2024 Improvement and Innovation Summit

GBMC HEALTHCARE

Leveraging Technology to Decrease the Incidence of Pulmonary Embolisms & Deep Vein Thrombosis

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GBMC

Malcolm Baldrige National Quality Award 2020 Award Recipient

Introduction

Greater Baltimore Medical Center's (GBMC) journey began in April 2020 with an exhaustive study, launching an initiative to improve patient safety by tackling Pulmonary Embolisms (PE) and Deep Vein Thrombosis (DVT), instigated by a noticeable number of hospital-acquired cases. With a focus on creating innovative solutions over engaging existing issues, we set ambitious targets to enhance the delivery and adherence of DVT pharmacological prophylaxis, aiming to drastically lower PE and DVT incidences. This effort highlights GBMC's dedication to pioneering patient safety through technological and data-driven approaches.

Objective

Our goal at GBMC was to leverage state-of-the-art technology and data-driven strategies to significantly reduce PEs and DVTs. The initiative focused on three key objectives:

1. Prompt DVT Prophylaxis: Ensure timely administration of prophylaxis.

2. Increased Adherence: Improve compliance with prophylaxis guidelines.

3. Reduce Incidences: Minimize occurrences of hospital-acquired PEs and DVTs.

Through these targeted objectives, we aimed to enhance patient safety and set new standards in healthcare quality.

Method

GBMC's strategy focused on utilizing Electronic Health Record (EHR) technology and engaging stakeholders:

- **Data Analysis:** Evaluated existing practices to pinpoint areas needing improvement.
- **EHR Dashboard:** Launched real-time dashboard in Epic EHR for continuous monitoring and analysis (Figures 1 &2).
- **Medication Protocols:** Streamlined ordering and timing of prophylaxis to match target goals (Figure 3).
- **Risk Assessment:** Utilized DVT Scoring Tools to accurately assess patient risk (Figure 4).
- **Provider Empowerment:** Gave providers detailed patient data for informed decision-making (Figure 2).
- **Alerts:** Implemented advisories to prompt immediate action for patients needing prophylaxis (Figures 4 & 5).
- **Feedback Mechanism:** Established a channel for providers to suggest improvements.
- **Provider Training:** Ensured provider familiarity with new protocols through dedicated sessions.
- **Patient Involvement:** Engaging patients with education and options enhanced adherence and timeliness in DVT prevention, boosting overall well-being.

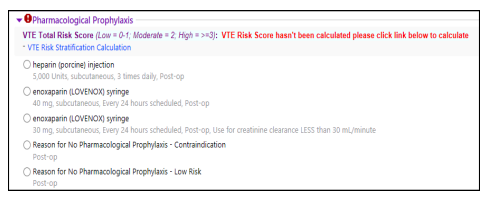


Figure 3. Post-operative DVT Pharmacological Prophylaxis Order Set.

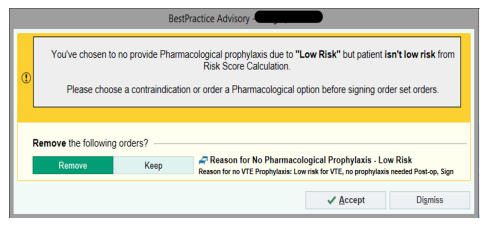


Figure 4. Best Practice Advisory (BPA), No current VTE Risk Score.

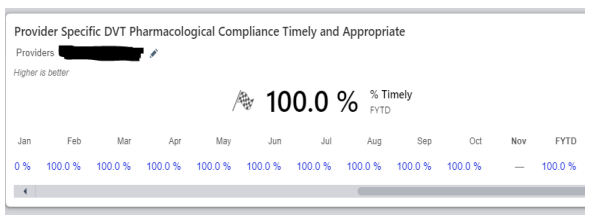


Figure 1. Provider Specific Surgical DVT Pharmacological Timely and Overall Compliance component.

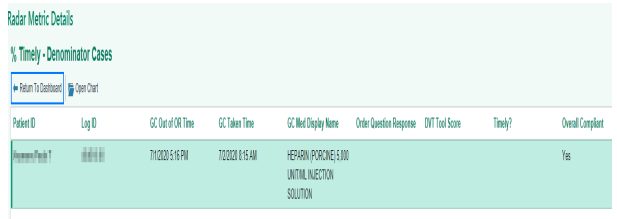


Figure 2. Timely DVT Prophylaxis Denominator Report Cases details.

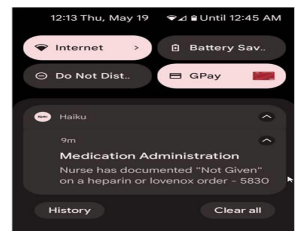


Figure 5. Push Notifications to providers when patient refuses dose.

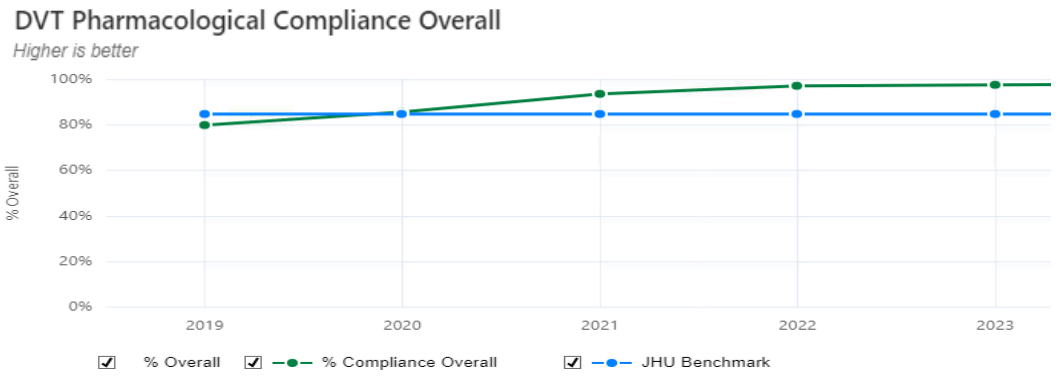
Results

The initiative at GBMC to reduce the incidence of PEs and DVTs yielded significant improvements across several key metrics:

- Timely Prophylaxis Administration: Achieved a rise in timely DVT prophylaxis from 64.6% in 2019 to 92.9% by 2023, marking a 44% improvement (Graph 1).

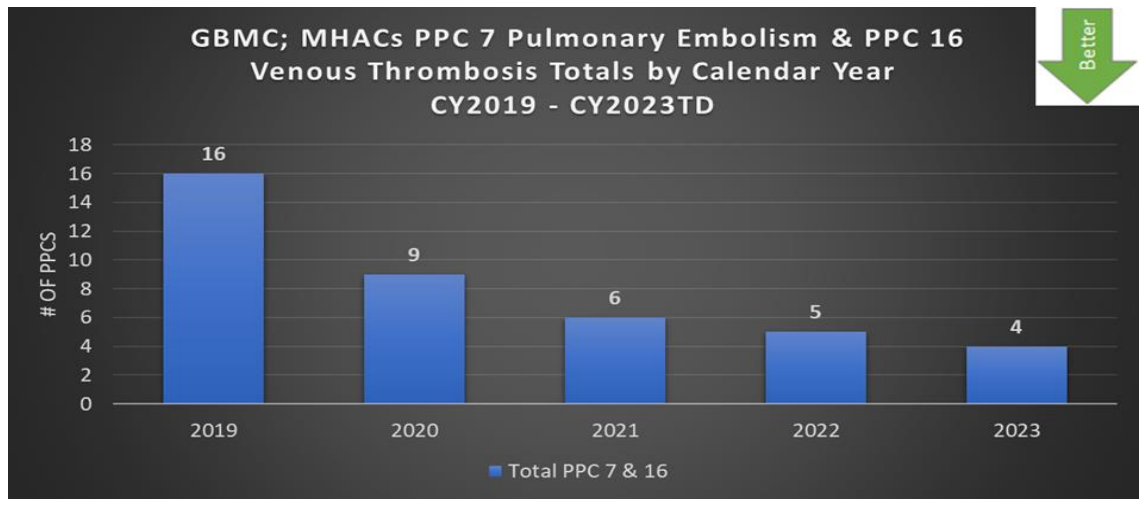
Graph 1. Epic Graph Surgical DVT Pharmacological Timely Compliance, Statistical Control Chart. (Note: Figure represent the percentage of Timely compliance with DVT prophylaxis guidelines over time &: GBMC Cyber Attack in December 2020, shows the Epic EHR downtime as low compliance)

- Compliance with Guidelines: Overall compliance with DVT prophylaxis guidelines increased from 80% in 2019 to 97.6% in 2023, a 22% enhancement (Graph 2).



Graph 2. Epic Graph Surgical DVT Pharmacological Overall Compliance. (Note: Figure represent the percentage of Overall DVT prophylaxis administration compliance over time)

- Reduction in Incidences: Hospital-acquired PEs and DVTs decreased by 75%, from 16 cases in 2019 to 4 cases in 2023 (Graph 3).



Graph 3. GBMC MHACs, PPC 7 and PPC 16 Totals by Calendar Year, CY2019-CY2023 through December. (Note: Figure represent the PPC 7 PE and PPC 16 DVT over time)

- Patient Refusal Management: Implemented strategies led to a better understanding and management of patient refusals, contributing to the improved compliance and timely administration.

These results underscore the effectiveness of our comprehensive, data-driven approach, combining technology integration, provider engagement, and patient-centric strategies in significantly enhancing patient safety at GBMC.

Conclusion

GBMC project to decrease PEs and DVTs achieved significant enhancements in prophylaxis timeliness and compliance, resulting in a marked reduction in hospital-acquired cases. This success highlights the effectiveness of leveraging technology, engaging healthcare providers, and prioritizing patient care. Our results reinforce the value of innovation and teamwork in improving patient safety and set a precedent for quality healthcare practices. GBMC remains dedicated to sustaining these gains and further advancing patient care standards.

Reference

Michael B. Streiff, MD, P. Jeffrey Brady, MD, Althea M. Grant, PhD, Scott D. Grosse, PhD, Betty Wong, MPH, Tanja Popovic, MD, PhD. (2014). CDC Grand Rounds: Preventing Hospital-Associated Venous Thromboembolism. CDC - Morbidity and Mortality Weekly Report (MMWR). March 7, 2014, 63 (09); 190-193. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6309a3.htm

A Day at the Beach: Implementing a Mid-year Resiliency Activity in Nurse Residency Program

Heather Graham, DNP, RN, CPN & Kristin Trawinski, DNP, MS, RN
Greater Baltimore Medical Center, Baltimore, Maryland

Introduction

- New graduate RN shock phase occurs about 3-6 months into program in transition (Cao, Li & Gong, 2021)
- Not feeling supported by peers and leadership, and lack of resilience leads to turnover
- Turnover of new RNs in first year remains 18%, costing health systems $3.6 to $6.5 million annually (ANA, 2023)
- Play-based teaching provides a positive learning environment (Mepieza, 2023)
- Request from NRP residents for "more activities" on evaluation forms

Aim Alignment: More Joy

EBP Question

For new graduate RNs, does a play-based resiliency activity during the mid-year point of NRP affect personal resiliency and perceived support?

