Weill Cornell Medicine

Annual WCM Quality Improvement & Patient Safety Poster Symposium

Abstracts and Posters

25 May 2022
Weill Cornell Medicine

Co-Sponsored by:

Quality Improvement Academy
and
Physician Organization | Division of Quality and Patient Safety
and
NewYork-Presbyterian Department of Nursing

Weill Cornell Medicine

June 1, 2022

Dear Colleagues,

First organized in 2013 through the Weill Department of Medicine, the **Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium** is now co-sponsored through Weill Cornell's Quality Improvement Academy, NYP's Department of Nursing and the Physician Organization's division of Quality and Patient Safety. We are proud to continue this groundbreaking interdepartmental and interdisciplinary celebration of quality and patient safety initiatives and innovations from Weill Cornell uptown, Lower Manhattan, NYP/Queens and NYP/Brooklyn-Methodist.

This year's poster event was held in the Harkness Courtyard on May 25, 2022. We were excited to showcase 27 projects across 13 departments, 14 of which were from the graduating QIA Class of 2022. Through a peer-review process by our QIA alumni, we recognized three Weill Cornell projects from those featured for their incorporation of QI and safety methodology, innovation, and impact on patient care: *Management of Infants at Risk for Early Onset Sepsis* (Department of Pediatrics, WCM), *Palliative Care in the Emergency Department* (Department of Emergency Medicine, WCM), and *Telehealth Access in a Multi-lingual Urogynecology Patient Population* (Department of Obstetrics and Gynecology, WCM/NYP-Queens). Also included were the top three graduate medical education projects selected during this year's NYP CLER- House Staff Quality Improvement Poster Session.

This e-catalog features the projects shared at this year's event. Congratulations and thank you to all for your participation, achievements and ongoing commitment to patient care. And a heartfelt *thank you* to Dean Augustine Choi and Dr. Anthony Hollenberg, Sanford I.Weill Chair, Weill Department of Medicine, for their ongoing support of academic quality improvement initiatives and scholarship across Weill Cornell Medicine.

With gratitude,

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THANK YOU!

Steering Committee

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Selection Committee

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Quality Improvement Academy Alumni
Housestaff Quality Council

*

Contents

Quality Improvement Academy: Graduating Class of 2022

General Symposium Posters

- *Improving Accuracy and Efficiency of Regional Block Administration for Breast Surgery*
  Dierdre Kelleher, MD; et al.
  Department of Anesthesiology

- *Palliative Care in the Emergency Department*
  Brenna Farmer, MD; et al.
  Department of Emergency Medicine

- *Starting the Conversation: Early Initiation of Goals of Care (GOC) May Reduce Inpatient Mortality*
  Calvin Hwang, MD; et al
  Weill Department of Medicine (NYP-Queens)

- *MoMA Social Rx - Introduction to Watercolor Painting for People with Parkinson's*
  Abby Andrew, LCSW; et al
  NYP-Department of Nursing

- *Block the Clot: Reducing Healthcare-Related Venous Thromboembolism*
  Jeffrey Rehnlund, RN; et al.
  NYP-Department of Nursing

- *Telehealth Access in a Multi-lingual Urogynecology Patient Population*
  Laura Kim, MD; et al.
  Department of Obstetrics and Gynecology (NYP-Queens)

- *Comparison of Intraoperative Breast Axillary Sentinel Node Frozen Section Diagnosis Concordance Between Digital Pathology and Glass Slides*
  Diana Berman, MD; et al.
  Department of Pathology and Laboratory Medicine

- *Improving Resident Preparedness for Rotations in the Pediatric Intensive Care Unit: A Pediatric Critical Care Fellow-driven Quality Improvement Initiative to Optimize Orientation*
  Eric Wilsterman, MD; et al.
  Department of Pediatrics

- *Management of Infants at Risk for Early Onset Sepsis*
  Erin Kelly, PA; et al.
  Department of Pediatrics

- *Impacts of Travel Time on Appointment Frequency and No Show Rates at a NYC Free Clinic*
  Gabrielle Ramirez; et al.
  Weill Cornell Medical School

NYP CLER- House Staff Quality Improvement Poster Session Awardees

- *Improving Shingles Vaccination Rate at a Family Medicine Clinic in Washington Heights*
  Amy Sun, MD; et al.
  NYP Primary Care (NYP-Columbia)

