

NI VII Meeting Three/Storyboard

## COHORT THREE Clinical/Quality Outcomes

Advocate Lutheran General Hospital (2 projects) Aurora Health Care – Family Medicine Team Community Health Network Good Samaritan Hospital Kaiser Permanente Northern California Ocean Medical Center UnityPoint Health – Des Moines



## Advocate Lutheran General Hospital Project 1







NI VII Meeting Three/Storyboard

## **Expanding the role of the PCP in Hospital Medicine**

Patrick Piper, MD Judith Gravdal, MD Franklin Chang, MD



## Introduction & Aim

Our original project aimed to increase the percentage of advanced directives completed and filed in appropriate patient charts. Rapid turnover in key stakeholders and the COVID-19 pandemic shifted institutional priorities and project placed on hold. The springtime surge of COVID-19 infected patients created an earlier adaptation of available technology for patient care. Nurses, house staff and other team members were able to interact with and treat patients with different communication modalities. Our new project is focused on utilizing technology to enhance team-based care in a broader sense. Our hypothesis is that incorporating the PCP virtually in hospital-based care will lead to not only improved end-oflife care goal discussions but will also increase patient satisfaction and decrease readmissions. Our hospital is currently below our target in all 3 of these measures. We plan to initiate the option of a virtual PCP consult on targeted patients to improve these measures. Specifically, we plan to:

-Increase patient satisfaction scores and move 50% closer to our stated target

-Decrease our readmission ratio and meet our target on identified patient coho



## Methods: Audience, Interventions, Measures

#### AUDIENCE

> Broader audience includes hospitalists, primary care physicians, nursing staff, hospital leadership and accountable care organization (APP)

#### INTERVENTIONS

- > Utilization of virtual primary care consult on selected patient groups.
- MEASURES
  - > Outcome
    - "Provider Pulse" date on HCAHPS and 30-day readmissions
  - > Process
    - Percentage of consults obtained on targeted patients
  - > Balancing
    - Hospitalist, PCP and nursing satisfaction scores, including questions teaming



## Results (to Date)

 Initial buy in on new project from hospital leadership, APP (accountable care organization) and hospitalist groups

Trial run of technology on selected volunteer inpatients successful and elicited positive feedback from patients

 Results on patient satisfaction scores and readmission ratios remain below target for prior 9 months



### Discussion: Barriers & Next Steps

 Barrier: Larger project scope will require buy-in from multiple newly identified key stakeholders

- > Capitalize on buy-in from nursing and hospitalist leadership
- > Continue to work with hospitalist groups and accountable care organizations to identify primary care physicians
- Barrier: Unclear compensation model for participating PCPs
  - > Focus on "full risk" patient groups where revenue is generated by meeting targeted quality measures rather than E&M codes
- Barrier: Outpatient primary care availability
  - > Allow flexibility on timing of consult and train nursing to provide technology at off hours
- Barrier: Larger project scope will require longer project timeline
  - > Focus on quality data that is fully aligned with key hospital and ACO goals



## Advocate Lutheran General Hospital Project 2







NI VII Meeting Three/Storyboard

## An approach in teamwork - COPD Multidisciplinary Clinic

Farah Chaus, MD Judith Gravdal, MD Erica Zak, MD



## Introduction [or Background] & Aim [or Purpose/Objectives]

- Chronic obstructive pulmonary disease (COPD) has significant patient morbidity and mortality
- This leads to high health care resource utilization and cost
- Many health professionals do not feel comfortable or have the time to address proper inhaler administration with patients
- The COPD Multidisciplinary Clinic offers comprehensive care for patients with COPD
  - > Sponsored by the Advocate Medical Group, ALGH and Advocate Physician Partners
  - > Team includes physicians, pharmacists, social workers, respiratory therapists and LPNs who provide holistic care
  - > The goals of our program are to reduce symptoms, improve exercise tolerance, educate patients about their disease so that they can lead fuller and better lives, prevent future complications, and educate residents and other team members in the team model.
- The AIM of this pilot multidisciplinary clinic is to
  - > 1- improve our patients' understanding of COPD
  - > 2- improve patient compliance with recommendations.
  - > 3- decrease emergency room visits and hospital admission by 50% over the next three years (2019-2022)