Search Strategy

Search terms used: engagement; nurse residency program; ice breaker; retention; resiliency

Level of evidence:
II A- 2
III A- 1
III B- 1
III C – 1
V A- 1

White	Blue	Red
- You walk into a patient's room and they are having a dance party- how do you react? - When a patient is discharged and they talk about the care they receive, what do you want to be remembered for? - It's the hospital Olympics, what sport would you compete in: IV team, code blue, baby swaddle, epic superusers, or dressing changes?	- Would you rather eat ice cream or chocolate? - Would you rather swim at the pool or beach? - What is your favorite and least favorite house chore?	- What makes you a good friend? - What are 3 things you are thankful for? - What are 3 things you love about your best friend?

Examples of Questions

Literature Review

- Perceived social support, positive environment, and resiliency decrease turnover and transition shock (Cao, Li & Gong, 2021)
- Students reported that icebreakers improved mood & brain activation in a safe environment (Mepieza, 2023)
- Reducing emotional exhaustion & improving sense of personal achievement increases new grad development (Han, Duan, Wang, Zhu, & Jiang, 2022)

Recommendations

- Incorporating a resiliency activity during shock phase helps new grad RNs feel more supported and connected to their peers (Lin, Viscardi, & McHugh, 2014)
- Game activity should use positive language to encourage resiliency ex. Name 3 things you like about yourself
- Social support from leaders, colleagues
- Incorporating positive self-awareness & professional confidence through seminar activities
- NRP to incorporate said activities in seminars 5 and 7 (months 5 and 7, respectively)

Conclusions

- 34% of seminar survey respondents (n=8) identified the beach ball game as their favorite part of seminar
- Limitations include a small sample size from limited amounts of cohorts where this has rolled out thus far
- More survey results needed over time to understand relationship between variables, particularly turnover
- More play- based resiliency activities should be developed to support new graduate RNs during critical windows of the nurse residency program

Measurement

- Casey Fink Survey
- Progression Survey
- Program Evaluation Survey
- Seminar Surveys

References

Standardized Approach to the Golden Hour: A Program Evaluation

Kristin Trawinski DNP, MS, RN

Greater Baltimore Medical Center, Baltimore, Maryland

Introduction

- Low birthweight is the leading cause of infant deaths
- Premature, low birthweight infants are at high risk for hypothermia
- Teamwork in high-risk deliveries is critical to improve admission temperatures
- Gap analysis identified a lack of standardized process related to communication, roles and equipment

EBP Question

For the multidisciplinary high-risk delivery team, does implementation of a standardized process aimed at improving team dynamics result in an increased rate of euthermia upon admission to the NICU among LBW infants (≤1500 grams) after a Golden Hour process program change when compared to pre-program change findings?

Search Strategy

State search terms used: Golden Hour, prematurity, low birthweight, hypothermia, prevention

Search engines: CINAHL, PubMed, & Medline-Ovid

Level of evidence:
III A – 6
V A - 8

Aim Alignment: Better Care, Least Waste

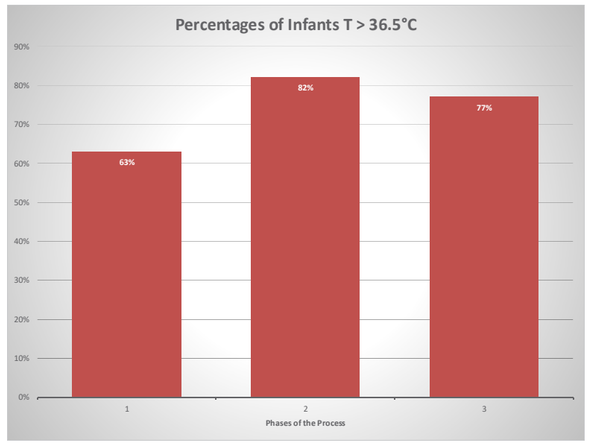
Literature Review

- Hypothermia in low birthweight infants continues to be a primary clinical concern (Bhatt et al., 2020)
- Quality improvement initiatives have been shown to improve admission temperatures in low birthweight infants (Peleg et al., 2019)
- In increase in morbidity and mortality is likely if the team is inefficient, incompetent, and/or lacks standardization (Doak & Waskosky, 2021)
- Teamwork can be improved by utilizing team training and performance support tools that allow for sustainability (Costar & Hall, 2020)

Methods

- Program Evaluation using the CDC Framework
- Level III NICU with 22 beds
- Multidisciplinary stakeholder involvement
- Implemented process redesign 2/2022 to: Improve Communication, Standardize Emergency Equipment, & role clarification with a Job Instruction Breakdown Tool
- IRB approval obtained
- SPSS analytics using ANOVA

Results



- Data did not show statistically significant difference pre-implementation vs post-implementation (p=0.364)
- Overall incidence of euthermic admission temperatures did improve from 63% pre-implementation to 82% post-implementation and 77% 6 months thereafter.

Conclusions

- Implementing a quality improvement project to improve the Golden Hour process by standardizing communication, equipment, and role clarification has shown to be effective.
- The CDC framework for program evaluation is a resourceful tool for evaluating quality initiative effectiveness.
- Limitations included small time frame to assess sustainability over time.
- Supply chain barriers

References and Acknowledgements

Thanks to University of Alabama Capstone College of Nursing

Staci Simmons DNP, RN

Michelle Patchett MSN, RN

Susan Aucott MD

CORE Leadership Development Program: Creating Opportunities and Resources for Excellence

1 What are we trying to accomplish? (Aim statement)

There was no formalized organization-wide leadership development program. We sought to fill the gap in foundational leadership skills and knowledge.

2 How will we know the change is an improvement?

Increase in engagement scores
Increase in retention rate
Reduction in turnover rate
Increase in leadership confidence scores
“More joy” testimonials (anecdotal evidence)

3 What changes will we make that will be an improvement?

Develop and implement a formalized development program for newly hired, promoted, and referred leaders within the organization. We will establish a set of baseline competencies and skills for all leaders.

Highlight or Describe One Cycle of PDSA

Plan

Conducted a system-wide needs assessment to identify gaps in leadership skills.

Do

- Designed CORE curriculum and materials
- Conducted pilot sessions with Health Partners practice managers
- Implemented CORE program
- Designed pre and post assessments

Study

Review course evaluations, pre & post assessments, tracked attendance and engagement, and obtained anecdotal feedback from participants and their leaders.

Act

Refined course material, adjusted course offerings and schedule, and expanded course evaluation to include Level 3 application.

Outcomes/Results

Total Number of Graduates = 74

FY24
Overall leadership turnover = 11%
CORE Leadership turnover = 8%

List all the stakeholders/departments involved in this project.

- Entire organization
- External vendors (educational partners)

Conclusions

The CORE Leadership Development Program has positively impacted GBMC through our approach to leadership development, mentorship opportunities, and increased engagement and retention scores.

References & Acknowledgements

Identifying High-Risk Patients Using Dot Phrase Screening

Intro

Head and Neck cancer patients have better health outcomes when the time between diagnosis and starting treatment is shorter [1]. We needed to identify which patients should be seen more urgently for their first appointment.

1 What are we trying to accomplish? (Aim statement)

The Senior Medical Secretaries will utilize the new patient dot phrase to identify and schedule 90% of high-risk patients.

2 How will we know the change is an improvement?

Patients determines to be high-risk will be scheduled within 5 business days of their call to the office.

3 What changes will we make that will be an improvement?

1. Implement dot phrase screening process
2. Notify MD/RN Navigator of patients identified as high-risk
3. Initiate outside pathology review (when appropriate)

Highlight or Describe One Cycle of PDSA

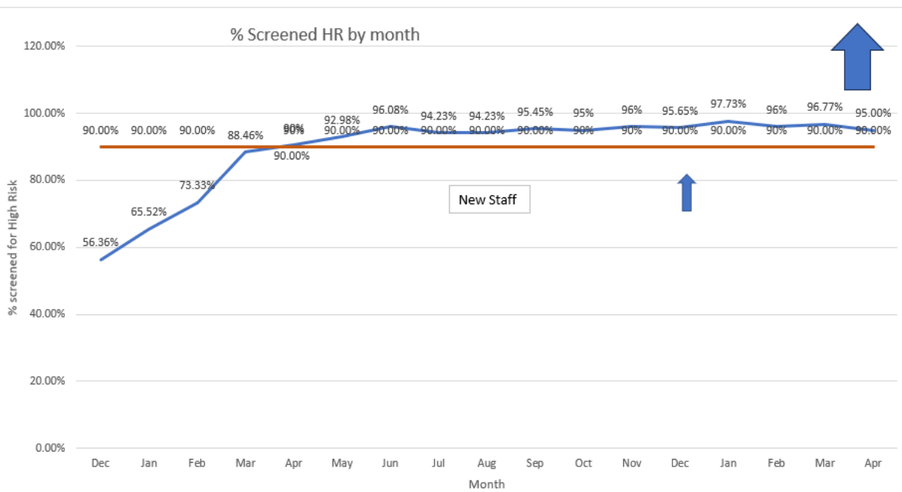
Plan Leverage the use of visual aids to remind staff of dot phrase name for high-risk screening

Do Created laminated visual aids for the SR. Med Secs that display the dot phrase name and the entire dot phrase scripting.

Study Success rate of Sr. Med Secs utilizing the dot phrase to screen new patients jumped from 73% in February to 88% in March.

Act Adopted the use of visual aids and adapted visual aids as necessary.

Outcomes/Results



List all the stakeholders/departments involved in this project.

- Senior Medical Secretaries
- Administrative Assistant
- Administrative Director
- Head and Neck Nurse Navigator
- Medical Assistants

Conclusions

We now have an active and very successful process for identifying high-risk patients before they ever have an appointment with our practice. We get those patients in quickly, and we are able to work with other processes in parallel instead of working them step-wise.

References & Acknowledgements

Henrieke W Schutte, Floris Heutink, David J Wellenstein, et. Al. Impact of Time to Diagnosis and Treatment in Head and Neck Cancer: A Systematic Review 2020 Apr;162(4):446-457. doi: 10.1177/0194599820906387. Epub 2020 Feb 25. [1]

Increasing Patient Access Through Online Scheduling

Intro

Over the past year, we have been working to build online scheduling for our patient population. Our hope was that by allowing patients to schedule their appointments online we will see any increase in appointments made and kept as well as a decrease in phone call volume.

1 What are we trying to accomplish? (Aim statement)

We will improve patient access in the bariatric practice.