- *Increasing Healthcare Proxy Documentation in an Outpatient Geriatric Medicine Practice*
  Emily Coskun, MD; et al.
  Division of Geriatric Medicine
  Weill Department of Medicine

- *Improving Rates of Pneumococcal Vaccination in Pediatric Rheumatology Patients with Systemic Lupus Erythematosus at Hospital for Special Surgery*
  Lauren Robinson, MD; et al.
  Division of Rheumatology (HSS)

Quality Improvement Academy: Graduating Class of 2022

Improving Transitions of Care for Older Adults in an Outpatient Geriatrics Clinic

Weill Cornell Medicine Quality Improvement Academy

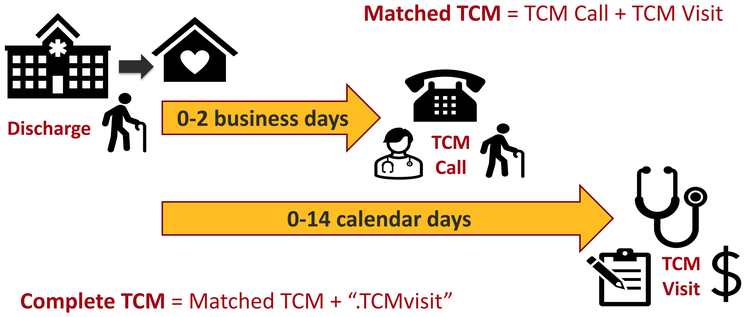
Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Kelly Cummings MD, Emily Fessler MD, Jihui Lee PhD, Robert Kim MD | May 25th, 2022

Background

- Discharge from the hospital is a time of heightened vulnerability for lapses in safety and quality, specifically for older adults.
- Transitional care management (TCM) programs have been developed to improve effective care transitions, reduce 30-day readmissions, and are reimbursable under Medicare.
- Currently, our ambulatory geriatrics practice, The Center on Aging (CoA), partners with the Physician's Organization to provide TCM services.
- This program is limited based on the patient's insurance and excludes the dual-eligible (Medicare/Medicaid) population.
- We are not currently providing equitable transitional care to all patients at the CoA.

TCM Components



Complete TCM = Matched TCM + ".TCMvisit" smartphrase + TCM billing code (99495, 99496)

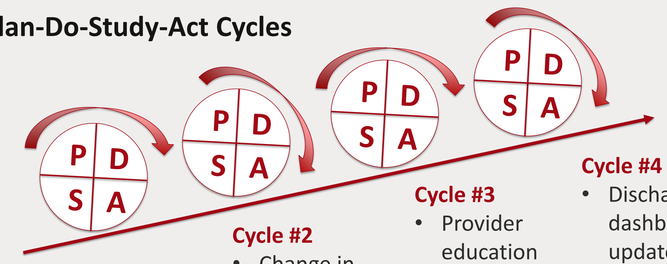
Aim Statement

- We aim to increase the percentage of matched TCM visits for dual-eligible CoA patients from 25% to 60% and for all CoA patients from 40% to 80% by June 30th, 2022.

Methods

- Study Period: January 1st, 2021 – June 30th, 2022.
- Setting: Outpatient geriatrics clinic with 3500+ patients ≥ 65 years old.
- Study Population:
  - Established patients of the CoA discharged to home from Weill Cornell Medicine (WCM) Hospital.
  - Exclusion criteria:
    1. Admitted for planned admission or elective procedure.
    2. Discharged to rehab, nursing home, hospice or against medical advice.

Plan-Do-Study-Act Cycles



Cycle #1
- New workflow with 2nd CM team for dual patients

Cycle #2
- Change in workflow to increase capture of dual discharges

Cycle #3
- Provider education

Cycle #4
- Discharge dashboard updated for more efficient capture

Results

Month	Jan '21	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '22	Feb	Mar
N=	1	3	3	1	1	2	3	4	3	2	9	5	4	5	2

Table 1. Number of dual-eligible CoA patients discharged per month.