## Methods: Audience, Interventions, Measures

IRB ID: 6687, Quality Improvement Project Around Education of COPD Disease and Medications

- > Once a month clinic
- > Clinic model staffing
  - PSR, MA/LPN, Patient Advocate. Pharm D, Social Worker or Care Manager, Respiratory Therapist, and physician
- > 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 across APP



## Results (to Date)

- 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
- Data has been limited due to COVID pandemic



## **Discussion: Barriers & Next Steps**

- Barrier: Patient enrollment
  - > Next Steps:
    - Automatic Referrals through inpatient into clinic in EMR to improve patient enrollment
    - Meeting scheduled with care management team to improve referral rate
- Barrier: New inpatient EMR implementation on February 9, 2020.
  - > Next Steps:
    - Improve and standardize care management engagement/communication across inpatient and outpatient setting
    - Invited transition care team to be part of the discussion
    - Create system wide protocols for standardization of paperwork on discharge in inpatient and outpatient setting
- Barrier: Need for a project manager to identify and review readmission data
  - > Next Steps:
    - Continued engagement with leaders of organization to ensure commitment and support for the project
    - Active participation in Hospital ACO committee to voice concerns and ask for help
- Barrier: Education of residents rotating through the clinic by working with the pharmacist for didactic lectures
  - > Next Steps:
    - Difficulty with in person didactics, looking at scheduling webinars or pre recorded videos
- Barrier: Need tool(s) for measuring team effectiveness
  - > Next Steps:
    - Continued engagement in workshops and meeting with AiAMC for guidance



Aurora Health Care Family Medicine





We are 🚜 😋 Advocate Aurora Health



NI VII Meeting Three/Storyboard

# Improving Hypertension in Young Adults within Two Family Medicine Clinics

Chella Bhagyam DO, Keyonna Taylor-Coleman MD, Erin Harvey MD, Lawrence Moore MD, Kim Schoen MSW, Catherine De Grandville MD, Pamela Graft MBA, Will Lehmann MD, Bonnie Bobot MD, Sarah Bowlby, Emily Shultz, Steven Murphy, MD, Rambha Bhatia, MD, and Deborah Simpson PhD

Aurora Family Medicine Residency, Milwaukee, WI – Our Program Website



## **INTRODUCTION & AIMS**

## Early data review revealed age-related disparity in hypertension control at our FM residency clinics

## Aims

- Increase patient awareness of hypertension-related sequelae
- Standardize clinician response to elevated BP during clinic visits
- Improve BP control in younger hypertensive patients to reduce the age disparity
- Develop creative solutions to push toward achieving these aims despite pandemic disruptions



## **METHODS: AUDIENCE, INTERVENTIONS, MEASURES**

#### Clinic Approaches

- Resident lecture and desk reference on HTN management
- Patient education cards given to patients with elevated BP; teambased workflow (MAs, RNs, physicians)

Virtual Approaches EPIC Reporting to define at risk population within individual providers' panels <u>MyAdvocateAurora</u> scriptedand-personalized patient messaging to offer virtual or (as able) in person visits for at risk patients



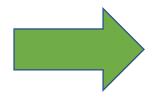
# **RESULTS (TO DATE)**

Overall, improvement in disparity gap at each clinic and across combined population

ALL CLINICS	AUGUST 2020				JANUARY 2020			
				Disparity				Disparity
	Control	Uncontrolled	% Control	Gap	Control	Uncontrolled	% Control	Gap
Age 18-49	194	74	72.4%	6.3%	206	89	69.8%	10.8%
Age 50+	891	241	78.7%		951	229	80.6%	

#### January 2020 Disparity Gap

Clinic A: 7.6%
Clinic B: 11.8%



August 2020 Disparity Gap Clinic A: 7.2% Clinic B: 5.1%



## **DISCUSSION: BARRIERS & NEXT STEPS**

## Address Setbacks

- Clinic B and both clinics overall with apparent decrease in BP control for *older* patients, this requires further parsing/review
- Reduced in person visits challenges BP re-measurement and med management follow ups

Recent approval to use home BP measurements toward quality scores!