2 How will we know the change is an improvement?

- We will increase new patient self-scheduled appointments from our baseline of 11% to our goal of 84% by the date of 1/31/2024.
- We will decrease the number of phone calls by 10% from our baseline of 1747 calls per month to our goal of 1573 calls per month by the date of 1/31/2024.
- We will decrease the number of phone calls by 10% from our baseline of 398 calls per week to our goal of 358 calls per week by the date of 1/31/2024.

3 What changes will we make that will be an improvement?

1. Online/Self-Scheduling for New Patient Appointments
2. Medical Weight Loss (MWL) Follow-Up Appointments
3. Nutrition Appointments
4. Long-Term Follow-Up Appointments
5. MWL Initial Appointments

Highlight or Describe One Cycle of PDSA

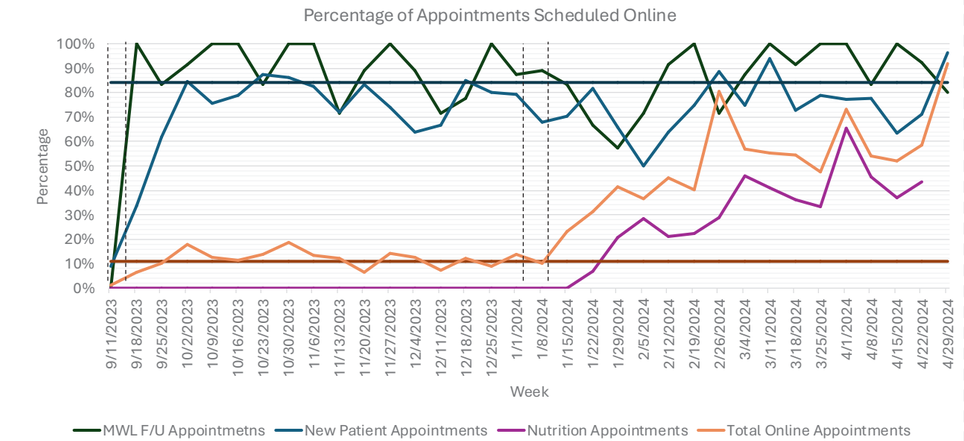
Plan — COMP and Epic Teams met weekly to discuss what was to be built. Decision trees were created by COMP and built by Epic Team.

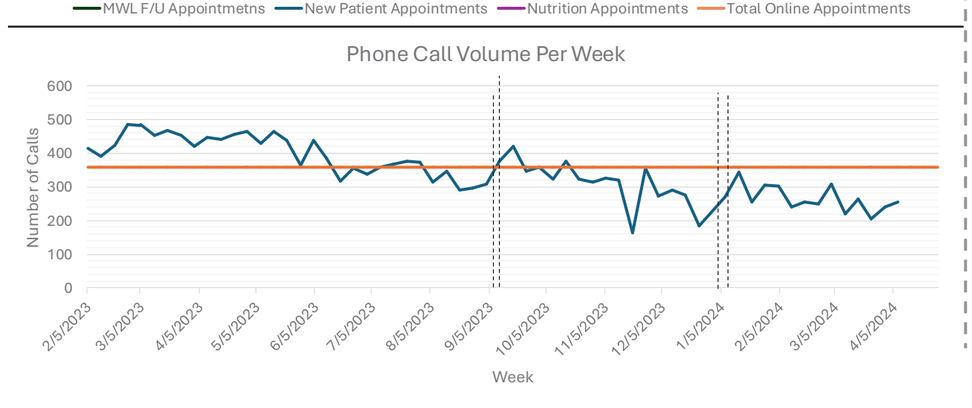
Do — Online scheduling went live on the COMP/GBMC websites.

Study — Scheduling was tested in the live environment and real time feedback was gathered.

Act — Changes to workflows and wording were made based on issues and feedback from go live.

Outcomes/Results





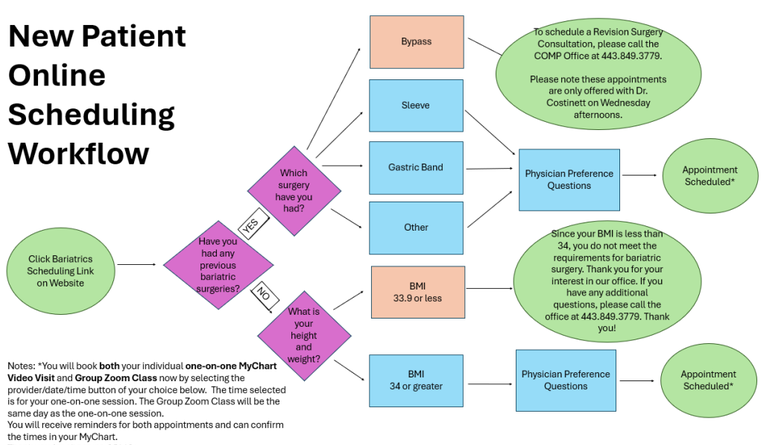
List the stakeholders/departments involved in this project.

- Physicians
- Practice Manager
- Program Coordinator
- PSAs
- Surgical Coordinator
- Medical Secretaries
- Medical Assistants

Conclusions

Roughly 76% of new patient appointments, 87% of our follow-up medical weight loss appointments and 33% of our nutrition appointments are being scheduled online. Since starting online scheduling, we have seen a steady decrease in our phone call volume going from an average of 398 calls per week to an average of 283 calls per week (roughly 29% less phone calls).

Decision Tree/Process Map



Healthcare Made Easy: In Your Neighborhood, In Your Home

For more information

Introduction

GBMC was awarded $1.5 million by the Maryland Community Health Resources Commission (CHRC) to improve health outcomes in underserved communities in Baltimore, predominantly Black, Hispanic and homebound seniors.

The “Pathways to Health Equity” program is a 2-year grant that began on May 1, 2022. Patients received primary care services at the Jonestown and Elder Medical Care practices. SDOH needs were addressed through our community partners.

Aims

1. Reduce health disparities
2. Improve health outcomes
3. Increase access to primary care
4. Promote primary and secondary prevention services
5. Reduce healthcare costs, IP and ED utilization

Participants

1,173 Jonestown Patients

352 Elder Medical Care Patients

4,300 Community Participants

Social Drivers of Health (SDOH)

57% of patients have a SDOH requiring intervention

- Food Insecurity (38% of patients)
- Housing Instability (45% of patients)
- Transportation Barriers (38% of patients)

Medical Screenings and Outcomes

- **92%** Weight screened
- **98%** Blood pressure screened
- **83%** Depression & Anxiety screened
- **73%** Blood pressure controlled
- **94%** Diabetics controlled

Total Cost Reduction: $10.2 Million

Inpatient Charges

$8,729,096

108% reduction

ED Charges

$1,471,241

37% reduction

Community Highlights

100 health promotion events

57,076+ pounds of food provided

Lessons Learned

- Clinical staff attendance is critical to successful community events.
- New strategies and workflows were needed to reduce patient no-shows.
- Streamlined appointment booking through Epic EMR improved scheduling efficiency.

Conclusions

Community partnerships are critical to enroll patients in primary care and address SDOH.

Providing accountable, high-quality care to underserved communities led to positive health outcomes and reduced cost.

Sustainability

GBMC has been awarded a $3.5 million CHRC grant to expand these initiatives over the next 5 years, aiming to serve **3,025** patients and **20,000** community members.

Project Team

Co-Directors: Cathy Hamel, Erlene Washington

Project Manager: Karen Thompkins

Reporting and Evaluation: Martin Raffel, Cole Herbst, Martha Sylvia

Community Engagement: Wayman Scott

Special thanks to the Jonestown and Elder Medical Care practice staff, the entire CHRC team, and our community partners.

Unnecessary Lab Reduction

GBMC Health Partners GBMC gilchrist

Intro

Common labs are repeated more often than clinically indicated which result in unnecessary cost with impact to negative patient outcome.

1 What are we trying to accomplish? (Aim statement)

Reduce number of clinically unnecessary labs and associated laboratory charges.

2 How will we know the change is an improvement?

50% reduction of unnecessarily repeated labs as defined by literature/Subject Matter Experts.

3 What changes will we make that will be an improvement?

Just in time BPA to alert provider that the lab ordered is potentially unnecessary with evidence-based reference.

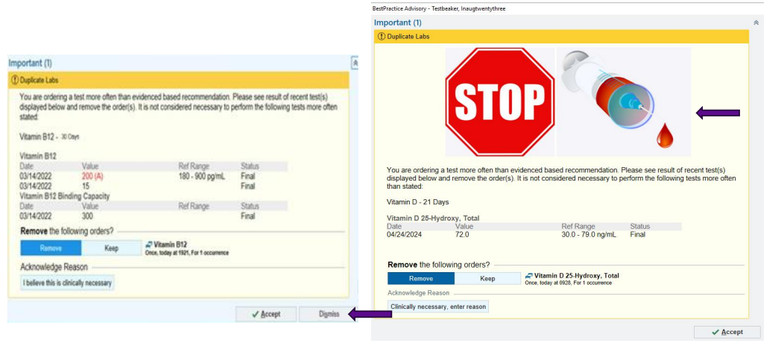
PDSA Cycle 1

Plan Identified 17 commonly repeated labs and the timeframes within which those labs should not need to be repeated

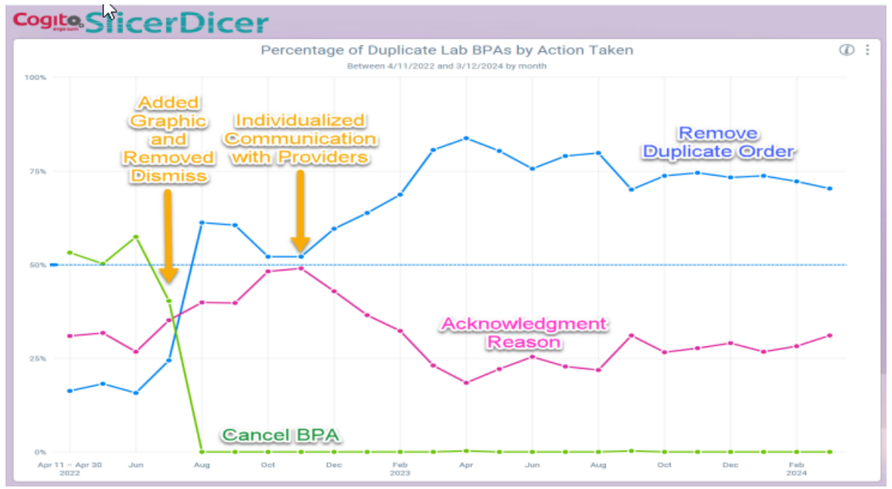
Do Implemented BPA to alert providers at the time when duplicate labs were entered along with most recent result and target timeframe

Study Less than 20% of unnecessary lab prevented. Report demonstrated BPA was canceled >60% of the time.

Act Removed ability to cancel BPA, added images to BPA to make it more visually distinct.



