Using Patient Safety Principles to Create a High-Functioning, Interprofessional CCU Team on 5SE

Sense of Urgency

- Dramatic Growth in Inpatient Cardiology census → overwhelmed Cardiology Team structure
- "Open unit" ICU model (Teams follow patients into/out of ICU):
  - Inefficient
  - Contributed to low 5SE staff satisfaction

Team Initiative

Collaboration between Division of Cardiology and Grant Team, with UWMC Leadership support, to develop a new CCU Service Model:
- Interprofessional Team
- Integrating patient safety best practices

Funding/Support

- UWMC
- HRSA

Contacts

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Results-1: ↑ SSE Staff Satisfaction

- Multiple POSA Cycles for:
  - SIBR Format
  - Quality/Safety Checklist
- Continuous Feedback:
  - On-going Catalyst Surveys of SSE Staff to identify opportunities for improvement
  - Individual peer feedback provided to Cardiology Fellows and Attendings by CCU Medical Director

Results-2:

- Inpatient Cardiology Mortality
  - CV Inpatient Mortality (N) by Month, Jan-14 to Apr-16
  - overall ↓ in Total Mortality on inpatient Cardiology Services since CCU Start:
    - Note that these results are NOT ADJUSTED for p's in either Census or Case-Mix Index (i.e., illness severity)
    - Therefore, as compared to the pre-CCU baseline, there is a significant ↓ mortality since 9/1/15

Principles #3A/B: “Flattened Hierarchy” and “Alternation of Roles”

Principle #4: Team Communication

- TeamCORE Training (Aug ’15, Mar ’16):
  - RNs, APPs, Attendings/Fellows
- TeamCORE Tools posted in CCU Team Room
- “Briefs”:
  - 8am/8pm Briefs with SSE Charge RN about potential transfers and patient rounding order
  - 1pm Brief with CCU and Card A-C teams to discuss:
    - Patient transfers (same day and next)
    - Load-leveling of Cardiology admissions/transfers

Principles #1: Iterative Improvement

- Multiple POSA Cycles for:
  - SIBR Format
  - Quality/Safety Checklist
- Continuous Feedback:
  - On-going Catalyst Surveys of SSE Staff to identify opportunities for improvement
  - Individual peer feedback provided to Cardiology Fellows and Attendings by CCU Medical Director

Build on Previous Cardiology Care Transformation Successes

- Cardiology B Length of Stay (LOS) Initiative (FY13-FY14):
  - ↓ O/E LOS from 1.61 → 1.05
  - ↓ O/E Mortality from 1.41 → 0.50
  - Validated Savings of $8.4 million in 1st year

- Heart Donor Utilization (CY13 to present):
  - Progressive ↑ in Heart Transplants since CY13
  - Prior average (CYs 03-13: 22.8/year)
  - CY14: 39, CY15: 42, CY16 (projected): 56 (145% ↑)

- Partnership with School of Nursing (Brenda Zierler and colleagues):
  - HRSA grant to promote Interprofessional Collaborative Practice in Advanced Heart Failure

SIBR and Quality/Safety Checklist

- Interprofessional CCU Team:
  - Inpatient Cardiology Fellows and Attending

- Rounding Format:
  - Structured Interprofessional bedside Rounding (SIBR) with patient/family, RN, PharmD and CCU Team → Learnings Informed Cardiology B SIBR
  - Quality/Safety Checklist

- Set Team Goals and Expectations:
  - TeamCORE Training for all 5SE Staff (PSS/PCT/RN/APP/PharmD/Fellow/Attending)

- Set a Deadline:
  - "Mock CCU rounding: 8/25/2015
  - CCU “go-live”: 8/31/2015

Sense of Urgency: 2-fold ↑ in Cardiology Census since 1/1/14

- UWMC Inpatient Cardiology Census 1/1/2014-4/12/2016 Source: CORES

- Significant ↑s in either Census or Case Mix

CCU Start

Assemble the Team

- CCU Leadership Team: Kevin O’Brien (CCU Medical Director), Carrie Boom (CCU Lead APP), Kim Yearo → Renee Paquet, SSE Nurse Manager, with help from:
  - Anna Ehoff, Aries Gum (Asst. Nurse Managers)
  - Sheryl Greco (Clinical Nurse Specialist)
  - Amanda Moore, Debra Liner, McNady Murphy

Culture of Safety