implementation of new programs. To take advantage of this untapped potential, proponents of these programs need evidence to present to decision-makers in government, the industry, and in individual facilities.

The US Government formally recognized the disparities in level of healthcare quality throughout the population 1999 after commissioning a study by the Institute of Medicine [20]. This research was expanded in another IOM report, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, in which they present an integrated model assessing health disparities, asserting that internal and external characteristics, or determinants of health, impact the patient's interaction with providers and other resources within the health system [20]. The Affordable Care Act categorized health disparities into four issues: prevention and early detection, healthcare access and coordination, insurance coverage and continuity, and diversity/cultural competency [23]. Patient navigation can play a role in all of them.

The biopsychosocial approach proposes an intertwined, complex relationship between societal factors/needs and health/health services, an example being that a disturbance in psychological and biological wellbeing noticed by the patient or family is often what drives treatment, and that societal and psychological factors can affect the patient's ability to access and/or comply with treatment [24].

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