Outcomes/Results



Lab order name	GBMC Charge	Total # of Orders	# of Removed Orders	Avoided Charges
Pro B-type Natriuretic Peptide	$68.70	738	377	$25,899.90
Vitamin B12	$34.35	332	234	$8,037.90
Ferritin	$34.35	287	115	$3,950.25
Iron	$13.74	8	5	$68.70
Iron group	$27.48	331	217	$5,963.16
Transferrin	$34.35	17	10	$343.50
Folate	$34.35	338	273	$9,377.55
Lipid Panel with Reflex Direct Low-Density Lipoprotein	$43.51	263	187	$8,136.37
Prostate Specific Antigen Screen	$57.25	16	10	$572.50
Thyroid Stimulating Hormone with Reflex Thyroxine	$34.35	591	380	$13,053.00
TSH	$34.35	393	237	$8,140.95
Thyroxine, Free	$34.35	288	78	$2,679.30
Ammonia	$45.80	365	84	$3,847.20
Respiratory Pathogen Panel with SARS-CoV-2 PCR GBMC LAB	$416.78	568	216	$90,024.48
Hemoglobin A1c	$45.80	2738	2280	$104,424.00
Vitamin D, 1,25-Dihydroxy	$57.25	40	8	$458.00
Vitamin D 25-Hydroxy, Total	$34.35	209	159	$5,461.65
Grand Total		7522	4870	$290,438.41

List all the stakeholders/departments involved in this project.

- Lab – Jesse Nasby, Alan Graham
- Physicians – Dr. Fuscaldo, Dr. Chan, Dr. Blanchard, Dr. Rhee, Dr. Kalas, Dr. Halilu
- Epic – Amy Varesko, Amber Hendricks, Ryan Everett, Ginyse Braddy, Rebecca Fricke, Juan Negrin, Laura Schulman

Conclusions

- Adding images, removing Cancel Button, and Education helped achieve the desired results of reducing clinically unnecessary (>70%).
- It is difficult to determine clinical necessity when examining labs as a group.
- Avoided cost calculation supported the rationale for the project.

References & Acknowledgements

- https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/nhe-fact-sheet#:~:text=NHE%20grew%204.1%25%20to%20%244.5,Gross%20Domestic%20Product%20(GDP).
- Zhi M, Ding EL, Theisen-Toupal J, Whelan J, Amaout R. The landscape of inappropriate laboratory testing: a 15-year meta-analysis. PLoS One. 2013;8(11):e78962. doi:10.1371/journal.pone.0078962.
- Miyakis S, Karamanof G, Liontos M, Mountokalakis TD. Factors contributing to inappropriate ordering of tests in an academic medical department and the effect of an educational feedback strategy. Postgrad Med J. 2006;82(974):823–829. doi:10.1136/pgmj.2006.049551.
- Rehmani R, Amanullah S. Analysis of blood tests in the emergency department of a tertiary care hospital. Postgrad Med J. 1999;75:662–666. doi:10.1136/pgmj.75.889.662.
- Bejjanki H, Mramba LK, Beal SG, Radhakrishnan N, Bishnoi R, Shah C, Agrawal N, Harris N, Leverence R, Rand K. The role of a best practice alert in the electronic medical record in reducing repetitive lab tests. Clinicoecon Outcomes Res. 2018 Oct 8;10:611-618. doi:10.2147/CEOR.S167499.

Automatic Un-Hold Medications on Transfer from Procedural Areas

Intro

One of Epic's most common off hour calls is medications in a MAR Hold status post procedure

1 What are we trying to accomplish? (Aim statement)

We needed a way to facilitate these MAR Hold medications to be released post procedure by the procedural physicians.

2 How will we know the change is an improvement?

- Increase in physician satisfaction with workflow
- Decrease in delays of medication administration for these situations
- Decrease in off hour calls related to this issue

3 What changes will we make that will be an improvement?

We implemented a new workflow using Epic functionality to Auto Unhold Medications that were placed on MAR hold when the patient transfers to a procedural area

Highlight or Describe One Cycle of PDSA

Plan

We met with stakeholders from IR and Endo to discuss the new functionality and Pros and Cons of this new automatic workflow

Do

The new functionality was implemented in our test system and extensively vetted

Study

During testing we discovered some safety issues that needed to be addressed. This were corrected and the new build was taken to Production

Act

The new workflow is live and working

Outcomes/Results

Automatic MAR UnHold is now live in both Interventional Radiology and Endoscopy.

Both Procedural Physicians and Inpatient Physicians are loving the change.
Off hour calls have drastically decreased for the issue.

List all the stakeholders/departments involved in this project.

- Interventional Radiology leadership and nursing
- Endoscopy leadership and nursing
- Epic
- Physician leadership
- Inpatient nursing leadership

Conclusions

This was a great change to better the care of our patients and increase joy for our physicians and nurses

References & Acknowledgements

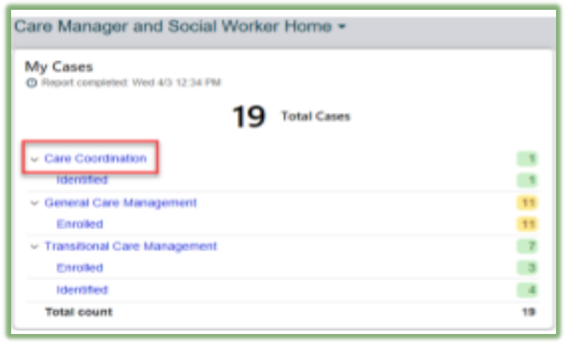
It was a great opportunity to work with these procedural areas. We also had assistance from Epic Wisconsin and many applications throughout the Epic team.

Compass Rose Implementation

GBMC HealthPartners GBMC gilchrist

Introduction

Improve Coordinated Care Management to facilitate better management of patient information and improve the patient experience.



Aim Statement

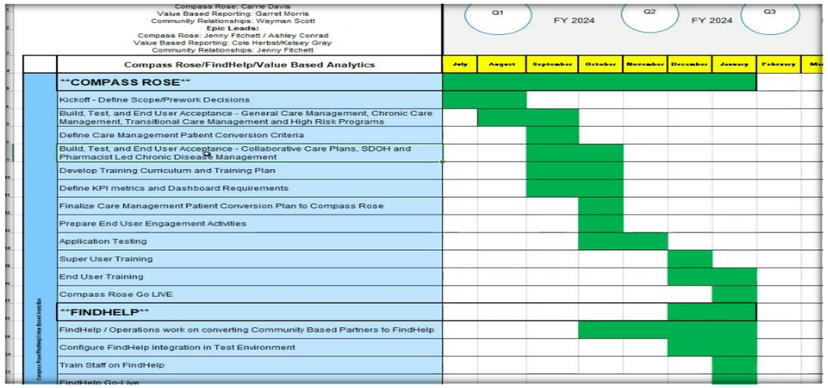
Increase care coordination across all areas of the health care spectrum to improve the overall quality of patient care with an emphasis on patient centered perspectives

Test of Change

- Manage and track patient outcomes
- Conduct social determinants of health screenings and asses data to help make referrals for suitable resources

Transformation

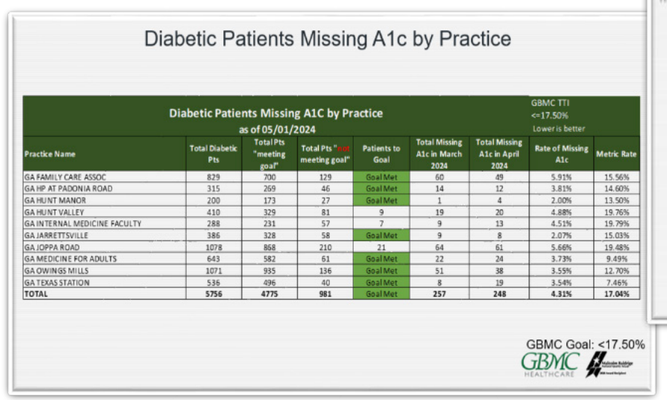
Implement a consistent documentation platform to employ dashboards, reports, and workflow management tools and improve continuity of care and health equity



Process

- Collaborate with Stakeholders
- Build Care Management Programs with Established Goals and Targets
  - Chronic Care Management
  - Transitional Care Management
  - Care Coordination
- Initiate Training Exercises
- Implement Standard Workflow

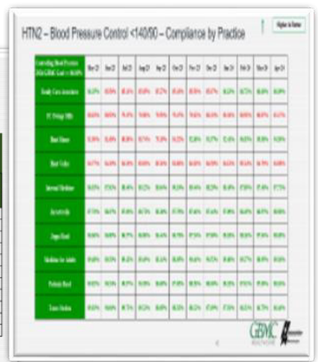
Outcomes/Results



Diabetic Patients Missing A1c by Practice

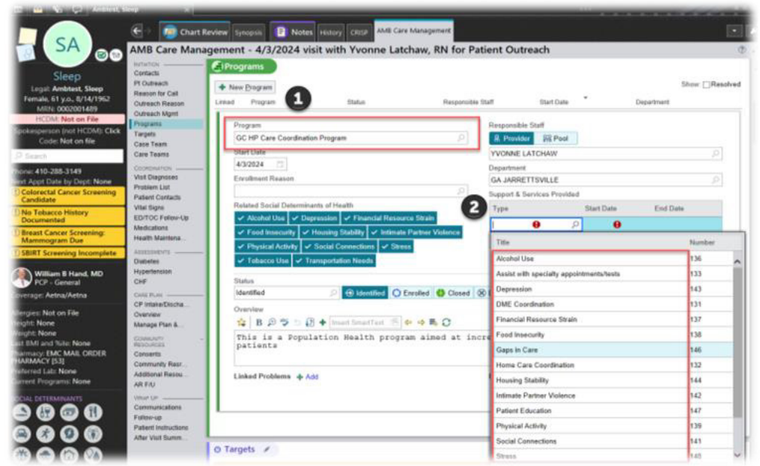
Diabetic Patients Missing A1C by Practice as of 05/01/2024								GBMC TTI <=17.50% Lower is better
Practice Name	Total Diabetic Pts	Total Pts "meeting goal"	Total Pts "not meeting goal"	Patients to Goal	Total Missing A1c in March 2024	Total Missing A1c in April 2024	Rate of Missing A1c	Metric Rate
GA FAMILY CARE ASSOC	829	700	129	Goal Met	60	49	5.91%	15.56%
GA HP AT PADONIA ROAD	315	269	46	Goal Met	14	12	3.81%	14.60%
GA HUNT MANOR	200	173	27	Goal Met	1	4	2.00%	13.50%
GA HUNT VALLEY	410	329	81	9	19	20	4.88%	19.76%
GA INTERNAL MEDICINE FACULTY	288	231	57	7	9	13	4.51%	19.79%
GA JARRETTSVILLE	386	328	58	Goal Met	9	8	2.07%	15.03%
GA JOPPA ROAD	1078	868	210	21	64	61	5.66%	19.48%
GA MEDICINE FOR ADULTS	643	582	61	Goal Met	22	24	3.73%	9.49%
GA OWINGS MILLS	1071	935	136	Goal Met	51	38	3.55%	12.70%
GA TEXAS STATION	536	496	40	Goal Met	8	19	3.54%	7.46%
TOTAL	5756	4775	981	Goal Met	257	248	4.31%	17.04%

GBMC Goal: <17.50%



Stakeholders

- Epic Team
- GBMC IT
- Value Based Care
- Population Health
- Ambulatory Care Management



Conclusions

Incorporating Electronic Learning Needs Assessment (LNA) into Education Planning

Rachel Hellmann MSN, RN, CNOR; Silvana Willoughby BSN, RN-BC, CEN
Greater Baltimore Medical Center, Baltimore, Maryland

Introduction

As technology and evidence-based literature in healthcare continues to expand nursing practice, it is critical to assess learning needs and opportunities for professional growth and development, continuing education, and certification among staff. An LNA encompassing the variable roles within peri-operative services has not been completed at GBMC. The educators for peri-anesthesia and intra-operative services collaborated to determine what educational needs could be incorporated into an annual education plan for general operating rooms, specialty operating rooms, interventional radiology, and endoscopy using an LNA through Microsoft Forms.