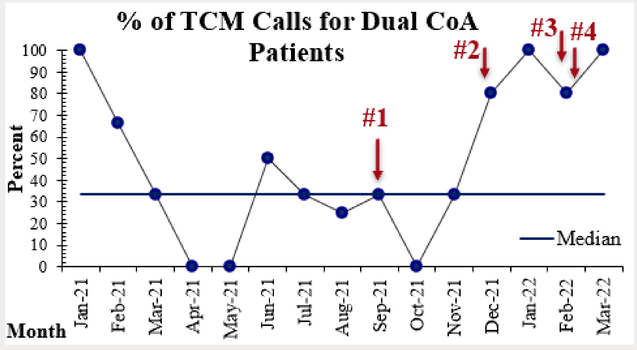


Figure 1. Process measure. % TCM calls for dual-eligible discharges.

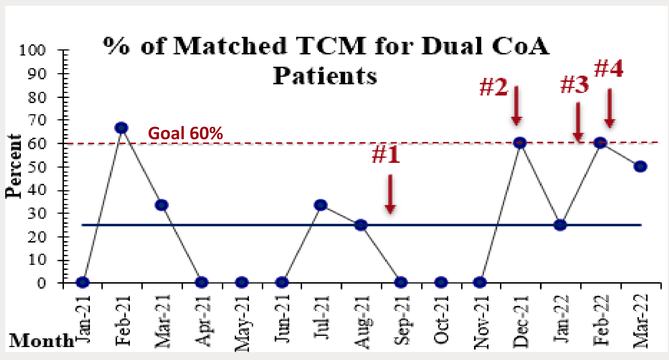


Figure 2. Outcome measure. % matched TCM for dual-eligible discharges.

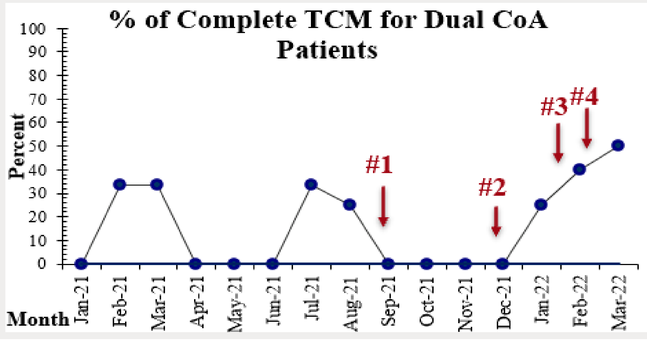


Figure 3. Process measure. % complete TCM for dual-eligible discharges.

Results

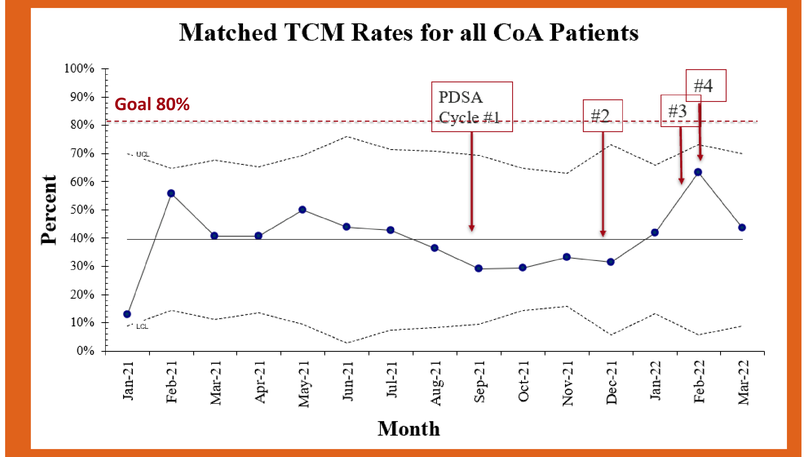


Figure 4. Outcome measure. P chart showing % matched TCM out of all eligible discharges.

Conclusions:

- Our first intervention established a workflow with the Ambulatory Care Network care management team at WCM to proactively provide dual-eligible patients with TCM services. Further PDSA cycles refined this process.
- Early data shows an increase in rates of matched TCM for dual eligible discharges.
- Mismatch persists between rates of TCM calls, matched TCM, and complete TCM, indicating further improvements are needed to improve TCM visit rates, as well as correct documentation and billing.
- Over 1/3 of the time providers missed the opportunity to bill for TCM services despite all components being met.

