Introduction: Background & Context

The need for clarification of end-of-life care goals at our institution has been identified as an important area for improvement by various stakeholders. Key leaders at our hospital fully recognize the impact appropriate end-of-life care can provide not only in optimizing patient care but also in improving our hospital’s quality metrics and resulting financial health. As a result, a subcommittee was formed under our Department of Performance Excellence including representatives from care management, nursing, social work, spiritual care and palliative care. Initial discussions focused on further identifying stakeholders, determining the scope of the project and a review of our current state. The cohort of patients with a diagnosis of heart failure was identified as our target population based upon relevance and available resources. Additional stakeholders, particularly our heart failure APNs, were identified.

Mission/Vision Statement

We hope to utilize the concepts of teaming to foster comradery and improve communication amongst team members from different professions in order to improve the care of our patients as they near the end of their lives. Specifically, we hope to improve the documentation and clarification of end-of-life care goals in our patients suffering from heart failure.

Aim/Purpose/Objectives

Achieve clearly documented end-of-life care plans for 75% of our patients diagnosed with heart failure with a reduced ejection fraction

Methods: Interventions/Changes

Baseline data was originally gathered during Mortality Review Committee monthly meetings based upon the framework proposed by the IHI White Paper, “Conversation Ready: A Framework for Improving End-of-Life Care.” Initial interventions were originally identified through literature review and creation of the driver diagram below.

Methods: Measures/Metrics

Specific patient data will be pulled from the EMR and surveys will be used to assess team participation and patient satisfaction. We plan to utilize outcome, process and balancing measures to assess the effect of our project including:
- Percentage of completed end-of-life care documentation in chart
- Percentage of time end-of-life care file is accessed
- Percentage of documented discussions among specific provider groups
- Baseline and post intervention surveys to patients and health care providers regarding perceptions of process and interventions

Barriers – Strategies

Current state data was based on analysis using prior EMR
- New EMR may provide a shift in our current state. Recalculating baseline data should not be difficult
- New EMR may allow us to be more realistically aggressive in our aims.
- Will work in teams to identify potential opportunities.
- Multiple role changes at multiple levels in our institution
  - Will utilize expressed support from C-suite leadership to underscore the value of our project and identify new key leaders

Discussion: Next Steps & Areas Seeking Input

Critical next steps:
- Meet with new leadership, particularly at the level of Performance Excellence to garner resources and support
- Team familiarization with new EMR system
- Re-assessing our current state based on data from new EMR which will provide access to outpatient charts
- Identifying alternative methods of data collection if hospital support wanes
- Outlining potentially smaller scale interventions if team paradigm shifts
- Identifying metrics to measure the effect of teaming

Group Feedback
### Introduction: Background & Context

Chronic obstructive pulmonary disease (COPD) is a chronic respiratory disease that has significant patient morbidity and mortality. These conditions lead to high health care resource utilization and cost. Key driver for negative impact is recurrent exacerbations, which leads to high utilization of ED and readmissions. Many health professionals do not feel comfortable or have the time to address proper inhaler administration with patients.

### Mission/Vision Statement

The COPD Multidisciplinary Clinic offers comprehensive care for patients with COPD. Our expert healthcare team includes physicians, pharmacists, social workers, respiratory therapists and LPNs. Our clinic is equipped to care for a wide range of patients including the newly diagnosed, those who may have recently been discharged from the hospital, along with those who are currently living with a COPD diagnosis. The goals of our program are to: reduce symptoms, improve exercise tolerance, educate patients about their disease, prevent future complications and help patients lead fuller and better lives.

### Aim/Purpose/Objectives

With this endeavor, the aim was to improve our patients’ understanding of COPD through a multidisciplinary education program at Nesset Family Medicine in Park Ridge, IL by decreasing the number of emergency room visits and hospital admission by 50% over the next three years (2016-2019).

### Methods: Interventions/Changes

- **IRB ID**: 6687, Quality Improvement Project Around Education of COPD Disease and Medications
- **Once a month clinic for 2 hours**
- **Goal for 6-8 patients per session**
- **Clinic model staffing needs**: 1 PSR, 1 MA/LPN, 2 Patient Advocate: Pharmacist and Social Worker or Care Manager, 1-2 Respiratory Therapist
- **Session Structure**: Rotating individual appointment with physician, respiratory therapist, and patient advocate
  - Initial Intake: 30 mins per individual appointment
  - Follow ups: 15 mins per individual appointment
- **Patient Demographics**: Looking at high risk utilizers of ED and high risk for hospital readmissions

### Methods: Measures/Metrics

- **Measurements – two fold**
  - Effectiveness of the clinic
  - Patient Surveys
  - Look at metrics of decreasing ED visits and readmission risks
  - Effectiveness of teaming
  - Team survey
  - Chinook Model
  - Evaluation of effective communication within team

### Barriers – Strategies

- Patient enrollment
- New EMR implementation on inpatient setting would necessitate to reevaluate data and recruitment of patients
- Care management engagement across inpatient and outpatient setting
- Need for a project manager to identify and review readmission data
- Continued engagement with leaders of organization to ensure commitment and support for the project

### Discussion: Next Steps & Areas Seeking Input

- Education of residents rotating through the clinic by working with the pharmacist for didactic lectures
- Set up meeting for outpatient and inpatient care management team
- Invited transition care team to be part of the discussion
- Looking into Group Visits for patients enrolled in the clinic
- Create system wide protocols for standardization of paperwork on discharge in inpatient and outpatient setting
- Automatic Referrals through inpatient into clinic in EMR
- How to measure team effectiveness?
The COPD Clinic offers comprehensive care for patients with COPD. Our expert healthcare team includes physicians, pharmacists, social workers, respiratory therapists and LPNs. Our clinic is equipped to care for a wide range of patients including the newly diagnosed, those who may have recently been discharged from the hospital, along with those who are currently living with a COPD diagnosis. The goals of our program are to:

- Reduce symptoms
- Improve exercise tolerance
- Educate patients about their disease
- Prevent future complications
- Help patients lead fuller and better lives

During their visit, patients can expect assistance with the following issues:

- Assessment of disease severity and recommendations regarding optimal medications
- Tobacco cessation counseling if needed
- Assessment of need for oxygen and respiratory assist devices
- Referral to Pulmonary Rehabilitation for patients if they qualify

- Social support including access to social workers for questions and concerns
INTRODUCTION: BACKGROUND & CONTEXT

- The Structural Heart Team works in a dynamic, fast-paced, high procedural volume environment with multiple team members.
- Highly recognized for successes in:
  - Patient outcomes
  - Patient satisfaction
- Continued growth in procedural volume & innovative technology in the Cardiac Catheterization Laboratory (CCL) → increased complexity of CCL fellowship training.

MISSION/VISION STATEMENT

AHC GME VISION: To demonstrate GME’s leadership role in driving a culture of continuous learning → high reliability org

CCL Vision: To demonstrate high quality communication within the CCL to promote educational training, patient outcomes, CCL efficiency, and staff well-being

AHC GME MISSION: To improve care for our patients & the well-being of our clinical team members through implementation of system aligned QI projects

CCL Mission: To improve procedural education of the fellows and the well-being of our clinical team members through implementation of CCL initiatives

AIM/PURPOSE/OBJECTIVES

- Improve communication/feedback between fellows ↔ faculty
- Improve the effectiveness and efficiency of the CCL

METHODS: INTERVENTIONS/CHANGES

- Explicitly defined fellow’s role in the CCL based on PGY status
  - Delineated levels of supervision × whom (attending, IC fellow)
  - Feedback frequency, formality, timing (pre-post procedure)
- Promote in-office procedural consent - goal ≥70% outpatient
- Earlier procedural case assignment to the fellows
- Fellow confirmation of procedure and access site

GROUP FEEDBACK

BARRIERS – STRATEGIES

HIGH VOLUME & SCHEDULING – PACE & TRANSITION
- STRATEGY: Team Buy In
  - Keeping fellows involved and driving change
  - Instilling the value/importance of system changes for faculty
  - Promoting a culture where staff (RN’s, techs, non-clinical members) feel valued as essential team members within the CCL

HIERARCHICAL STRUCTURE
- Lack on input/response by non-fellow/faculty team members despite outreach
- STRATEGY: Team Buy In
  - Consistency: Continued promotion of interventions
  - Utilize Data: Redirect actions post data analysis to improve interventions
  - Communication: Continuous updates/action items presented at faculty and fellow meetings

DISCUSSION

CRITICAL NEXT STEPS
- Re-evaluation via CLEQ survey post intervention
- Comparison of pre and post intervention data
- Revision of current interventions to correct course/direction
- Create fellows’ Role of Training (ROT) framework document to be used as template outside the CCL

 AREAS SEEKING GUIDANCE/INPUT
- Motivating fellows/faculty to actively participate
- Strategies to address hierarchical structure/culture in CCL: high stakes, fast paced, complex

METHODS: MEASURES/METRICS

- CCL data regarding volume, transition, and delays
- ACGME semi-annual survey data for fellows/faculty
- Clinical Learning Environment Quick Survey (CLEQ)
- Mayo Well-Being Index
INTRODUCTION: BACKGROUND & CONTEXT
• Hypertension (HTN) is a chronic disease impacting 1/3 of U.S. adults
• Primary care physicians typically are the 1st to identify and treat HTN
• Two family medicine residency clinics analysis of HTN patients:
  o Younger adult population (age 18-49) had high rates of uncontrolled HTN per system quality metrics (> race / gender)
  o Controlling HTN in younger patients has significant long-term health impacts
• Successful models for treating HTN use an interprofessional collaborative team approach including regular huddles

MISSION/VISION STATEMENT
VISION: To demonstrate GME’s leadership role in driving a culture of continuous learning - essential in a high reliability organization
MISSION: To improve care for our patients and the well-being of our clinical team members through implementation of system aligned QI projects within and across our GME programs/clinics/service units

AIM/PURPOSE/OBJECTIVES
• AURORA AIM: Apply tested interventions to facilitate a safer environment for patients and clinicians
• NI-7 PROJECT AIM: Reduce the discrepancy between our younger patients (age 18-49) vs our older patients (age > 50) who have controlled hypertension by 5%
  o Currently < 70% are controlled in age 18-49 vs 80% in age 50+
  o Ultimate Goal: Cut the disparity in half

METHODS: INTERVENTIONS/CHANGES
• PHASE 1: EDUCATION OF CLINICIANS AND CLINIC STAFF
  A. Baseline Survey of Physicians and Residents Revealed:
    o CLINICAL STAFF felt comfortable prescribing HTN medications for patients with an average age of 27 years according to current JNC 8 guidelines
    o CLINICAL INERTIA – Unlikely to prescribe HTN medications to younger adults (various reasons noted)
  B. Education
    o RESIDENTS EDUCATION: Didactic lectures on HTN and appropriate management (applicable to all ages with emphasis on young adults)
    o RES/FAC ANNUAL EDUCATION MEETING: Review data & strategies to improve HTN including Motivational Interviewing
    o CLINIC HUDDLES: Introduction and reiteration of hypertension goal and residency-wide initiative
• PHASE 2: PATIENT EDUCATION & WORKFLOW
  A. Created laminated BP card
  B. MAs circle BP risk on BP card
  C. Physicians or MA’s recheck BP
  D. Discuss JNC 8 management options
• PHASE 3: IMPLEMENT & SUSTAIN MOMENTUM
  A. Identify MA & Nurse champions
  B. Monitor quality metrics and adjust
  C. Monthly Res/Fac meeting discussion on progress