EBP Question

Does utilizing an LNA in the peri-operative services division improve staff engagement compared to informal identification of educational gaps in forecasting future educational planning and needs for FY24?

Search Strategy

Search terms: learning needs assessment, education assessment, formal education activity, nursing education, electronic assessment, educational planning.

Search engines: Medline, CINAHL, ScienceDirect, PubMed.

Literature Review

An electronic assessment approach can allow for the educators to develop plans for hospital education that is specialty specific based on adult learning preferences (Winslow et. al., 2016, p. 81).

Performing an evaluation of the program development and measuring outcomes after education presentations are essential in determining how the information was received, retained, and applied to current practice (Schneider and Good, 2018, p. 16).

Nurse training must be based on their perceived knowledge gaps and adapted to the professional stage of each nurse. An LNA allows for tailoring the education and training to benefit the nurses and health system (Santana-Padilla et. al., 2022, p. 350).

Ongoing education is essential to enable evidence-based client care. Education is costly to the health system and must be fiscally responsible, and relevant. Historically, education for nurses has not been systematically planned and has relied on the perception of the nurse educator (Dyson et. al., 2009, p. 821).

Methods

Result: Overall, 54.5% staff responded within the two-week timeframe allotted; 82.4% were RNs and 17.6% were ancillary staff. Some of the common themes were 38% preferred live presentation, 27% preferred online presentations. Additionally, 50% preferred presentations during the workday. Moreover, 34.2% were interested in pursuing certification with 43% interested in an online certification review course held at GBMC.
Plan: Export data from Microsoft Forms into Microsoft Excel to create pivot tables to visualize data and guide a standardized education plan based on staff input for FY24.
Stakeholders: Peri-operative professional excellence model (PEM) nurses, managers, educators, assistant director, and director.
Timeline: One month (April 3, 2023-May 5, 2023).
Communication: Microsoft Forms LNA invitation, email, peri-operative leadership committee, and flyers posted on units.
Next Steps: Create peri-operative services education calendar and plan dates and times for education based on responses. Create FY24 education feedback survey. Receive feedback from peri-operative staff through survey at end of FY24 to further advance professional development.

Limitations

- Short timeline due to end of year FY23 planning for FY24.
- Limited current literature with respect to self assessment and use of technology.
- Need to evaluate if this should take place hospital-wide for all divisions and corresponding job roles.

Recommendations

- Assess adequate LNA tool based on institutions' information technology platforms.
- Obtain key stakeholder input and commitment, as well as perceived barriers to tool implementation.
- Establish an electronic assessment with various specialties and roles with peri-operative services in mind.
- Administer the electronic assessment on a platform that provides the ability to aggregate and trend data.
- Use data to develop a standardized FY education plan.
- Evaluate education plan, information retention, and applicability to learning needs based on post-implementation outcomes.
- Culminate additional data to determine success and staff engagement once standardized education plan is completed for FY.

Nurse Driven Protocol: Preoperative Prevention Of Surgical Site Infections (SSIs)

Rachel Hellmann MSN, RN, CNOR; Silvana Willoughby BSN, RN-BC, CEN
Greater Baltimore Medical Center, Baltimore, Maryland

Introduction

According to Hammond (2020), although there have been breakthroughs in surgical practice, the prevalence of SSIs continues to affect "approximately 500,000 patients annually in the United States" (p.2). Literature supports studies related to a myriad of interventions that can be implemented to decrease SSIs due to their significant impact on patient care and hospital reimbursement. Therefore, it is important to seek opportunities to improve practice and adherence related to care bundles set forth by institutions to prevent SSIs. This quality improvement project was initiated to improve patient safety through the development of a universal order-set and pre-operative nurse driven protocol to aid in adherence to the care bundle set forth for the prevention of SSIs at GBMC.

EBP Question

Does a nurse driven protocol improve adherence to care interventions for the prevention of SSIs?

Search Strategy

Search terms: Surgical site infections, chlorhexidine gluconate, Surgical skin antisepsis, nasal decolonization, normothermia, warming therapy, nurse driven protocol, care bundle, forced air warming

Search engines: Medline, CINAHL, ScienceDirect, PubMed.

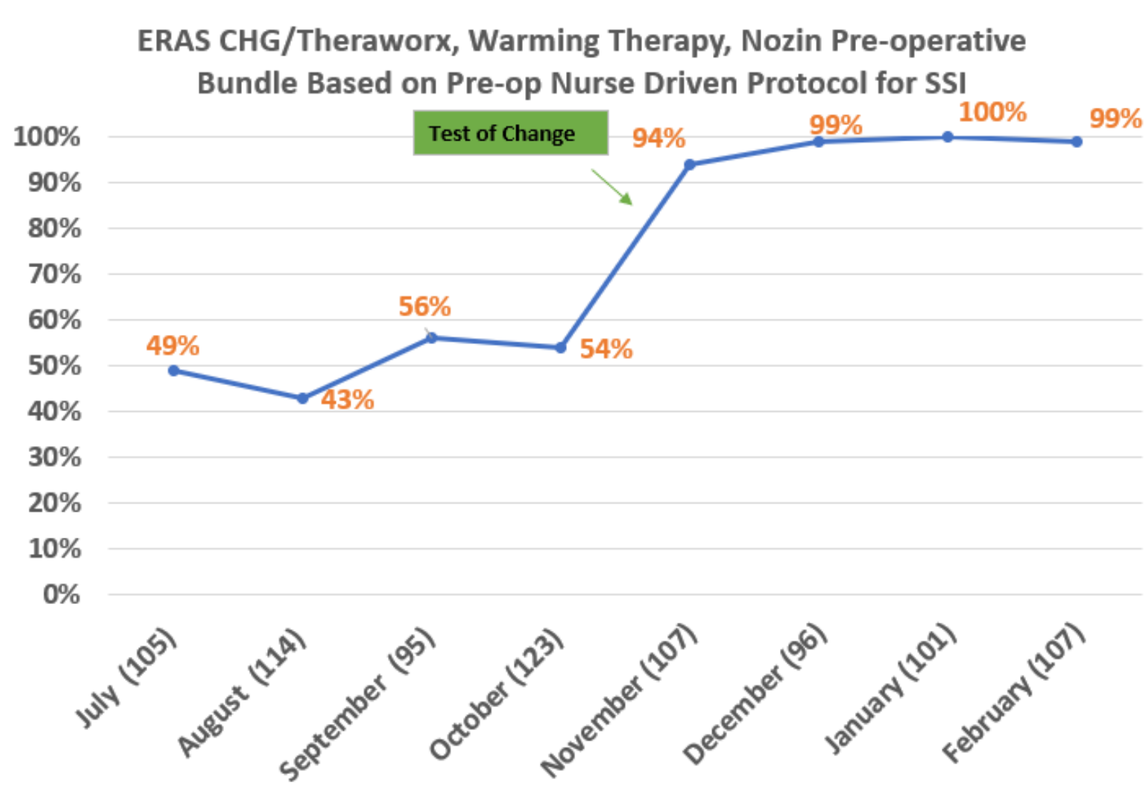
Literature Review

Although there have been breakthroughs in surgical practice, the prevalence of SSIs continues to affect "approximately 500,000 patients annually in the United States (Hammond, 2020, p. 2).

Utilizing care bundles can help reduce the incidence of SSIs and should be enforced as routine protocol to improve overall quality of patient care (Vincenti, 2022, p. 615).

Perioperative leaders should support the implementation of strategies to prevent SSIs and work with interdisciplinary team members to develop an SSI prevention bundle that will meet the needs of their patients (Goldberg et al., p. 587).

Data



Methods

Result: Nurse Driven Protocol was implemented in November 2023 and there was an immediate 43% increase in intervention compliance.
Plan: Continue to export data from electronic health record to track trends and deviations from practice.
Stakeholders: Peri-operative leadership, physicians, pharmacy, nursing.
Timeline: One month (April 3, 2023-May 5, 2023).
Communication: Staff meetings, rounding, standard of work acknowledgements, huddles, surgical site infection committee, surgical operations committee, enhanced recovery after surgery (ERAS) committee.
Next Steps: Continue to export data to drive accountability and compliance. Assess current practice to ensure evidence is translated appropriately. Assess barriers and facilitators through the plan do study act (PDSA) cycle as an iterative process. Determine project's sustainability and opportunities for expanding the scope.

Limitations

- Lack of standard work for carrying out interventions
- Nurse accountability

Recommendations

- Assess adequate LNA tool based on institutions' information technology platforms.
- Obtain key stakeholder input and

INPATIENT COLONOSCOPY BOWEL PREPARATION QUALITY IMPROVEMENT INITIATIVE

Akshay Duddu, MD; Jayashrei Sairam, MD
Greater Baltimore Medical Center, Department of Internal Medicine

Introduction

- The quality of bowel preparation for inpatient colonoscopy is frequently suboptimal.
- Inadequate bowel preparation leads to delay/cancellation of procedures resulting in negative patient and hospital outcomes due to increased risk of cardiopulmonary complications from additional sedation, increased hospital length of stay, and increased hospital costs.

1 What are we trying to accomplish? (Aim statement)

- Improve the frequency of poor-quality inpatient bowel preparation by 30% by 05/2024.
- Reduce the cancellation rate of inpatient colonoscopies due to poor bowel preparation by 50% by 05/2024.

2 How will we know the change is an improvement?

- Measure and compare the quality of bowel preparation & cancellation rate of inpatient colonoscopy over 8 months (pre-intervention vs post-intervention)

3 What changes will we make that will be an improvement?

- Create and implement a standardized single-click EPIC order set with distinctly laid down provider and nursing instructions to administer a split-dose low-volume bowel preparation with polyethylene glycol to all adult inpatients needing colonoscopy.

Highlight or Describe One Cycle of PDSA

Plan — We met with the endoscopy administrative staff to gather data on the quality of bowel prep and cancellation rates from 02/2023- 09/2023.

