MEDICAL SCHOOL
UNIVERSITY OF MICHIGAN

Capstone for Impact Submission | GY2020

Project Title: Michigan Emergency Department Leader Attitudes and Experiences With Clinical Pathways to Guide Admissions Decisions

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Path of Excellence: Health Policy

If this project can be continued by another UMMS student, please include your contact information or any other details you would like to share here:

Summary: The objective was to characterize ED leader's attitudes toward potentially avoidable admissions and experiences with the use of clinical pathways to guide admission decisions, including the challenges and successes with implementation of these pathways.

Methodology: A mixed-methods study of Michigan ED leaders was conducted. First a cross-sectional Web-based survey was distributed via email to all 135 hospital-based Eds in the state. Descriptive statistics were calculated. Survey participants who provided contact information were considered eligible for follow-up. Semi structured interviews were conducted by telephone until thematic saturation was reached. Interviews were recorded, transcribed verbatim, reviewed for accuracy, and thematically coded. Representative quotes were extracted for reporting.

Results: Survey responses were received from 64 ED leaders (48% eligible response rate). Semi-structured interviews were conducted with a purposeful sample of 11 of the 29 representatives willing to be contacted. Eight sites implemented clinical care pathways as a strategy to reduce avoidable admissions. Pathways were developed for high-frequency conditions. Many pathways were multidisciplinary, incorporating case managers and outpatient care providers, which was thought to improve acceptability. Five models of care emerged 1) standardized care, 2) observation medicine, 3) enhanced follow-up, 4) care coordination, and 5) comprehensive programs. We identified barriers to and facilitators of discharging a patient from the ED when an admission otherwise could be avoided. Barriers included limited access to follow-up, lack of care coordination, and lack of trust in patient's ability to provide self-care or navigate the system. Facilitators included strong relationships with outpatient providers, care coordination, and shared decision making.

Conclusion: Many commonalities exist between a diverse sample of EDs regarding the definition and causes of avoidable admissions. ED providers have limited capacity to coordinate care beyond the ED and are concerned about the ability of their patients to navigate a fragmented outpatient care system. Potential solutions to help avoid hospitalizations from the ED include multidisciplinary clinical care pathways, case management, and defined arrangements for follow-up care with generalists and specialists. By utilizing these

methods, EDs may be able to decrease health care costs caused by avoidable admissions without sacrificing patient safety.

Reflection/Impact Statement:

You may use the following questions to guide your reflection:

1. How did the process of conducting this research confront any limitations of your prior thinking?
2. Who could potentially benefit from this CFI project over different timescales and how?
3. What actions will you take afterwards to continue the momentum of this project, and maximise the likelihood of the identified benefits being achieved?
4. What advice would you give to another student completeing their CFI?

Almost all of medical school is, rightfully so, learning how to take care of a singular patient. We study countless hours so that during each patient encounter we are best equipped to help that one person in front of us. But as we venture into the work force, we will no longer be siloed into patient-provider interactions. We will be part of a healthcare system. This project was my introduction into QI research that can help inform policies implemented by healthcare systems and insurance companies. It was my gateway into what I hope will be an EM career dedicated to improving health care systems. By influencing my future workplace on a systems level, I can impact not only the patients in front of me, but all who walk through the doors (and hopefully those who no longer need to walk through the hospital doors because of changes we've made).

This project was my first time taking part in a qualitative research study. This meant learning about new software (Dedoose) and learning how to code transcripts. I really enjoyed the qualitative component of this research because numbers only tell you so much. Conducting a mixed-methods study allowed us the fortune of combining objective data with quotes to better understand the meaning behind the numbers.

Moving forward, I'd like to get more workforce experience before tackling additional QI and health systems projects. I learned a lot about the workflow and potential improvement areas during my rotations and I know this knowledge will dramatically increase as a resident. Discussing current improvement projects at other hospitals became a talking point in many of my residency interviews. It's exciting to find a research area that actually interests you. For future students brainstorming about their CFI project, my advice is to think broadly about areas they're passionate about. There really is no limit to what interests we can combine with our medicine background in order to make an impact in a community.