METHODS: METRICS
Clinical Quality Metrics
Field Notes from Team Members
Clinical Learn Environment Quick Survey
Mayo Well-Being Index
ACGME Resident Milestones: Team and Communication
Clinic Engagement / Pt Experience

PROCESS

OUTCOME

BARriers – STRATEGIES
• ACCESSING CONSISTENT DATA:
  o STRATEGY: Work with IT / EPIC to open Slicer/Dicer app to access data by age on consistent basis
  o STRATEGY: Work with Clinic Managers to optimize data reporting as system standards have changed during the project
• TRACKING: Multiple team members involved; difficult to track day-to-day implementation
  o STRATEGY: Explore use of EPIC “dot phrase” or “MyAurora”
  o STRATEGY:  collaboration between Clinic Manager and other key professions (eg pharmacy, BP clinic)
• INCREASING INTERPROFESSIONAL TEAM INVOLVEMENT: Changing roles / expectations of other clinic professions vs their limited availability
  o STRATEGY: Create champions with each clinic to lead project initiatives, enhance identification, and disseminate concerns and solutions
  o STRATEGY: Orientation of roles (ie, role play various scenarios)

DISCUSSION: NEXT STEPS & AREAS SEEKING INPUT
• CRITICAL NEXT STEPS:
  o Collect and monitor data to determine if interventions are improving HTN control in younger adults
  o Move to Phase 3: Enhance patient and clinic members’ ownership
• AREAS SEEKING GUIDANCE/INPUT
  o Sustain participation – “inspire” &  patients/team members’ involvement
  o Effective alternative for on-going communication (avoid “delete” key)
  o Utilization and value of HTN Educator in the clinics/system
  o Utilization of EHR Patient Portal (MyAurora) as intervention

GROUP FEEDBACK
**INTRODUCTION: BACKGROUND/CONTEXT**

- Approximately 300 to 400 practicing physicians die by suicide annually.
- Medical residents are at high risk for depressive disorders, depressed mood, burnout, and suicidal ideation.
- ACGME endorsed an “After a Suicide” toolkit to use in time of crisis.
  - Aurora GME approved a 4-page Crisis Communication Plan.
  - Includes a 4-Level (by risk of harm) decision/action tree.
  - Outlines key roles for GME & system leaders (e.g., security, legal, EAP, PR, HR).
- As part of extensive prevention interventions, it is vital to prepare PDs, APDs, Coordinators, Chiefs for appropriate response in a time of crisis.

**AHC-GME MISSION/VISION STATEMENT**

**VISION:**
To demonstrate GME’s leadership role in driving a culture of continuous learning - essential in a high reliability organization

**MISSION:**
To improve care for our patients and the well-being of our clinical team members through implementation of system aligned QI projects within and across our GME programs/clinics/service units

**AIM/PURPOSE/OBJECTIVES**

**AURORA AIM:**
Apply tested interventions to facilitate a safer environment for patients and clinicians

**NI-7 PROJECT AIM:**
To design/implement key GME stakeholders’ Crisis Communication Plan Mock Drills to optimize plan utilization during an emergency/crisis (e.g., roles, responsibilities, exceptions)

**METHODS: INTERVENTIONS/CHANGES**

**PHASE 1: DEVELOP MOCK DRILLS - CRISIS COMMUNICATION PLAN (CCP)**
- Identify 3 realistic drill scenarios associated with key CCP key elements
- Develop an assessment rubric and drill to assess each GME program’s leadership responses - approved by GME leadership and HR
- Pilot, reconcile assessor differences, and revise

**PHASE 2: IMPLEMENT MOCK DRILLS**
- Conduct a mock drill (with 3 scenarios) within individual residency program’s leadership team (e.g., PDs APDs, Coordinators, Chiefs)
- Minimum of two assessors for each drill (authors)

**PHASE 3: ON-GOING EDUCATION WITH DELIBERATE PRACTICE**
- Analyze data → identify gaps → revise CCP as needed
- Periodic review and practice of plan with GME Leader

**METHODS: MEASURES/METRICS**

**MOCK DRILL ASSESSMENT RUBRIC**

**Crisis Communication Plan Mock Drill #1: No Show**
- Resident didn’t show up for inpatient shift today
- Supervising physician has called & paged resident; Chief resident has called & paged the resident
- 3 hrs have passed; No one has heard from resident
- What’s the 1st thing you do (by role)

**GME Wide Measures**
- Well-Being Index
- ACGME Resident & Faculty Survey

**BARRIERS – STRATEGIES**

**PHASE #1: FINALIZING MOCK DRILLS**
- STRATEGY: Finalize scoring rubrics and pilot
- STRATEGY: Training raters

**PHASE 2: IMPLEMENT MOCK DRILLS WITH 2 ASSESSORS**
- STRATEGY: Schedule mock drills; every program
- STRATEGY: Seek to embed drill in existing program leadership

**DISCUSSION**

**CRITICAL NEXT STEPS**
- Phases 1-2: Finalize Drills, schedule and implement
- Phase 3:
  - Compile and review data into meaningful conclusions
  - Use common knowledge gaps to guide future education and awareness campaigns

**AREAS SEEKING GUIDANCE/INPUT**
- Areas of rubric missing?
- Sustaining team time/effort:
  - To do “deep thinking” has been difficult
  - To perform assessments - time consuming and challenging to schedule

**GROUP FEEDBACK**
INTRODUCTION: BACKGROUND & CONTEXT

IMPORTANCE OF ADVANCE DIRECTIVE (AD) DISCUSSION IN PRIMARY CARE
• Planning for future health care needs has multiple benefits for elderly patients, their loved ones and the entire health care system
• 89% of patients prefer AD conversations be initiated in outpatient setting
• Patients expect their primary care provider, more than any other medical provider to initiate the AD conversation