Do — Worked with endoscopy staff, EPIC team, nursing, and pharmacy to create a single-click EPIC order set that went live on 09/28/2023.

Study — Post-intervention analysis data showed 87% compliance with the order set and reductions in poor quality prep from 24% to 14% with an improvement in cancellation rate from 13% to 4%.

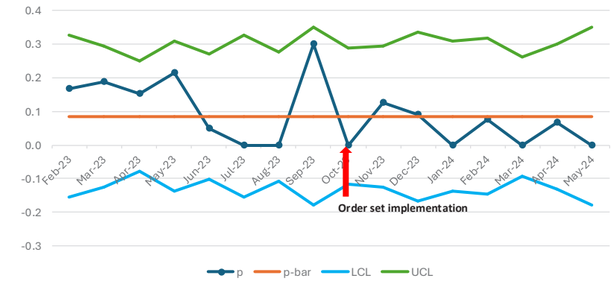
Act — Implementing a standardized bowel prep order set proved to be successful. We plan to create patient education pamphlets to further reduce poor bowel preparation quality during the second PDSA cycle.

Outcomes/Results

Prep Comparison Before and After Orderset Implementation

	Good Prep	Fair / Adequate Prep	Poor Prep	Total Colonoscopies
Before Orderset Jan 23 through Sept 23	56%	20%	24%	138
After Orderset Oct 23 through May 24	↑ 61%	↑ 25%	↓ 14%	115

P-chart representing monthly cancellations for inpatient colonoscopy



List all the stakeholders/departments involved in this project

- Kroh Center for Digestive Disorders
- Internal Medicine Residency Program
- GBMC Quality & Patient Safety
- GBMC EPIC, Pharmacy, and Nursing

Conclusions

- After our first PDSA cycle (10/2023- 05/2024), we achieved an 87% compliance rate with the use of the order set.
- The percentage of poor bowel preparation improved by 42% (goal of 30%).
- We reduced the cancellation rate by 68% (Goal of 50%).

References & Acknowledgements

Special thanks to:

1. Melvin Blanchard, MD, FACP
2. Joseph Fuscaldo, MD
3. Kathryn Stine, BSN, R4N, CGRN

References:

- Shah-Khan SM, Cumberledge J, Reynolds GJ Using the plan-do-study-act approach to improve inpatient colonoscopy preparation *BMJ Open Quality* 2017;**6:**e000230. doi: 10.1136/bmjoq-2017-000230
- Russell L, Mathura P, Lee A, Dhaliwal R, Kassam N, Kohansal A. Patient-centered approaches to targeting incomplete bowel preparations for inpatient colonoscopies. Ann Gastroenterol. 2021 Jul-Aug;34(4):547-551. doi: 10.20524/aog.2021.0623. Epub 2021 Apr 2. PMID: 34276194; PMCID: PMC8276365.

Call Center Collaboration

Intro

Describe background/how you identified the problem.

1 What are we trying to accomplish? (Aim statement)

- Improve the quality of calls within GBMC Health Partners' call center and reduce call volumes by April 2024
- Improve the teamwork between our providers, staff, call agents, and call center leadership for better patient care

2 How will we know the change is an improvement?

- We will track changes in several measures that include:
  - Number of patient calls
  - Number of return or repeat calls
  - Agent call length and "after call" work Provider's time spent in their inbox

3 What changes will we make that will be an improvement?

- We are using a team-based approach to design dot phrases that act as a checklist for the agent; to be sure no steps are missed and offer a more standardized and functional message for providers.

Highlight or Describe One Cycle of PDSA

Plan

We planned to improve the quality of calls within GBMC HP call center and increase teamwork by designing a series of standardized dot phrases, by April 2024. We used a team-based approach to create the dot phrases and trialed them with a pilot group of agents at GBMC at Joppa Road.

Do

We observed: Some aspects of the dot phrase were not used correctly, or agents forgot to use the dot phrase. Feedback from providers was important but we were not getting enough. Agents were being trained but not at a fast enough rate.

Study

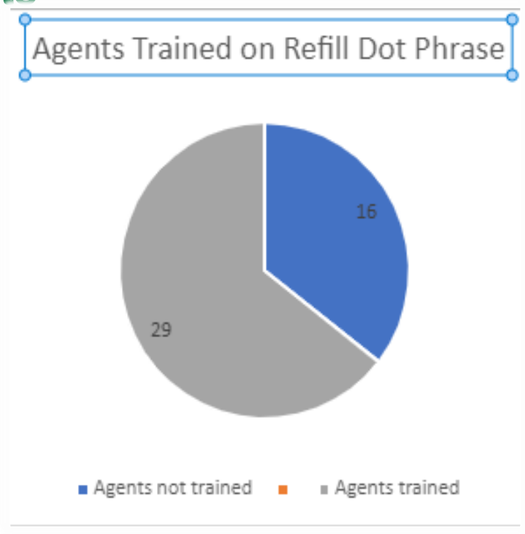
We made some progress training agents and creating several high quality dot phrases but did not fully meet our goal – not all agents were trained and we did not obtain as much provider feedback as we hoped.

Act

We decided to make some improvements- we are creating videos, a PowerPoint, and a competency test to aid in agent training. We created a video and feedback system to encourage providers to give more feedback.

Outcomes/Results

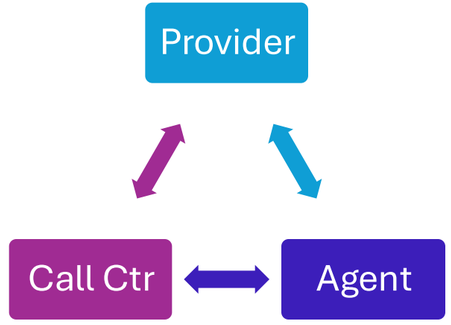
Between July 2023 and onwards, we hope to track measures from the following sources:
- Call Center data
- Epic Reports & Signal Data
- Agent, Provider, and Staff Satisfaction surveys
- Staff Employment Data
- Press Ganey



List all the stakeholders/departments involved in this project.

- Project Leader: Dr. Vivian Harvey (Family Medicine at Joppa Road)
- Call Center: Shannon Littleton/Judy Starling, Sarah Willingham, Phyllis Campbell
- EPIC Ally: Jackie Rode
- Funded by GBMC Health Partners

Team-Based Model



Conclusions

This project is a work in progress.

However, so far we have energized our call center and primary care practices into believing in a future with improved teamwork and communication within the primary care setting.

Establishment of New ERG Formation Process

1 What are we trying to accomplish? (Aim statement)

The DEI team seeks to establish new ERGs in order to engage more employees in DEI efforts. By increasing the number of ERGs, we intend to create more opportunities for employee engagement, support, and development, thereby fostering a more inclusive workplace.

2 How will we know the change is an improvement?

We will measure the success of our initiatives by tracking the following outcomes:
1) Number of new ERGs launched.
2) Employee engagement in ERG-related activities

3 What changes will we make that will be an improvement?

1) Creating a process to launch ERGs
2) Once established, ERGs will hold regular meetings and engage in activities that promote their specific interests and goals, further driving engagement and inclusivity.

Highlight or Describe One Cycle of PDSA

Plan — Creation of process for which employees can establish new ERGs.

Do — Soft launch interest in ERGs in conjunction with DEI-related events, interest form, interest sessions, signup and verification of employees to join ERGs. ERGs will meet and engage in ERG activities.

Study — Track participation rates and participant feedback in DEI- and ERG-related events. Check-ins with ERG leadership. Reduced time in launching new ERGs.

Act — After one year of having newly established ERGs, made following changes: more support for new ERG leaders, quarterly ERG leader meetings, every other month check-ins with ERG leaders, and ERG promotion at orientation.

Milestones Achieved

Jan ‘23 – Black ERG interest form created; first info sessions held.
Feb ‘23 – Black ERG soft-launched after BHM celebration.
Mar ‘23 – Black Alliance hosts first meeting. Women’s ERG soft-launched after WHM celebration.
Apr ‘23 – Women’s ERG first info sessions held.
Jun ‘23 – Greater Pride ERG participates in Baltimore Pride Parade and Community Fair. Black Alliance hosts Juneteenth celebration.
Sep ’23 – Greater Pride hosts info sessions.
Oct ‘23 – Employee reaches out to start Neurodiversity ERG.
Nov ‘ 23 – Greater Pride hosts Trans Day of Remembrance.
Feb ’24 – Black Alliance hosts BHM, including formal program, trivia, and weekly radio hour. Greater Pride hosts Valentine’s Day social.
Mar ‘24 – Women’s ERG hosts WHM, including Women of Impact Awards, educational workshop, and networking event.
Apr ‘ 24 – Neurodiversity ERG soft-launched after two Neurodiversity Awareness events.
May ’24 – First Neurodiversity info sessions held.

List all the stakeholders/departments involved in this project.

All employees; managers; senior team as exec sponsors; HR sponsors for each ERG; external job candidates for whom ERGs are a draw.

Conclusions

The creation of an ERG formation process has led to the successful establishment of new ERGs. ERGs can be further supported through better support of ERG leaders.

References & Acknowledgements

Bryant, K. (2023, September 15). The impact of employee resource groups in the workforce. *Forbes.*

Decreasing Length of PACU Stay for Minimally Invasive Same-Day GYN Surgery

1 What are we trying to accomplish? (Aim statement)

Decrease length of stay in PACU for minimally invasive same day GYN cases when a patient is required but unable to void prior to discharge and meets all other discharge criteria.

2 How will we know the change is an improvement?

A decrease in length of stay in PACU.

3 What changes will we make that will be an improvement?

- Decrease dose of pre-op Lyica from 150mg to 75mg.
- Consider backfill bladder with 150ml-200ml prior to Foley removal in OR.
- Create a standard of work with an algorithm to make recovery for GYN minimally invasive cases standardized.

Highlight or Describe One Cycle of PDSA

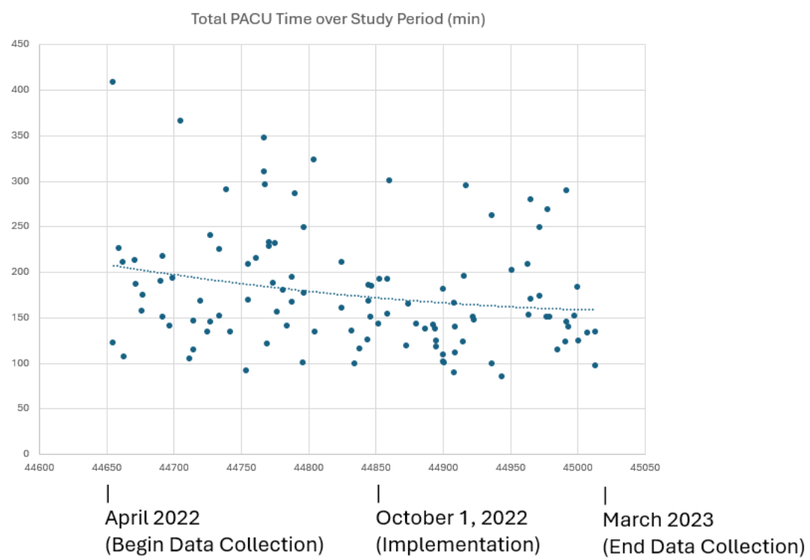
Plan
- Within 5 months we plan to see a decrease in PACU length of stay by coordinating with surgeons to decrease Lyrica dose to 75mg and adhere to new standard of work.

