Internal Medicine GME: Patient Safety and Quality Improvement Learning Program

HIGHLIGHTS OF EXPERIENTIAL PROJECT LEARNING FOR 2ND YEAR RESIDENTS

ACADEMIC YEAR: JULY 2016 – JUNE 2017

LAST UPDATED: 7/2017
Program Assessment

33% (4/12) had impact (presented, published, implemented, or connected to larger QI project)

Impact Summary

- New curriculum modules and PI team/data support began January 2017 (pilot observations occurred Oct-Dec 2016)
- Pre/post survey began Jan 2017
- Communication between providers of hospitalized patients and Oncologists (Feb 2017) - part of larger QI project that is still ongoing and scheduled to be completed in 2018.

Scholarly Work

- CBC daily labs (poster) – SHM 2017 conference
- DNAR Code status reversals for cardiac procedures (poster) - Quality Month, October 2017 and CVC Leadership quality showcase, December 2017
Project Topics

Jul – Dec 2016

• Jul: Lost orders upon patient transfer at AA VAMC
• Aug: 
• Sept: Floor to ICU transfers
• Oct: Utilization of Interpreter Services
• Nov: CBC Daily lab draws
• Dec: The CODES project: Coordinating Onsite Debriefing, Education and Simulation for In-hospital cardiac arrests.

Jan – Jun 2017

• Jan: Improving inter-hospital transfers
• Feb: Communication between providers of hospitalized patients and Oncologists
• Mar: DNAR reversals after cardiac cath
• Apr: VA – SHIFT tool
• May: Anticipatory Management of Bleeding Complications of Heart Catheterization
• Jun: Addressing Communication Barriers Between Medical Providers and Physical Therapists

PI team observations completed Oct - Dec 2016 and pilot of new materials occurred Jan - Jun 2017
Continuous Blood Collection: A Review of Current CBC Utilization, Provider Survey, and Pilot Intervention at a Large Academic Medical Center

Kayla McAllister, MD, Justin Sibony, MD, Eric Smith, MD, Tony Chen, MD, Jennifer Kennedy, MD, Lauren A. Heideman, MD, Matthew Janoski, Paul Dunne, PhD, Timothy Shen, MBA, John Gubisch, MD and Christopher Petriski, MD

**Background**

Choosing Wisely: Targeting CBCs

**Identify Problem**

6-month avg. # 1.37 CBCs per patient-day!

**Current Attitudes**

- Reimbursement
- Physician culture
- Lack of knowledge

**Root Cause Analysis**

- Discrepancy between number of daily CBCs and laboratory tests
- Outdated laboratory protocols
- Lack of provider education
- Inefficient laboratory processes

**Methods (PDCA Cycle)**

- **Plan (P)**: Introduce daily review of CBCs
- **Do (D)**: Implement daily review of CBCs
- **Check (C)**: Monitor CBC utilization
- **Act (A)**: Adjust based on feedback

**Results**

Reduction in number of CBCs ordered per patient-day during intervention period compared to 6-month average

**Intervention:** AM reminder paging to attendings and residents on all general medicine resident services for one week pilot

49% reduction from baseline

**Conclusions**

- Routine CBC ordering is prevalent and driven by culture and perceived efficiency
- Our pilot decreased daily CBC orders
- Further intervention will require the combination of education, clinical decision support within the electronic health record, and regular audit with feedback

Nov 2016: CBC Daily lab utilization
Project supporting existing faculty project
Feb 2017, Hospital Medicine/Oncologist Communication

Improving the Quality of Communication Between Providers of Hospitalized Oncology Patients at University of Michigan

Background Information:
- Fragmented and not standardized
- A 2017 retrospective analysis on inpatient oncologist communication demonstrated that communication with outpatient providers often misses important information (diagnostic test results, treatment plans, patient or family counseling, and follow-up plans).
- Oncologists are fundamental caregivers for cancer patients
  - Oncology is the most important to both patients and families.
- Improving Communication Preceding the Transition of Care
  - 2017 action plan from the hospital.

Current State:
- Process: Inefficient and fragmented.
- Workflow: Disconnected and non-standardized.
- Communication: Lack of standardization and timely transfer of information.

Proposed Counter Measures:
- Process: Standardization and streamlining.
- Workflow: Integration of communication tools.
- Communication: Timely and comprehensive.

Targeted Patient Population:
- High volume of patients with primary oncology at University of Michigan.
- Focus on improving communication for inpatient oncology patients.

Action Plan and Next Steps:
- Implement a standardized communication tool.
- Conduct regular training sessions for oncology and attending physicians.
- Monitor and report on communication metrics.

Automated MCheck Message: Example of MCheck Message
- Identification of Oncology Patient
- Communication of Oncology Needs
- Communication of Treatment Plan
Introduction

Despite their frequent role in caring for patients with in-hospital cardiac arrest (IHCA), earlier data suggest residents often feel uncomfortable during resuscitations.

Purpose and aims

We sought to characterize the experiences of residents at our academic institution with IHCA, delineate reasons for discomfort (if any) with their roles, and then assess what educational interventions were considered most valuable.

METHODS

A 9-question survey was electronically distributed to all Internal Medicine and Medicine-Pediatrics residents at the University of Michigan Health System. This survey asked residents about: 1) the number of IHCA’s that residents had attended or led, 2) their comfort with their roles including leading an IHCA, 3) possible reasons for any discomfort in their roles, and 4) educational interventions that would be considered most valuable. We report simple unadjusted statistics.

Results

- 98 responses from 155 residents (63.2%).
- Most PGY-1’s and PGY-2’s reported attending few or no IHCA’s (n=47/68, 69.1%). Some PGY-3’s and PGY-4’s had never run a resuscitation effort (n=4/30, 13.3%).
- Regardless level of training, few residents rated their ability to run a resuscitation effort as very good or excellent (n=6, 8%).
- Most residents unsatisfied with formal education currently in place for IHCA.
- Feedback in the setting ofIHCA was rare.

Conclusion

Few residents perceived their own comfort and competence as adequate. These findings provide a foundation for future efforts to potentially elevate resident performance in IHCA. Recommendations include: implement an easily accessible code feedback/debriefing tool, monthly didactic IHCA review at morning conference and mock simulation.

References


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Quality Month submission and project that continued after project month March 2017: DNAR Code Status Reversals for Cardiac Procedures
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References

- M-Box: [https://umich.app.box.com/folder/11867646521](https://umich.app.box.com/folder/11867646521)
  - Curriculum modules
  - A3 and Powerpoint slides from each monthly rotation
  - Catalog of past projects