## Maintain Momentum & Weather the Storm

- □ Intern resident class, new clinic staff since starting the project
- As flu/COVID season approaches, anticipate that clinic access may fluctuate as more restrictive safety measures are reimplemented



### Community Health Network







NI VII Meeting Three/Storyboard

## Providing a Framework to Improve Understanding and Call to Action for Teams to Address Disparities in Healthcare

Areef S. Kassam, MD, MPA, Kasey Windnagel, PhD, Kim Jones, LCSW, Holly Wheeler, DO, Laura Ruekert, PharmD, Peter Karalis, MD, Crystal Neal, Allison Woody, Kathy Zoppi, PhD, MPH



## Introduction [or Background] & Aim [or Purpose/Objectives]

In 2020, the American Medical Association reported, despite improvements in health and healthcare in many parts of the country, racial, ethnic, and other under-represented people experience a lower quality of care and suffer higher morbidity and mortality. Recent national events have charged healthcare organizations to face the personal, professional, and systemic factors which discriminate against marginalized groups of patients.

This important call to action has galvanized organizations, however, there is a significant lack of collated resources and paths to help guide them. The mission of Community Health Network's AIAMC initiative is to provide a framework for interdisciplinary teams to better understand systemic factors which create disparities with patients, providers, systems, and in research.

This framework will provide the structural support for residency programs to enact meaningful change within their team in addressing diversity, equity, and inclusivity



## Methods: Audience, Interventions, Measures

We created four workshops to help our residency teams recognize gaps and in their understanding which includes:

- 1) Social Determinants of Care and Health Care Disparities
- 2) Implicit Bias
- 3) Microaggression
- 4) Cultural Humility.

At the end of the four workshop series, residency programs will be empowered with a new set of tools and understanding to create interdisciplinary initiatives aimed to tackle disparities evident within their team. In order to track success, the AIAMC collaborating team will measure ACGME Diversity survey results for 20 pre-initiative, and 2021, post-initiative.

## Results (to Date)

Workshop #1 on Social Determinants of Care and Healthcare Disparities was an overwhelming success with positive response from faculty, staff, and residents. Programs have began to think about where there are gaps in education, clinical care, and teaming as it relates to underrepresented minorities and other disparities.

Three more workshops are planning for Winter and Spring with completion set for March 2021. Results from ACGME Diversity Survey will be available in Summer 2021.



### **Discussion: Barriers & Next Steps**

- Barriers
  - > Working on being "in-line" with other Network/Program initiatives
  - > Education/Training for large groups for dedicated time and different baselines
  - > Limited internal data/infrastructure set-up thus far
  - > Navigating personal, professional, and systematic biases
- Next Steps
  - > Complete workshop series on GME level
  - > Programs have a call to action to begin brainstorming on initiative to address program disparity (patient care, employment, teamwork, etc)
  - > ACGME Diversity subsection survey in Spring 2021 (2020 used as benchm



### **Good Samaritan Hospital**





Ascension

St.Vincent

**Good** 

Samaritan



NI VII Meeting Three/Storyboard



Dr. Christopher Neely, MD Dr. Margaret Beliveau, MD, FACP Dr. Robert Ficalora, MD, FACP Dr. Adrian Singson, MD



Introduction [or Background] & Aim [or Purpose/Objectives] 2017: 1,176 reported opioid-involved deaths in Indiana; rate of 18.8 deaths/100,000 persons (national rate is 14.6 deaths/100,000 persons).

2017: 649 reported synthetic opioid cases; 20-fold increase from 2013.

160 to 327 heroin-related deaths.

2017: Indiana providers prescribed 74.2 opioid prescriptions for every 100 persons (US national average rate is 58.7 prescriptions); only 9 states have a higher prescribing rate than Indiana.