Next Steps

- Future interventions include those aimed at improving communication between inpatient/outpatient teams; utilizing geriatric fellows' clinic to increase TCM visit availability; direct provider TCM completion performance feedback; and increase utilization of telehealth for TCM visits.
- Further data collection and analysis needed to evaluate impact of matched TCM on 30-day readmission rates.

Acknowledgements

- Special thank you to Kimberly Rosado MSN RN-BC, Justine Llop RN, Felvic Adriatico RN, Semhar Fisseha MPH, Joy Gelman MD, Physician's Organization Care Management Team, Melissa Bryant, and the Center on Aging Team.

Reducing Unassisted Falls Among Patients with Cancer at New York Presbyterian/ Weill Cornell Medicine: A Multipronged Approach

Christine A. Garcia, MD, MPH & German Rodriguez, MSN, RN

Weill Cornell Medicine Quality Improvement Academy

Background

- Patients with cancer are at particularly high risk for falls and unfortunately may suffer worse outcomes with falls:
  - Increased risk for fractures due to bony metastases
  - Worse subsequent bleeding due to thrombocytopenia from disease or from anticoagulation
- Cancer patients over the age of 50 years are more likely to die in-hospital after a fall than elderly patients without cancer.

Problem

- At Weill Cornell Medicine, in 2020, there were 67 falls among patients with cancer admitted to oncology floors, accounting for 12.4% of all falls.
- In 2020, there were 67 falls among patients with cancer admitted to oncology floors, accounting for 12.4% of all falls.
- Of the patients that fell during their inpatient admission during 2020, 20% of these patients were not considered “high risk for falls” based on the Morse Falls’ risk assessment.

Objective/Aim Statement

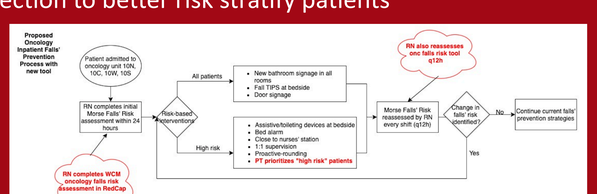
- To reduce the rate of unassisted inpatient falls per 1000 patient days on oncology inpatient units (10N, 10S, 10C, 10W) at New York Presbyterian / Weill Cornell Medicine by 10% from January 31, 2021 to June 30, 2022

Existing Knowledge & Gaps

- CC-CA has been shown to have a strong concordance index for predicting falls and higher discrimination than the Morse Fall Tool for patients hospitalized for cancer management. [2]
- MSKCC falls’ risk assessment instrument which incorporates history of a previous fall, age >65 years, sensory deficits, cognitive changes, impaired mobility, generalized weakness, and medications was associated with a 91% positive predictive value for falls. [3]
- It is unclear if Morse Falls’ Risk adequately predicts for falls among cancer patients.

Study Design

- QI project at WCM 10th floor for oncology patients
- Collect additional variables for risk of falls
- Nurses to enter data into Redcap during each shift when adding Morse Falls’ Risk Assessment
- Includes 10 risk factors from CC-CA and MSKCC not previously validated outside of these institutions
- Compare to SOC Morse Fall’s Risk Assessment scores at same time of collection to better risk stratify patients



QI Interventions

Iterative PDSA Cycles

Cycle 1: 2/2021
Multidisciplinary RCAs
Rapid Cycle Falls’ Audit

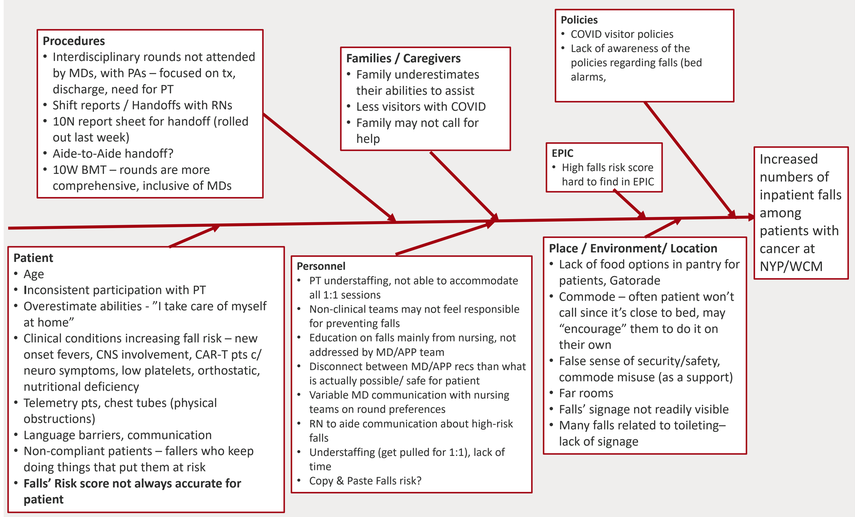
Cycle 2: 3/2021
New falls’ signage

Cycle 3: 6/2021
Interdisciplinary Falls’ Education (APPs, RN, EVS, MD)