OUR CHALLENGE: INTERNAL MEDICINE RESIDENCY CLINIC (IMRC)
• 47% of IMRC patients >65 and older have completed AD
• Existing clinic AD workflow limited utility as need process to:
  – Identify patients needing AD
  – Provide AD documentation and education to patients in busy clinic
  – Formalize workflow and tracking for patient follow up with Social Worker

MISSION/VISION STATEMENT
VISION: To demonstrate GME’s leadership role in driving a culture of continuous learning - essential in a high reliability organization
MISSION: To improve care for our patients and the well-being of our clinical team members through implementation of system aligned QI projects within and across our GME programsclinics/service units

AIM/PURPOSE/OBJECTIVES
• AURORA AIM: Apply tested interventions to facilitate a safer environment for patients and caregivers
• OUR AIM: To Advance Advanced Directive Documentation in Internal Medicine (AADD-IM)
• OBJECTIVE: To increase our AD completion numbers for patients >65 years old in the Internal Medicine Residency Clinic at Sinai to >59% by project completion (best possible Advocate Aurora QI Metric)

METHODS: MEASURES/METRICS

PROCESS MEASURES & OUTCOME MEASURES w 2nd residency clinic as control
• # of ADs uploaded and DotPhrase Metrics
• Audit workflow via # pts who follow-up with MSW, # of packets, direct observation of physician/patient interaction
• Clinical Learning Environment Quick Survey (CLEQS) & Well-Being Index

BALANCING MEASURES: Overall Clinic QI Scores & CLEQS clinic data

GROUP FEEDBACK

DISCUSSION

NEXT STEPS
• Support seamless integration into daily clinic work flow
• Monitoring & sustaining process > NI7 study period (all ages)

AREAS SEEKING INPUT
• How assess the “quality” of clinician communication
• Strategies for follow-up with patient to facilitate completion – from packet distribution to returning document for uploading
  – How can we get patients to “value it” and act on it?
  – Has anyone developed an approach to support patient completion in clinic?

METHODS: INTERVENTIONS/CHANGES

PHASE 1: INTERPROFESSIONAL TEAM & STANDARDIZE WORKFLOW
• Team: Work with Medical Assistants (MAs), clinic administration, residents/providers, and social work
• Review/Revise: Post Clinic Leaders input
• Produce AD Packets: Hand to patients including AD paperwork, AD workshop dates, social worker info, and AD workshop dates/times

PHASE 2: EDUCATION/TRAINING
• Residents: Two 1-Hr Noon Conf: Fill out our own ADs; Strategies to discuss topic w patients in clinic + ½ Day on goals of care conversation
• Clinic: Staff/clinic huddles and faculty meetings

PHASE 3: MONITOR PER PDSA, ENGAGE CHAMPIONS & PATIENTS

BARRIERS — STRATEGIES

CURRENT CHALLENGES AND STRATEGIES
• Convincing clinicians and patients that ADs can be impacted (time):
  – Are vital for excellent primary care
  – To complete paperwork, signatures and upload to our system
  – Ongoing refreshers from specialists on how to discuss with patients
  – Continued Education: Use examples of real life scenarios; Follow-up with each resident to complete their own AD paperwork (supports advocacy and education with patients re: how to fill out forms)
• Gaps between paperwork ↔ social worker, (co) signing and uploading
  – Explore feasibility of “clinic-based in the moment completion” approach
**Introduction: Background & Context**

- **L&D is an intense, high stakes environment where communication between and amongst health professions is critical for the safety and well-being of health care professionals and patients**
- Improper communication is cited by the Joint Commission as a key contributor of negative sentinel events.
- Use of simulations and practice scenarios allow team members to practice and role-play situations.
- L&D is an intense, high stakes environment where communication is a critical element.
- Continuous learning is essential in a high reliability organization.

**Mission/Vision Statement**

**Vision:** To demonstrate GME’s leadership role in driving a culture of continuous learning - essential in a high reliability organization.

**Mission:** To improve care for our patients and the well-being of our clinical team members through implementation of system aligned QI projects within and across our GME programs/clinics/service units.

**Methods: Interventions/Changes**

- **Application of common communication tool, S-BAR, from TeamSTEPPS & 3-phase approach:**
  - **Phase 1: Setting the Stage**
    - A. Shared Purpose Exercise
    - B. Six 1/week S-BAR examples using common L&D scenarios to demonstrate poor and proper communication
    - C. Two 1/week sign-outs between physicians and nurses on the research team demonstrating “huddles” using current patients
  - **Phase 2: Active Integration**
    - A. Continue L&D sign-out huddles with expanded participants to build skill sets & commitment among all L&D team members
  - **Phase 3: Expansion**
    - A. Care team huddles for individual patients
    - B. Establish group goals in patient care management
    - C. Integrate skills into various modes of communication (phone calls)
    - D. Complete Phase 1 & 2 in other units on OB ward (postpartum, night)

**Methods: Measures/Metrics**

**Process & Outcome Data**

- Pre-Post: What brings meaning/purpose to your work on L&D?
- Field Notes: Direct observation of Phase 1-2 & participant feedback
- Resident Milestones: Team and communication
- Mayo Well-Being Index
- ACGME Resident/Faculty Survey
- Clinical Learning Environment Quick Survey (CLEQS)
- L&D system engagement scores

**Discussion**

**Critical Next Steps**

- Maintain momentum with team member participation
- Collect and monitor data to determine if interventions are creating a psychologically and physically safer work environment
- Expand interventions to other units and modes of communication

**Areas Seeking Guidance/Input**

- Methods to increase interprofessional team members’ participation
- Creating a timeline in which participants do not become frustrated with repetition
- Establishing appropriate avenues of re-iteration and reminders to prevent participants from falling into old habits
- Alternative techniques for daily integration