Currently, no information on effect of inter-professional teaming on opiate prescribing and usage.

This project is a dual opportunity to impact the opioid epidemic and build bor relationship and infrastructure in a new program.

## Introduction [or Background] & Aim [or Purpose/Objectives]

AIM: We plan to investigate and construct teaming as we build our medical education infrastructure in our 4-hospital GME naive medical education consortium.

This will also include medical consultation and hospital medicine at a surgical specialty hospital. The internal medicine and psychiatry residencies share many resources and facilities.

We also plan to integrate nursing and pharmacy, and our established nurse and pharmacy residency programs, into the effort.

This combination of disciplines will be well suited to focusing on opioid prescribing across the consortium, and thus we will have one project that spans several environments.

Methods: Audience, Interventions, Measures

Trying to change how to treat pain in-house post-operatively.

Educate patients in clinic prior to surgery.

Equip patients with mantra/tools for appropriate opiate use.

Going away from trying to "stay ahead" of pain; educate and modify patient behaviors to being able to cope with pain and direct patients toward a therapeutic activity goal. Methods: Audience, Interventions, Measures

Arms nursing staff to move away from "staying ahead" of pain and focusing on therapeutic activity goals.

Monitoring pill counts post-operatively.

Many arthroplasties now only requiring 1-2 day stay.



## Results (to Date)

Much momentum lost in orthopedic arm due to COVID 19.

Orthopedic arm deployed individualized discharge opioid pill counts from multidisciplinary team involving RN, PT, pharmacy, and physicians.

Assessed various factors to determine pill count including INSPECT, 24-hour opioid use in the hospital, and interviews with patients to assess if they are meeting their therapeutic activity goal.

Pill counts are customized based on combining the surgery-specific maximum opioid pill count recommendations from Michigan OPEN data with a multiplier based on 24-hour use. Also involved non-narcotic analgesia.

Patients also discharged with a carbon-based disposal bag to assist in safe destruction of unused opioid pills after treatment course. Data from orthopedic arm lines up with national data that estimates 40% of prescribed opioids are unused.

### Discussion: Barriers & Next Steps

- Momentum lost due to COVID.
- Volume has been a barrier.
- Project started prior to SWINRES IM residents arriving.
- SWINRES IM residents will need to have rotation w/ Dr. Neely.
- Engaging pharmacy residents.
- Will recruit SWINRES IM residents to the project as well.



### Kaiser Permanente Northern California









NI VII Meeting Three/Storyboard

#### Vallejo Mobile Health: Teaming For an End to Homelessness

Emily Fisher, MD; Ted O'Connell, MD; Kat Dang, MS, MAS; Siddharth Selvakumar; Jung Kim, PhD, MPH; Joelle Lee, MPH; Vanessa Franco, MD; Theresa Azevedo-Rousso, DIO; Angela Jenkins; Michelle Loaiza







## Introduction and Aim

- Solano County: ~1200 people living without homes
- **Top Needs:** Aid with employment, rent, alcohol/drug counselling, and mental health services
- Vallejo Mobile Health(VMH) is a street outreach team seeking to reduce the burden of disease and improve wellness of Vallejo's people without homes through a multidisciplinary, community-based approach
- VMH findings: lack of trust in healthcare system is common

• *Mission*: We strive for wellness and the long term goal of facilitating housing stability for people without homes through the culturally-informed provision of supportive services including, but not restricted to, medical services,

#### Pre COVID-19 Plan:

- Integrate medical care with mobile outreach and improve referral workflow process
- Track a) patient utilization with referrals, b)ED and primary care visit
   c) the patient experience.

#### Post COVID-19 Plan:

- Integrate medical care with Project RoomKey, formalize partnerships, integrate social services, expand to additional transitional housing sites
- Track a)patient utilization and referrals b)ED and primary care visits

mental health, housing assistance, and case management.

c)the patient experience.