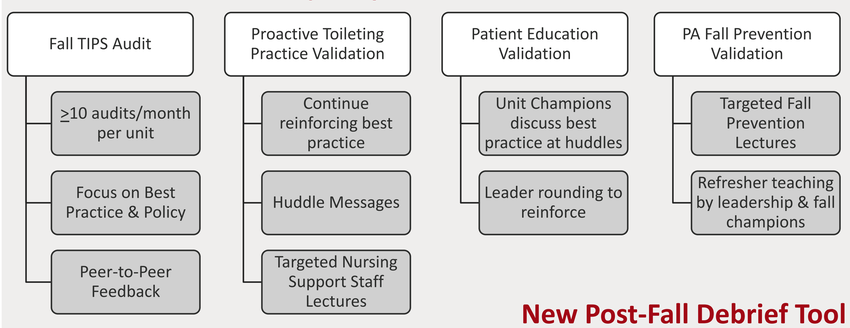
Cycle 4: 7/2021
Falls’ Prevention Board

Cycle 5: 10/2021
Prospective Risk Assessment Tool

Multidisciplinary RCAs

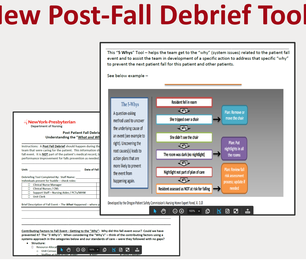


Rapid Cycle Falls’ Audit

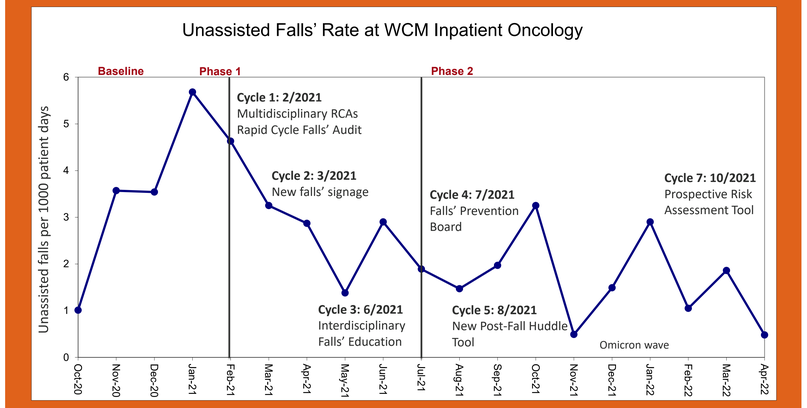


New Falls’ Signage

New Post-Fall Debrief Tool



Results



Balancing Measures & Barriers

Balancing Measures

- Burden on PT for increasing consults
- Burden on data collection on nurses

Barriers

- COVID Omicron wave 12/2021-1/2022 - Understaffing, temporary staffing
- Data collection was challenging & burdensome
- EPIC – Redcap technical difficulties

Conclusions/Lessons Learned

- Important to have key stakeholders involved– RNs, PCDs, physicians, EVS, dieticians, patients and families
- 5 WHYs of Falls are important to get to the root cause of falls
- For sustainable changes, must be built into IT
- Standardized enterprise-wide post huddle form to debrief falls important
- Consider extension into outpatient setting to improve handoff for admitted patients

Next Steps

- Start prospective collection of additional risk factors for oncology patients that may better predict for falls
- Create our own tool to predict risk of falls for oncology patients

Oncology Falls’ Reduction Project Team

Project Leaders
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Catherine McHugh, RN, Quality & Patient Safety Specialist

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Erika Fong
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10th Floor Nursing Falls’ Champions
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Ethan Besas, RN
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Stefanie Taflin, RN
Dana Dejesus, RN

Students
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References:
[1]Toomey et al. Mortality in cancer patients after a fall-related injury: The impact of cancer spread and type. Injury 2014. 45. 11: 1710-1716.
[2]Capone LI et al. Predictors of a fall event in hospitalized patients with cancer. Oncol Nur Forum 2012. 39:5): E407-15. doi: 10.1188/12.ONF.E407-E415.
[3]Weed-Pfaff SH. Validation of predictors of all events in hospitalized patients with cancer. Clin J Oncol Nursing 2016. 20(5): E126-31. doi: 10.1188/16.CJON.E126-E131.