---

**Group Feedback**

---

---
INTRODUCTION

• Swallow study evaluation
  – Fluoroscopic procedure where a patient drinks contrast while being assessed under real-time X-ray
  – Most frequent fluoroscopic procedure performed in the radiology department
  – Generally features a team consisting of a radiology resident who controls the radiation, a fluoroscopy technician who controls the positioning of the X-ray machine, and a speech pathologist who administers the contrast
• Long-term exposure to ionizing radiation from fluoroscopic procedures can lead to side effects
  – Deterministic effect: Side effect that occurs above a threshold radiation dose and severity increases with increasing dose.
  – Stochastic effect: Side effect where risk increases above a certain dose but the severity does not.
• Personal protective equipment recommended by Occupational Safety and Health Administration (OSHA)1
  – Lead aprons/vests, thyroid shields, lead gloves, and safety goggles
  – Badge-type dosimeters

METHODS

• Implementations
  – Replaced or provided personal protective equipment per OSHA guidelines to all medical personnel involved in swallow study evaluations, such as purchasing a new leaded glove for speech pathology and lead glasses for the fluoroscopy technician
  – In conjunction with speech pathology, developed a standardized swallow study evaluation flowchart
• Swallow study details
  – Barium contrast is the agent of choice as its effects if aspirated are lesser than other contrast agents,
  – Patients trial different consistencies of thin liquids, nectar-thick liquids, honey-thick liquids, puree, barium pill, and crackers in order to evaluate risk of laryngeal penetration or aspiration
  – Aspiration increases the risk of developing pneumonias
• Retrospective data analysis of swallow study evaluations completed during 2 months of fluoroscopy rotations
  – Current PGY3 class data will be used to establish an exposure baseline
  – Current PGY2 class data will be used to evaluate efficacy of implemented reduction techniques
• Absorbed dose: Ionizing radiation absorbed per unit mass, measured in Grays (Gy)
  – X-ray machine records patient radiation exposure into patient’s chart
  – Patient radiation exposure can be used to estimate the radiology resident’s radiation exposure using the formula: Intensity = 1/distance^2
  – Badge-type dosimeter readings might not be a reliable source for assessing reduction techniques

PRELIMINARY RESULTS

Swallow Study Flowchart

Patient Radiation Exposure Data

- Average: 1.9, 7.9, 13.5
- Median: 1.8, 7.2, 13
- Range: 0.3–4.3, 1.5–24.3, 1.26

Resident Exposure Data prior to Implementations

- Estimated Exposure/Rotation: 10.7, 23.9

Threshold Doses for Deterministic Effects2

- Bone: 0.5 Gy
- Skin: 0.02 Gy
- Eyes: 0.1 Gy
- Skin: 0.02 Gy

GME programs, clinics, and service units.

To improve care for our patients and the well-being of our clinical team members through implementation of system-aligned quality improvement projects within and across our GME programs, clinics, and service units.

MISSION STATEMENT

Vision: To demonstrate Graduate Medical Education’s (GME) leadership role in driving a culture of continuous learning, which is essential in a high-reliability organization.

Mission: To improve care for our patients and the well-being of our clinical team members through implementation of system-aligned quality improvement projects within and across our GME programs, clinics, and service units.

PURPOSE

To retrospectively establish a fluoroscopic radiation exposure baseline in order to monitor prospective reduction techniques.

GROUP FEEDBACK

Barriers

• Badge-type dosimeter readings might not be a reliable source to compare radiation exposure baselines
  – Badges need to be switched out monthly and are worn in sets of 2, 1 at the collar and 1 underneath the lead apron at waist level
  – Equipment shared among medical personnel may falsely elevate an individual’s badge readings
• Extraplotating resident radiation exposure data from patient dosage recorded on C-arm X-ray machine may only be useful for assessing reduction techniques
  – Calculating radiation scattered from a given distance is not as accurate as direct measurements
• A standardized swallow study evaluation flowchart may not always be adhered to
  – Speech pathologists and patients vary, so recommending a standardized protocol may only help to a certain extent

REFERENCES

2. Mooney et al. Absorbed dose and deterministic effects to patients from interventional neuroradiology. The British Journal of Radiology. 10.1259/bjr.73.871.11089467JO.
Introduction: Background & Context

- **Strategic Alignment:**
  - Key Institutional Objective = Improve Patient Satisfaction
  - Senior Leadership included on project team
- **Improve Patient Satisfaction:**
  - Patient feels listened to & fully understands their care plan
  - Consistent and accurate information from all care team members
- **Improve Staff Satisfaction & Coordination:**
  - Create team structure to allow fluid high functioning teams
  - Streamline daily rounding routines involving all disciplines
  - Team members have clearly defined roles & feel appreciated
  - Reduce frequency of needing to track down members during the day
  - Maintain educational excellence for students and residents

Mission/Vision Statement

Bassett Medical Center will be the model of integrated interdisciplinary team-based inpatient rounding. This will result in excellent and efficient patient care, as well as exemplary workforce engagement and satisfaction.

Aim/Purpose/Objectives

Within 18 months, Bassett Medical Center will significantly increase Patient Satisfaction scores and Staff Relational Coordination scores, and decrease Delta Length of Stay, while not negatively impacting Readmission Rates.