# Methods:

# Audience

- Previously homeless patient housed at Project RoomKey
- Research indicates this population:
  - Shows high utilization of emergency services and low utilization of primary and specialty care
  - Reports transportation, insurance enrollment, and economic barriers to access care

# Interventions

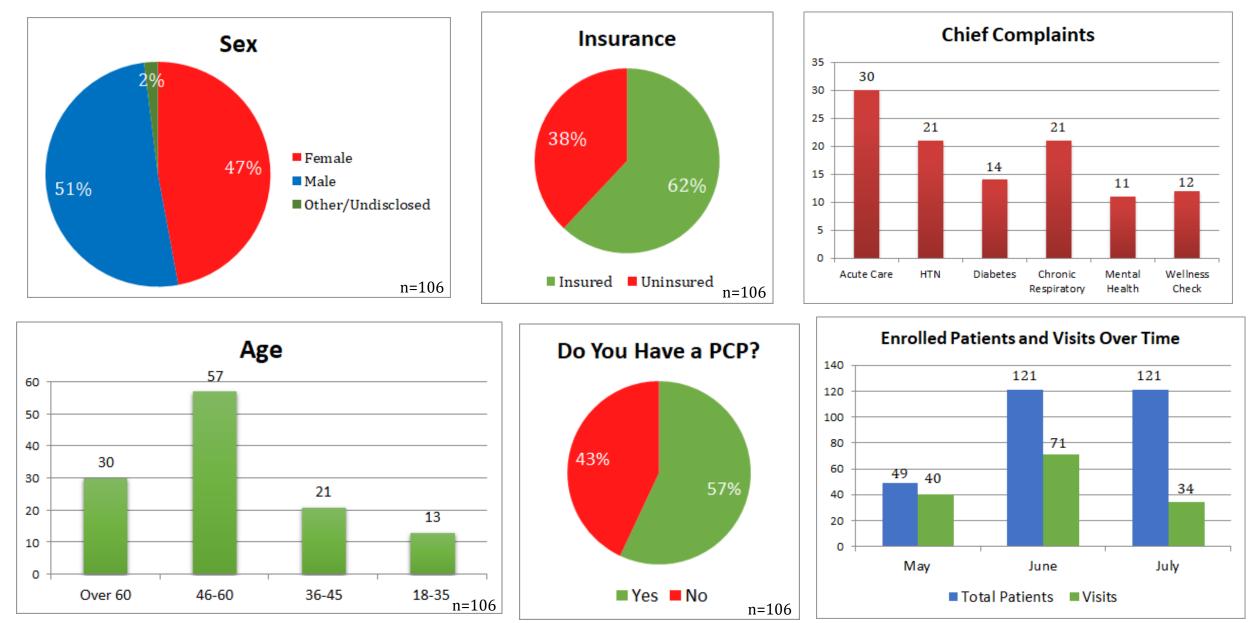
- VMH services to PRK patients include:
  - Health Screenings and Primary Care Services
  - Aid in PCP connection

## Measures

- **Demographic:** Age, Sex, Insurance, Utilization Behavior, Common Diagnoses and Chief Complaints, and Social History (length of time without stable housing, drug use, employment)
- **Process Measures:** # patients seen, periods of high activity, patients enrolled in PRK over time
- **Outcome Measures:** # appts with PCP, ER incident reports



## Results (to Date)



# **Discussion: Barriers & Next Steps**

Barriers Getting involvement of patient population in the team

Medical Student and Resident involvement continues to be an issue working with faculty

COVID prevents number of team members and volunteers on site for organization and data collection

**Telemedicine barriers** 

Recent lack of on-site coordination and case management due to organization and city communication barriers



Next Steps Identify leaders in the patient population for inclusion in team

Include residents on Community Medicine Rotations, reach out to neighboring residency programs, establish Street Medicine elective with Medical School

Scheduling PCP appointments for patients with on site medical staff present

New case management team to start this week; Creating clear scopes of practice and onboarding documents Ocean Medical Center Hackensack Meridian Health







NI VII Meeting Three/Storyboard

# 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 & Aim

### Introduction:

> 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. CMI-Adjusted Length of Stay (LOS) Goal for 2020 is 2.5 days for Hackensack Meridian Ocean Medical Center. Our goal is to utilize inter-professional teaming to reduce length of stay through collaboration.