Do
- We plan to track date, procedure, surgeon, presence of must void prior to discharge order, length of stay in PACU, and reason for delay in PACU for 5 months.

Study
- We found a decrease in PACU length of stay with decreased Lyrica dose and a standardized recovery plan for each patient using a GYN Recovery SOW.

Act
- Based on results we decided to continue giving 75mg Lyrica in preop and implement the new SOW for GYN same day discharge for all minimally invasive procedures.

Outcomes/Results



List all the stakeholders/departments involved in this project.

- Joan Blomquist, MD
- Preston Edge, MD
- Kate Devan, RN
- Megan Silberzahn, RN
- Kayla Pringle, RN

Conclusions

The PACU length of stay decreased by 33 minutes after decreasing pre-op Lyrica dose to 75mg and creating a standard of work for GYN minimally invasive cases.

References & Acknowledgements

Frishman, G.N. (2020). Do we need to follow doctor's order to void before discharge after same day surgery? *The Journal of Minimally invasive gynecology* [editorial]. https://doi.org/10.1016.j.jmig.2020.04.022

Ishino, A., Yen-Tucker, L., Navarrete, E., Hartt, A., Stenquist, A., Ritterman Weintraub, M., & Zaritsky, E. (2021). Active versus passive voiding protocols after same day minimally invasive hysterectomy. *The Journal of Minimally Invasive Gynecology, 29* (1) 145-150. http://doi.org/10.1016/j.jmig.2021.07.016

Frost, A. (2020) Predictors of same day discharge after minimally invasive hysterectomy. Abstract in *Journal of Minimally Invasive Gynecology*, 27 S1-82

Article from Hopkins -*Abstract in Journal of Minimally Invasive Gynecology*, 24 S1-S201 (2017). A comparison of voiding times and PACU length of stay after hysterectomy and myomectomy based on bladder volume.

Education Initiative for Gilchrist: A Hospice Residency Program

Gina Altekruse, BSN, RN, CPEN Master's Candidate in Nursing Education, Stevenson University Spring 2024

Introduction

- Hospice care is a growing specialty in today's healthcare system, in part due to the aging population with increased comorbidities and longer life expectancies (Qugley &McCleskey, 2021).
- Hospice nurses must pivot away from the engrained life-saving interventions to providing comfort and quality of life care in patients' final days.
- Hospice is not immune to stressors that can lead to burnout which impacts patient safety and nurses' intention to leave (Camden, 2023).
- Residency programs are demonstrating to be:
    - An additional layer of support
    - Provide continuing opportunity to gain and apply knowledge.
    - Safe and supportive learning environment.
    - Retains staff.
    - Decreasing cost for the organization.
- Imperative to explore how to transition nurses away from acute care nursing to hospice nursing to reduce burnout and foster resilience in hopes to enhance retention.

PICO Question

Does a residency program for new-to-specialty hospice nurses, when compared to non-residency new-to-specialty hospice nurses, influence retention?

Search Criteria

Databases Searched:
- CINAHL, PubMed, Ovid, and Elsevier

State search terms used:
- hospice and retention, hospice orientation, new to hospice, and resiliency

Theoretical Framework:
- Constructivist Theory

Gilchrist Aim Alignment:
- Better Health, Better Care, More Joy, and Least Waste

Literature Review

- Mentoring can be described as a reciprocal and collaborative learning relationship between two or more individuals who share responsibility and accountability for helping a mentee to achieve mutually defined learning goals (Miller et al., 2020).
- Mentorships reduced staff turnover by an average of 12 percent with two studies averaging 17 percent increase in retention as well as increasing professional engagement for both mentor and mentee (Brook et al., 2018; Ward-Smith et al., 2023).
    - Increased retention provides the ability to develop clinical experts which enhances the quality of care provided and potentially health outcomes.
- Offering a transition to practice program of any description, the organization is indicating the importance attached to newly qualified nurses and can be enough to positively influence recruitment and retention.
    - The effectiveness of transitional programs can manifest as increased job satisfaction, confidence, and competence, and alternatively a decrease in turnover (Brooke et al., 2018).
- Parekh de Campos et al. (2022) recommend providing opportunities to formally debrief in a safe, supportive space about patients' complex palliative care needs with other nursing staff, palliative experts, or ethic committees.
    - Parekh de Campos et al., also suggest debriefing may not only help with the development of adaptive coping behaviors but may also serve as critical teaching moments (2022).

Recommendations

- The National Hospice and Palliative Care Organization (NHPCO) best practices to recruit and retain hospice staff by incorporating efforts to improve workplace culture by:
    - Providing resources to maximize wellness and avoid burnout.
    - Implementing staff satisfaction surveys, Listening Sessions, or Town Hall meetings to ensure that employee needs are being assessed and addressed.
- This education initiative intention is to support new hospice nurses as they transition from providing life-saving interventions to providing end-of-life quality and comfort interventions.
    1. Embedding support from peers through monthly clinical reflection groups, which will model a nurse residency program reflection time.
    2. The reflection group will be hosted virtually once a month from month three to month nine of employment.
    3. Led by someone from the education and quality team.
    4. The aim to support longevity and find their individual art of hospice nursing.

Conclusions

- A partial antidote of burnout is resiliency.
- Residency programs can be resiliency training.
- Leaders can implement to counterbalance the innate stressors of frequently encountering death and dying.
- In turn, residency programs can:
    1. Improve job satisfaction
    2. Decrease burnout
    3. Increasing the quality of patient care

References and Acknowledgements

Improving Inpatient DM Care in a Community Hospital: Leveraging Tools and Talent

Intro

Hyperglycemia in the hospital is associated with longer inpatient stays and mortality in non-critically ill patients. For the year 2020-2021, 29.5% of all hospitalized non-ICU patients in GBMC had diabetes as an associated comorbidity. Our goal was to increase blood glucose readings in the recommended range between 70 mg/dL to 180 mg/dL.

1 What are we trying to accomplish? (Aim statement)

Improve inpatient glycemic control in order to improve patient outcomes such as decreasing the risk of infections and shortening length of hospital stay.

2 How will we know the change is an improvement?

By achieving a 5 % increase in blood glucose readings within the recommended range of 70-180 mg/dL, from 70.34% in FY 2021 to 73.5% in FY 2022.

3 What changes will we make that will be an improvement?

Mandating providers to complete modules on diabetes management and designing Best Practice Advisories (BPAs) to alert and guide users' actions, recommending possible treatments.

PDSA cycle 1

Plan

Literature search was conducted to identify recommended inpatient glucose targets. Determining an accurate method of assessing inpatient glycemic control.

Do

Designed BPAs, implemented mandatory diabetes management modules for providers and prepared daily summary of glycemic control that was discussed daily as a part of our lean management system with a focus on identifying any existing or arising barriers.

Study

Achieved incremental improvements of the percentage of in-range blood glucose readings without an increased incidence of hypoglycemia.

Act

Provided individual feedback to providers based on performance data, offered refresher diabetes modules, and revised existing BPAs.

Outcomes/Results

Year	% of glucose in range
Pre-intervention FY-2021	70.34%
Post-intervention FY-2022	72.81%
Post-intervention FY 2023	73.1%

List the stakeholders/departments involved in this project.

- Internal medicine department: Dr Bapat, Dr. Fuscaldo, Dr. Chan, Dr. Kalas, Dr. Blanchard, Dr. Flack, Dr. Tucker
- Endocrinology department: Dr. Khan, Dr. Horowitz.
- Data team: Juan Negrin and Laura Schulman
- Epic team and Ryan Perrott PharmD

Conclusions

We achieved incremental improvements of the percentage of in-range blood glucose readings from 70.34% to 72.81% in FY 2022 and then to 73.1% in FY 2023 without an increase in the incidence of hypoglycemia by leveraging existing electronic health system tools and multidisciplinary collaboration. Further studies are needed to determine which strategies have the greatest impact on glycemic control.

References

1. American Diabetes Association Professional Practice Committee. 16. Diabetes Care in the Hospital: Standards of Care in Diabetes-2024. Diabetes Care. 2024;47(Suppl 1):S295-S306. doi:10.2337/dc24-S016
2. Owens PL, Liang L, Barrett ML, Fingar KR. Comorbidities Associated With Adult Inpatient Stays, 2019. In: Healthcare Cost and Utilization Project (HCUP) Statistical Briefs. Rockville (MD): Agency for Healthcare Research and Quality (US); December 15, 2022.

An Analysis of Palliative Care Consultation Notes for Nursing Home Residents with Dementia: UPLIFT Trial Early Data

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UNIVERSITY of MARYLAND SCHOOL OF SOCIAL WORK

UPLIFT
UTILIZING PALLIATIVE LEADERS IN FACILITIES TO TRANSFORM CARE

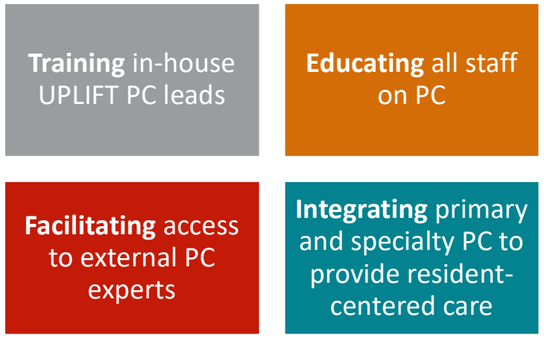
Background

- Few clinical trials have tested **how palliative care (PC) practices might be helpful** and effective in the nursing home (NH) setting.
- Extant studies have found people with dementia are more likely to have **poorly managed symptoms,** a lower quality of life, and experience burdensome treatments vs. others.

Question

- Can **PC programs in nursing homes** improve the quality of life and care for residents with dementia?

Figure 1. The UPLIFT Model



UPLIFT Participants

- 640 long-stay NH residents with moderate-to-severe cognitive impairment
- Facility-designated family or surrogate decisionmakers of residents
- CNAs, RNs, and other staff who regularly care for enrolled residents
- 16 Nursing homes: 8 in Indiana and 8 in Maryland

Clinical Trial Design

- Gradual facility rollout
- Stepped wedge design
- Residents opted in
- Residents enrolled in UPLIFT who screen positive for PC needs are referred for consultation with an external specialty PC team

Figure 2. UPLIFT Palliative Care Consult Process

Maryland Nursing Home Residents Referred for Palliative Care

- 241 initial PC consults in 8 Maryland NHs
- In terms of **acuity,**
- 8% (n=19) identified as "high priority“
- 37% (n=89) identified as "moderate priority“
- 47% (n=114) identified as "low priority“
- 8% (n=19) identified **as not needing a palliative care consultation**.