Methods: Interventions/Changes

- **Team-Based Rounding on Medicine Inpatients:**
  1) Intern Pre-Round @ 7 – 8:30 am
  2) Table/Teaching Round @ 8:30 – 10 am
    - Attending
    - Interns
    - Senior Resident
  3) Bedside Round @ 10 – 11:30 am
    - Attending
    - Interns
    - Senior Resident

- **Action Planning:**
  Short-Term: Pilot with Medicine Team began 1/21/2020
  Long-Term: Spread to other Medicine Teams
- **IRB Submission:** Approved as Exempt

Methods: Measures/Metrics

- **Outcome Metrics:** Pre vs Post & Pilot vs Control
  - Patient Satisfaction: HCAHPS (communication & coordination)
  - Staff Communication: Relational Coordination Survey
  - Length of Stay: % patients meeting Target LOS or Excess Days
  - Readmission Rates
- **Process Metrics**
  - Patient Survey: In house patient survey
  - % Patients with Team Rounding & Round Attendance Log

Barriers – Strategies

- **Scheduling & Timing**
  - Bedside Rounds take 1-1.5 hrs: optimize everyone's time usage
  - Residents & Attending see ED & SCU patients 1st during Table Round
  - 1 intern round at a time; other intern work on notes, etc.
  - Pharmacist checks in at Table Round & rounds on specific patients
  - Case Manager coverage during rounds; monitor if delays discharges
  - RN Manager or Resource coordinate Bedside nurse participation
  - 2nd med pass during Bedside Round; merging 2 morning med passes
- **Consistency Across Constantly Changing Teams**
  - Create standard work instructions with Schedule & Script
  - Handoffs & Orientation of Attendings, Interns, & Residents
- **Data Collection**
  - Staff Relational Coordination Survey: capturing all staff Pre & Post
  - Patient Surveys: low sample & high Pre scores
  - Confusion over who should keep Rounding Attendance log

Discussion: Next Steps & Input

- **Data Collection:** increase response rate
- **Data Analysis**
- **Trial Combining Table/Teaching & Bedside Rounds**
  - Opportunity for patient input & incorporating preferences into plan
  - Too Long for Case Managers & Nurses?
  - Convert to working rounds – put in orders etc. during rounds
- **Plan expansion to other Medicine Teams**

Group Feedback (leave blank)
### Mission/Vision Statement
- We seek to improve the culture and camaraderie of interdisciplinary teams in the labor and delivery unit by incorporating a teaming education curriculum into our obstetric case reviews.
- Obstetric case reviews will be a “can’t miss” opportunity for nurses, midwives, residents and faculty.

### Aim/Purpose/Objectives
- To improve attendance and attitudes towards obstetric case review by adding education components
- To compare existing hospital survey data pre and post-intervention about the culture of labor and delivery.
- To compare pre- and post-intervention surveys about labor and delivery culture, as well as comfort of teaming, conflict resolution and leadership skills.

### Methods: Interventions/Changes
- A survey was created that will be sent to all faculty, midwives, residents and nurses who work in labor and delivery asking about overall culture, attitudes towards OB Case review, and personal comfort with teaming, conflict resolution and teaming skills. IRB exempt status is pending.
- Our team will develop and roll out a teaming curriculum during OB case reviews. Materials will be made available for all staff who cannot attend.
- Our department is also working on a team training program (Team STEPPS). We will incorporate teaming concepts into this pre-existing curriculum.

### Methods: Measures/Metrics
- Data from questions in the AEIX and Press Ganey annual hospital surveys that pertain to labor and delivery unit culture will be compared pre and post-intervention.
- A post-intervention survey will be compared to our initial survey to see if there is improvement in any of the content areas, overall culture and morale.

### Methods: Measures/Metrics
- Data from questions in the AEIX and Press Ganey annual hospital surveys that pertain to labor and delivery unit culture will be compared pre and post-intervention.
- A post-intervention survey will be compared to our initial survey to see if there is improvement in any of the content areas, overall culture and morale.

### Discussion: Next Steps & Areas Seeking Input
- Awaiting IRB approval
- Development of teaming curriculum. Our team have all read “Teaming” by Amy C. Edmondson which we will use as a guide, but we need to divide up the work of creating presentations, modules, and interactive scenarios to roll out our education. We also want to include conflict resolution and leadership skills. We need to identify local leaders in these areas to help.

List areas you could use guidance/input
- Any other good resources about teaming concepts?
- Any useful literature about labor and delivery culture?
Nurse Mentoring Program for Internal Medicine Interns

C. McLaughlin MD, A. Alameh MD, C. Carpenter RN, K. SnyderRN, A. Ababneh MD, D. Mayes RN, J. Gorecki RN, C. Goliath PhD, N. Haller PhD, A. Diwakar MD, T. Sheers MD

**Introduction: Background & Context**
- There is a need to improve resident physician – nurse teaming for the purpose of improving patient care.
- Currently, our institution does not have an onboarding program to address this need.
- A review of the literature yielded reports of institutions that incorporate inter-professional mentorship programs in the resident onboarding process (Tilden et al, 2016).

**Mission/Vision Statement**
To improve patient care and safety through increased communication and teaming following a nurse-Internal Medicine intern mentorship program.

**Aim/Purpose/Objectives**
- To develop a nurse mentorship-based onboarding program for Internal Medicine Interns.
- To assess feasibility and desirability of the mentoring program concept and content.

**Methods: Interventions/Changes**
- A mentoring program will be piloted with Internal Medicine interns.
- 12 interns will be paired with self-selected nurse mentors on a 1:1 basis.
- There will be six sessions followed by a debriefing celebration:
  - Session 1 (1 hour): Dyad Pairing and Icebreaker Luncheon.
  - Session 2 (4 hours): Nurse mentor shadows intern.
  - Session 3 (4 hours): Intern shadows nurse mentor.
  - Session 4 (1 hour): Debrief of shadowing experience – identify challenges and role misperceptions.
  - Session 5 (1 hour): Mentoring session on teaming for patient care – Patient Safety and Barriers to Teaming.
  - Session 6 (1 hour): Mentoring session on teaming for patient care - Communication.
- This project received a Quality Improvement designation from the CCAG IRRB.

**Methods: Measures/Metrics**
- There will be two pilot sessions of the program:
  - Pilot 1: Jan 2020-Jun 2020 (established interns)
  - Pilot 2: Jul 2020-Dec 2020 (new interns)
- Program feasibility and desirability will be assessed during the debriefing celebration following the six sessions.
- Objective measure of the program’s success will occur through pre/post-program administration of a relational coordination survey.
- The RC Survey 2.0 is a validated measure of teamwork in healthcare.