### Aim:

> 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

- Methods:
  - > Utilizing a newly developed Multi-Disciplinary Rounding Tool in EPIC, virtual multi-disciplinary rounding
  - Monthly implementation team meetings to exchange best practices and areas for improvement
- HCAHP discharge questions
  - > During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?
  - > During this hospital stay, did you get the information in writing about what symptoms or health problems to look out for after you left the hospital?



Methods: Measures

 Data and Measurement: Quarterly reporting of Length of Stay (LOS) Data, CMI Adjusted LOS and HCAHPS patient survey results.

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: Implementation** 

- 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)
  - > Ongoing: Every 90 days

- Intervention Group: Family Medicine Teaching Service
- **Control Group**: Internal Medicine Teaching Service



### Results (to date)

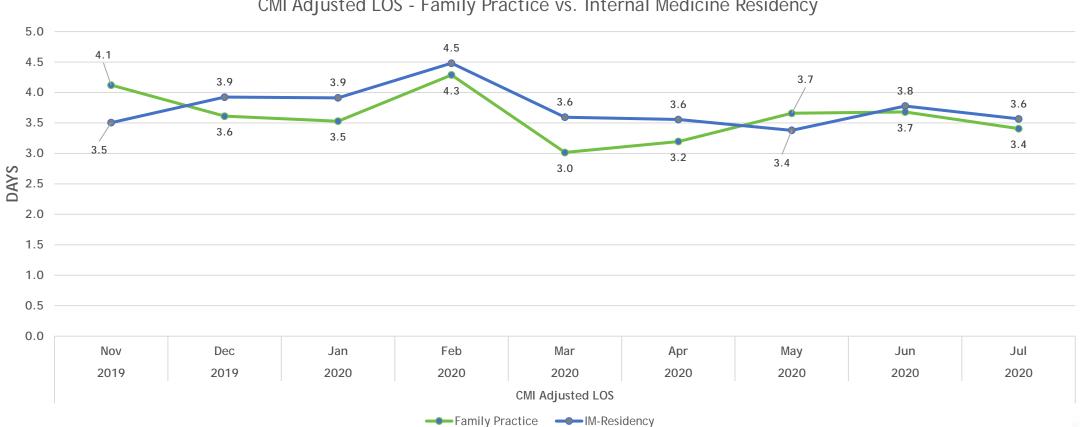




----Family Practice -----IM-Residency



### Results





CMI Adjusted LOS - Family Practice vs. Internal Medicine Residency

### Results

N-Size ----Score 100% 100% 90 100% 90% 84% 90% 80 82% 78% 80% 70 70% 61% 60 60% 50 CASES 40 69 SCORE 50% 52 40% 50 52 58 44 43 30 30% 20 20% 2 10 5 10% 16 11 9 9 9 0% 0 Nov Dec Jan Feb Mar Apr May 2019 2020 2019 2020 2020 2020 2020 Axis Title

Family Practice - HCAHP Discharge Information

Project goal are scores >75%/month



Cases

## **Discussion: Barriers & Next Steps**

### Barriers:

- 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
- > COVID-19 pandemic impacted our patient mix, discharge rates, meetings, and time available to diligently apply interprofessional communication via EMR for each patient

### Next Steps:

- Residents have been scheduled to spend time with case management and with the physician advisor team to experience the steps in discharge
- Education sessions have been scheduled with the Patient Experience Office, Pharmacy, Clinical Documentation Specialists
- > Pharmacists rounds with the inpatient team
- > Standardized DME scripts provided from Case Management
- > Creation of a Discharge Template for the team to use
- > Bedside discharge rounds with the patient's primary nurse



## UnityPoint Health Des Moines







NI VII Meeting Three/Storyboard

# **Quality Improvement and Antimicrobial Stewardship in the ICU**

Chanteau Ayers, Hayden Smith, Steven Craig, William Yost, Amanda Bushman, Frank Caligiuri, Julie Gibbons, Rosa Rossana, Samuel DuMontier, Brooke Delpierre