Table 1. Screening for Initial PC Consult Notes for Eight Indiana Facilities

Screening Findings	Number of Findings
Goals of Care/ACP	83 (34%)
Non-Concordant Care	20 (8%)
Unmanaged Symptoms	35 (15%)
Polypharmacy (9+ medications)	148 (61%)
Multiple Providers involved with care	77 (32%)

Observations

- **Average recommendations** per first consult was **between 2 and 3** (those with and without family members participating in consult with resident).
- The **leading palliative care needs** identified were polypharmacy, a lack of documentation about care preferences, and care complexity.
- **Less common palliative care** needs were symptom burden and post-hospital transition.

Discussion

- UPLIFT Maryland PC first consult data demonstrates that **PC consults can be productive for residents of nursing homes.**
- **Goals of care discussions** are important parts of many first consults that occur in nursing homes.
- **The acuity of PC consults** varied across screened residents allowing consultants to triage visits.

Acknowledgments

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- Special thanks to **Gretchen Tucker, Anne Evans, Jessica Trimmer, Todd Becker, Kathleen Unore, Alex Floyd, Jodi Lamie, Becky Ridder, and Matthew Nesvet**

Using the LEAN Management System to Improve Recognition of and Response to Postpartum Hemorrhage

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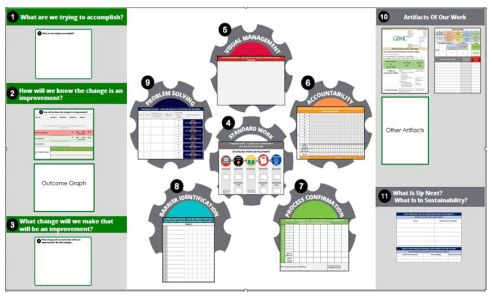
Introduction

Postpartum hemorrhage is a leading cause of severe maternal morbidity (SMM) related to childbirth. At GBMC, we identified an opportunity to improve our standard approach to postpartum hemorrhage, including an objective, quantitative measurement of blood loss.

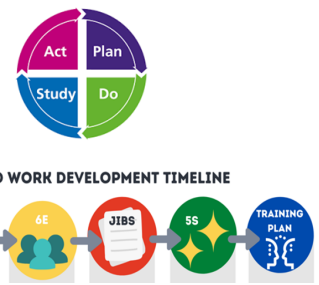
Objective

The goal of this project was to use the LEAN Management System (LMS) to redesign and implement a hemorrhage recognition and response process to decrease severe maternal morbidity (SMM) associated with postpartum hemorrhage from the baseline of 8.1% by June 1, 2023.

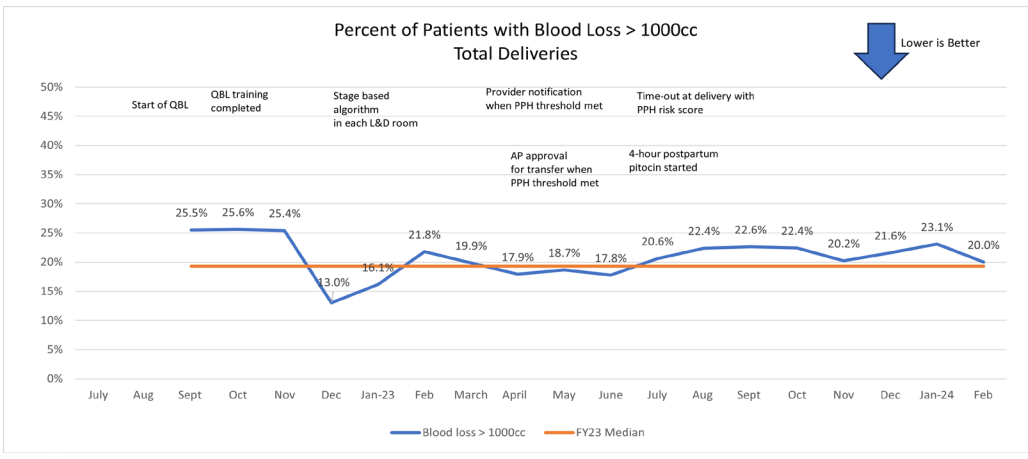
Method



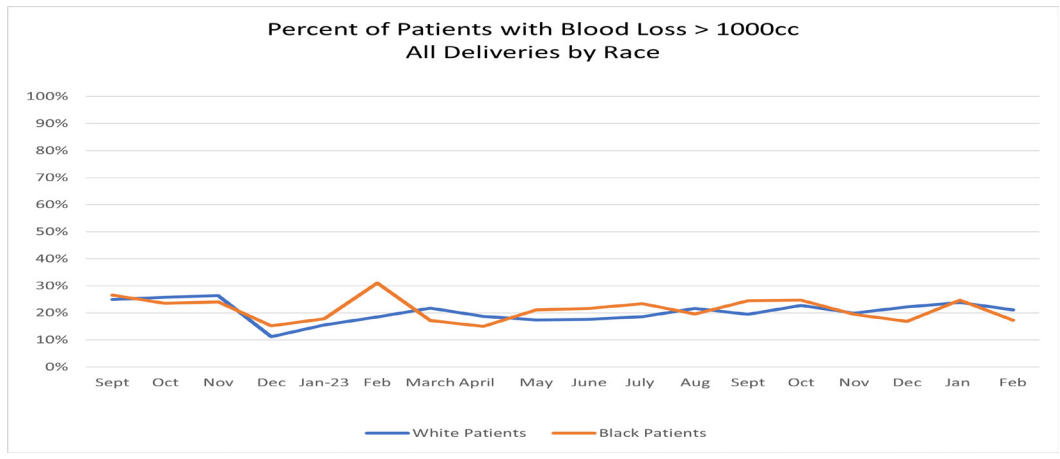
LMS is a strategic and systematic approach to designing rigorous, sustainable standard work for complex, multi-disciplinary processes and workflows. LMS was used to assess current state, develop standard work, problem solve identified barriers using multiple PDSA cycles, create visual management, educate staff, and confirm compliance with the new standard process. LMS includes a physical board posted on the units highlighting the work being done and facilitating a weekly report-out to the hospital executives and divisional leaders.



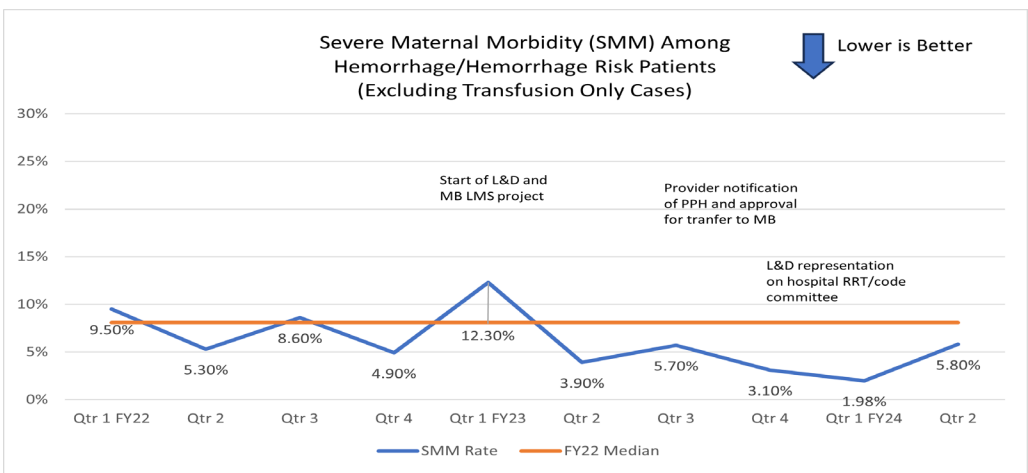
Results



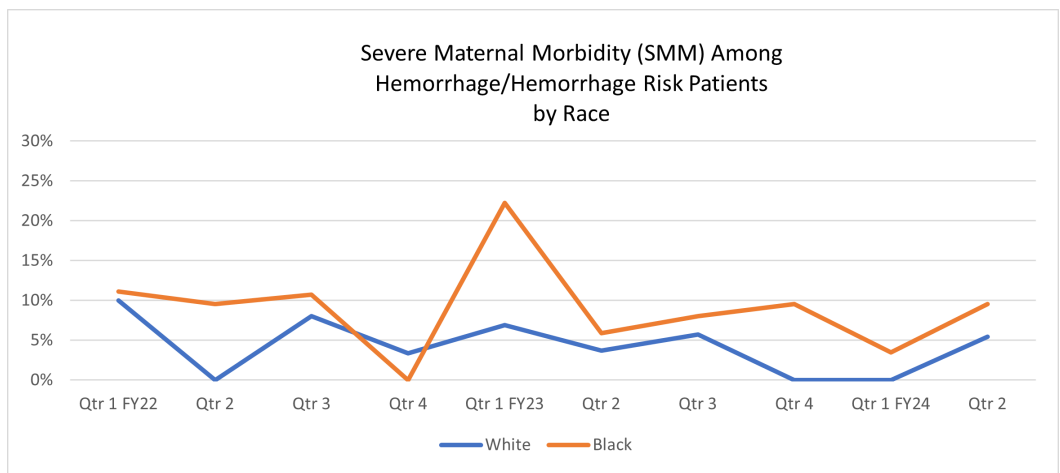
Hemorrhage rates were tracked monthly, with the baseline established at the beginning of the process redesign, since actual hemorrhage rates were unknown prior to quantifying blood loss.



Hemorrhage rates were tracked by race to uncover any disparities. Rates of hemorrhage were similar for white patients and black patients, separated by less than 2 percentage points.



SMM related to hemorrhage decreased below the pre-process redesign baseline of 8.1% and has stayed below for four consecutive quarters.



This SMM graph shows that a disparity in SMM exists between black and white patients, despite similar rates of postpartum hemorrhage. SMM has decreased in both groups– a decrease of 3.6 percentage points for white patients and 4.5 percentage points for black patients, decreasing the disparity slightly.

Conclusion

LMS is a valuable tool for process redesign and developing standard work. Implementing a standard process to recognize and respond to postpartum hemorrhage improves patient outcomes by decreasing incidences of SMM.

References

California Maternal Quality Care Collaborative. (2022). *OB Hemorrhage Toolkit V3.0.* Retrieved 2/28/2024 from https://www.cmqcc.org/resources-tool-kits/toolkits/ob-hemorrhage-toolkit

The American College of Obstetricians and Gynecologists. (2016, Reaffirmed 2021). *Severe Maternal Morbidity: Screening and Review Obstetric Care Consensus: Number 5*. Retrieved 2/28/2024 from https://www.acog.org/clinical/clinical-guidance/obstetric-care-consensus/articles/2016/09/severe-maternal-morbidity-screening-and-review