**Discussion: Next Steps & Areas**
- Schedule mentoring sessions 4-6.
- Identify key talking points for scripted mentoring sessions.
- Identify educational resources for mentoring sessions.
- Requested assistance:
  - Talking points and/or simplified resources for the following topics:
    1. Patient Safety
    2. Barriers to Teaming
    3. Inter-professional Communication in the healthcare setting.
**Introduction: Background & Context**

This program is designed to overcome inherent assumptions and biases that lead to a lack of trust and mutual respect between OR nurses and PGY1 surgical residents.

- Trust is essential to team success. When teams enjoy trusting relationships, individual team members do their best work, feel psychologically safe, and are able to act on the shared vision/goals.
- The curriculum addresses the identified gaps and needs of the surgical team through interactive activities, open discussions, and the recounting of “a day and life of a nurse/resident.”

**Methods: Interventions/Changes**

**BOOST (Bridging Operative Obstacles through Shared Tenets)**

- Meet & Greet between residents and nurses during the orientation
  - MAZE game which demonstrates relationship-building values and principles
- Teamwork Online Snippet
  - include roles & responsibilities, DESC, a conflict resolution TeamStepps strategies
- Emotional Intelligence Workshop
  - Establishing ground rules: the 10 commandments
  - Crossing the lines, who does what anyway (video vignettes)
  - Role play scenarios
- Day and life of a nurse/a resident to enhance empathy
- Building Trust: Bi-Weekly lunch to discuss ways of enhancing collaboration
- Facilitator Training

**Methods: Measures/Metrics**

Administer relationship coordination surveys
- The RC Survey 2.0 is a validated measure of teamwork in healthcare.
  - June 2020 – Non concurrent control group (PGY1 2019-2020 and OR Nurses)
  - December 2020 – Follow up survey to OR Nurses and PGY1 2020-2021
  - June 2021 – Follow up survey to OR Nurses and PGY1 2020-2021
- Compare the control group with the group receiving intervention to see there is any difference or improvement in relationships.

**Gather self-reflections**

- Bi-weekly after each session
  - What was most impactful about the session?

**Barrier – Strategies**

**Barriers Assessment:**

- Resistance from both residents and nurses who may already have inherent assumptions and biases about each other.
- Time is the largest barrier to making this program successful.

**Strategies:**

- The curriculum will strategically address the identified gaps through interactive didactics activities, discussions, and “a day and life of a nurse/resident.”
- Enlist champions to serve as leaders and encourage participation.

**Discussion: Next Steps & Areas**

**Next steps:**

- Identify faculty to assist in the development of the intervention
- Identify education resources that can supplement the educational intervention
- Develop the educational intervention
- Schedule of intervention sessions

**Areas we could use guidance/input:**

- What ideas do you have for case vignettes/activities that will build trust and mutual respect?
- How would you produce Day and life of a nurse/a residents in a creative yet cost-effective way?
Introduction: Background & Context

Opiate use and opiate abuse has become a major source of morbidity and mortality in Indiana and across the nation. In Indiana, there have been over 1500 deaths due to opiate overdoses per month for the past several years. Opiate prescribing practices are a part of this year’s strategic plan for Saint Vincent. It is a core focus of the psychiatry residency and psych program at Good Samaritan Hospital. We have initiated a study on the integration of psychiatry residents with internal medicine residents to improve treatment of substance use and to reduce the risk of development of substance use disorder.

Methods: Interventions/Changes

Psychiatry residents will be working as consultants in the medicine continuity clinic. They will work alongside the medicine residents to support them as they learn to care for patients with substance use and chronic pain. Work to provide education to the medicine residents on opiates and substance abuse disorders.

Methods: Measures/Metrics

• Pre and post survey (KnowPain12 and Substance Abuse Attitude Score) of internal medicine and psychiatry residents regarding their comfort with opiate prescribing, treatment of opiate use disorder at the beginning and end of their first ambulatory rotation working with psych residents.
• Control group of internal medicine residents at St. V who will have less contact with psychiatry residents.

Mission/Vision Statement

We will implement a multidisciplinary teaming in a GME naïve institution, which includes new internal medicine and psychiatry residencies, to decrease opiate prescribing to patients with chronic pain, while properly treating chronic pain, addiction and any concomitant psychiatric disorders.

Aim/Purpose/Objectives

• An increase in scores on the KnowPain12 inventory and improvement in attitudes towards patients with substance use disorder for internal medicine interns after their ambulatory block working with psychiatry residents.

Barriers – Strategies

• Both residencies are new programs, so building a team structure for them to work together will be from the ground up
• St. Vincent has an opiate prescribing policy for primary care that may pose a barrier for patient recruitment at that location
• As the programs grow, several of the leaders are new to the hospital systems
• Working between two hospital organizations across the region and two time zones complicates communication and meetings.
• Controlling for changes at state/local level that impact

Discussion: Next Steps & Areas

What are critical next steps?

• Residents arrive
• Train faculty on suboxone use

List areas you could use guidance/input

1. Conducting a study in a system that limits opiate prescribing while still treating chronic pain
2. Additional ways to track ability of medicine residents to treat/evaluate patients with comorbid substance use disorders.

Group Feedback (leave blank)
## Readmission Roundabout

**Alethea Turner DO, FAAFP; Cynthia Kegowicz MD; Darlene Moyer MD, FAAFP; Ashley Dyer-Giaquinto MD, FM PGY2; Yiwen Richard Liang MD, FM PGY2**

### Introduction: Background & Context
- Transitioning care from the hospital to the ambulatory setting is often complex and challenging for both patients and the healthcare team.
- We aim to standardize transitional care management (TCM) from the inpatient to the outpatient setting for patients within our residency program who are at the highest risk for hospital readmission.

### Mission Statement

**Mission Statement**

- By 2021 we will increase the volume of patients receiving formal transitional care visits at the NOAH Heuser Family Medicine Center (HFMC) and will begin collecting transitional care reimbursement, as well as preliminary data on social determinates of health affecting safe transitions.