# **Background & Aim**

#### **Background and Context**

- > A quality improvement initiative on anti-microbial stewardship revealed the rate of vancomycin use in our ICU patients was above national standards.
- > A changed was instituted in our ICUs from using nasal cultures to PCR testing for MRSA screening to decrease vancomycin usage. After implementing this change, no impact on vancomycin usage was discernible even though screening results were now available w/in two hours.
- > Also discovered was that patients were not being consistently screened for MRSA on ICU entry and vancomycin days of therapy was being improperly calculated.

### Aim

> To decrease vancomycin days in the ICU at two UnityPoint facilities and to increase pharmacist engagement in appropriate vancomycin usage.



## **Methods: Intervention**

### Interventions

> Assemble an interdisciplinary team (i.e., education, nursing, medicine, pharmacy, infectious diseases, and IT data analysts).

> Acquire IRB approval for data abstraction and review

> Reveal processes for MRSA screening and vancomycin usage

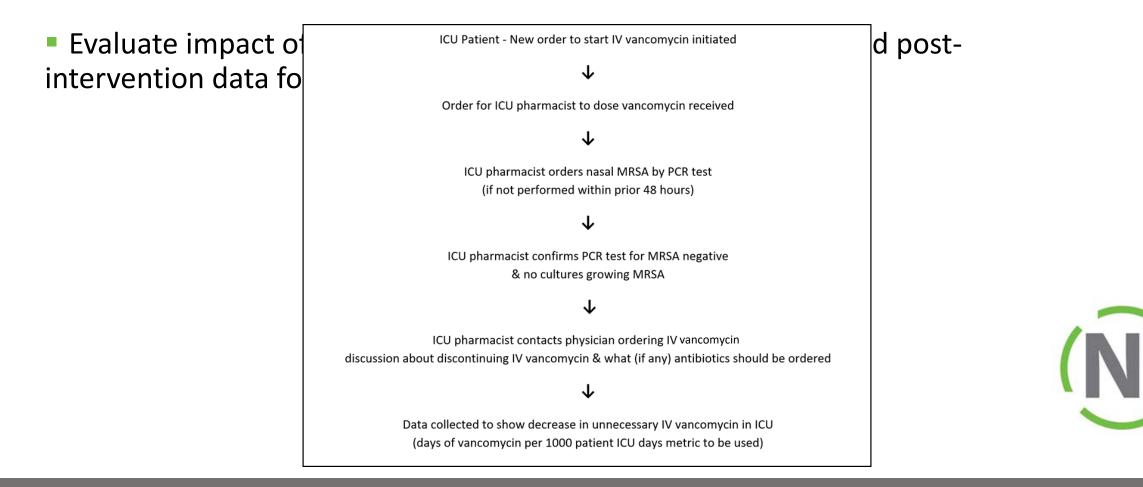
> Engage pharmacists related to appropriate vancomycin usage

> Involve physicians working with clinical pharmacists to assure appropriate vancomycin usage



## **Methods: Measures**

 Work with data analysts to properly measure vancomycin use per 1,000 patient days in ICU at each facility.



## **Discussion: Barriers & Next Steps**

#### **Barriers**

- > Communicate change in MRSA screening and availability of results to all providers (nurses, pharmacists, physicians, etc.) across the two campuses will be difficult.
- > Quantify days of vancomycin therapy metric calculated by data analytics.

#### **Strategies**

> Update pharmacists' ICU Clinical Practice Agreement and implement MRSA test ordering privileges in EHR.

E Order and	d Order Set	Search	-
VANCO			P
E Orde	r Sets &	Panels 🛠	
		Name	
R	ø	vancomycin & Pharmacy to dose	
~	ø	Vancomycin Dosing by Pharmacy & MRSA PCR	)

#### **Next Steps**

- > How can we best hardwire changes?
- > How is ICU prescribing and discontinuing vancomycin in possible MRSA infection patients managed at your facilities?