### Objectives

- Focus efforts on patients at the HonorHealth Scottsdale Osborn Hospital, who are also on the family medicine residency inpatient service and who will be following up at the NOAH HFMC.
- Increase outpatient follow-up within 14 days of hospital discharge for patients who are at >20% risk for readmission.
- Reduce readmission rates in this cohort of patients.
- Identify patient barriers for effective transitional care.

### Methods: Interventions/Changes

- Assess existing transitional care processes within our institution and partner with other departments to improve and consolidate efforts.
- Create a standardized process for scheduling patients in our clinic at the time of hospital discharge, contacting patients after discharge to initiate care coordination, and completing their ambulatory follow-up visits with utilization of TCM templates within EPIC.

### Measures

- Ambulatory follow up rates within 14 days of hospital discharge for patients at ≥20% risk for readmission.
- Readmission rates within 30 days of hospital discharge for this cohort of patients back into the HonorHealth system.
- Identification of barriers preventing effective transitional care; such as social determinates of health negatively impacting a patient's ability to:
  - Follow up on the telephone and/or in the office
  - Adhere to medication or dietary instructions.

### Barriers

- Effective consolidation of existing processes.
- Retraining individuals to follow new procedures (including scheduling, billing, telephone and in-person follow up).

### Discussion: Next Steps & Areas Seeking Input

**Next Steps:**
- Consolidate existing transitional care efforts.
- Create a standardized workflow for transitional care.
- Obtain buy-in from team members.
- Train stakeholders and implement the new workflow.
- Collect data.

**Areas for Guidance:**
- Workflow ideas to utilize support staff efficiently:
  - We plan to utilize a scheduler in the hospital, nurse/MA care coordination team in the ambulatory setting, billers, providers, and potentially a clinical pharmacist.
- Suggestions for efficiently identifying patient barriers that negatively impact safe transitional care as well as strategies for collecting and analyzing this data.

### Group Feedback
Utilizing Inter-professional Teaming To Reduce Inpatient Length of Stay

K. Ussery-Kronhaus MD, C. Bader DO, M.Halari MD
J. Tang MD, J. Bland MSN RN, K. Rasinya LCSW CCM
P. Cheriyath MD, W. Mink, G. Filice MD

Introduction: Background & Context

Reducing length of stay (LOS) is a network wide initiative, and Hackensack Meridian Ocean Medical Center is committed to achieving the goal of reduction of LOS by 1 day. Our goal is to utilize inter-professional teaming to reduce length of stay through collaboration.

Mission/Vision Statement

• Our Vision is to improve interprofessional teaming with all clinical and nonclinical personnel to achieve patient care excellence and align with our institutional goals of care.
• Our Mission is to utilize interprofessional teaming to improve team member communication for the care of patients, increase patient experience, and reduce length of stay.

Aim/Purpose/Objectives

• To decrease length of stay (LOS) by 1 day at Hackensack Meridian Ocean Medical Center by utilizing enhanced interprofessional communication. The project will continue until this goal is achieved.

Methods: Interventions/Changes

• Methods: Utilizing a newly developed Multi-Disciplinary Rounding Tool in EPIC, virtual multi-disciplinary rounding
• Data and Measurement: Quarterly reporting of Length of Stay (LOS) Data and HCAHPS patient survey results. Monthly implementation team meetings to exchange best practices and areas for improvement
• IRB Submission: IRB exempt
• Patient/Family Engagement: Utilize HCAHPS survey questions about transition of care, discharge information, and staff communication to incorporate patient and family feedback into the project

Methods: Measures/Metrics

• Measure: All payer Case Mix Index (CMI) adjusted Length of Stay (LOS) data
  – Baseline: 90 days prior to intervention (Feb 15th, 2020)
  – Follow up: 90 days after intervention (Feb 15th, 2020)
• Intervention Group: Family Medicine Teaching Service
• Control Group: Internal Medicine Teaching Service

Barriers – Strategies

Initial:
• Identifying comparison groups (ex: teaching service vs hospitalist vs private)
• Transparency of data
• System barriers- resources, staffing

Ongoing:
• Engagement- encouraging resident and physician engagement in the process by ensuring they find value in the process
• Re-education of the process with each changing patient care team

Discussion: Next Steps & Areas Seeking Input

What are critical next steps?
• Continual implementation of intervention daily and monthly reviewing for improvement along with frequent analysis of data to determine appropriate course of action
List areas you could use guidance/input
• Other interventions to decrease length of stay

Group Feedback (leave blank)
Introduction: Background & Context

This project evaluates the impact of multidisciplinary obstetric simulation training on team performance and clinical outcomes.

The focus is consistent with Saint Francis Hospital and Medical Center’s institutional priorities on interprofessional collaboration, fostering a culture of safety, and improving quality of care and patient outcomes.

Methods: Interventions/Changes

**Intervention:** Participants will take part in a series of multidisciplinary obstetric hemorrhage simulations with a focus on activation of the OB Hemorrhage Response Team (OB Code Pink) and team intelligence. All participants are given pre-work to complete prior to the simulations and will participate in facilitated debrief sessions.

Curriculum pre-work focuses on the process for activating OB Code Pink and removing any identified barriers to activation. Also included is information on team intelligence, shared mental model, and closed loop communication.

Methods: Measures/Metrics

The effects of coaching during simulation versus no coaching between groups will be assessed with the Performance Assessment for Communication and Teamwork tool.

Participants will complete self-efficacy and team functioning assessments.

Clinical outcomes evaluation will include: length of stay, costs, ICU admissions, and percent activation of OB Hemorrhage Response.

Barriers – Strategies

Creating homogeneous groups
Coordination of schedule for the participants

Discussion: Next Steps & Areas
Seeking Input

Finalizing team members
Development of self-efficacy and team functioning assessment tools
IRB process