Reducing Telemetry Utilization in Hospitalized Comfort Care Patients

Christine Park MD*, Ramsey Kalil MD*, Jihui Lee PhD, Evan Sholle MS, Brock Daniels MD, Jennifer I Lee MD
*co-first authors

Weill Cornell Medicine Quality Improvement Academy

Background

Telemetry overutilization increases healthcare costs, unnecessary interventions and may result in patient harm, particularly if utilized at the end of life. 'Comfort care' patients are particularly vulnerable to unnecessary telemetry use.

Aim Statement

We aimed to decrease the use of telemetry in hospitalized comfort care patients admitted to Medicine teams at NYP-WCM, defined by active telemetry and comfort care orders in the EMR, by 25% compared to baseline from October 2020 to April 2022.

Methods

STUDY POPULATION

- Adult patients on Medicine services at NYP-WCM with 'comfort care' and telemetry orders.
- Intervention arm = teaching services with house staff providers
- Control arm = PA services

INTERVENTION

- Education on indications for telemetry and how to appropriately discontinue telemetry orders in the EMR beginning October 2021
- EMR modification of the official 'comfort care' order set to include a "Discontinue telemetry" option implemented during February 2022

OUTCOME MEASURES

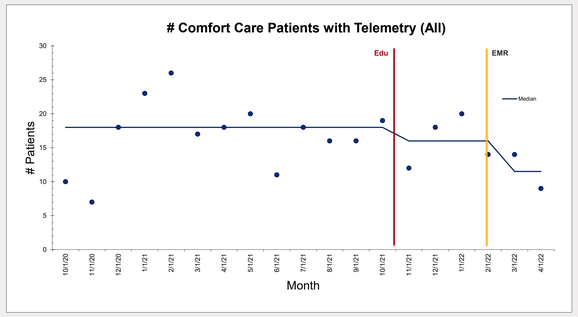
- # of comfort care patients with active telemetry orders

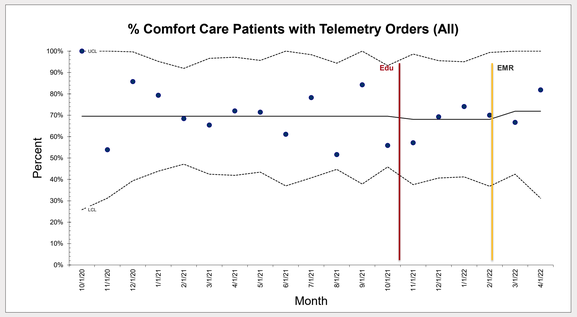
PROCESS MEASURES

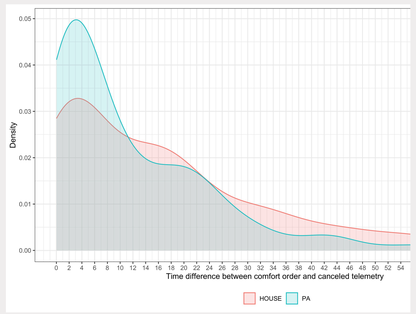
- % of comfort care patients with active telemetry orders
- Time to correctly discontinued telemetry order
- # of comfort care patients with telemetry discontinued
- % of correctly discontinued telemetry in comfort care patients

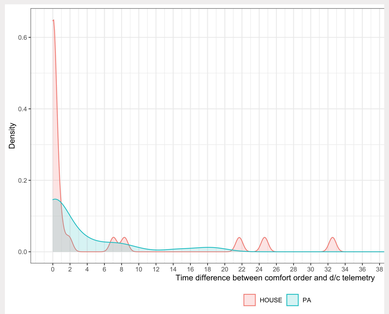
BALANCING MEASURES

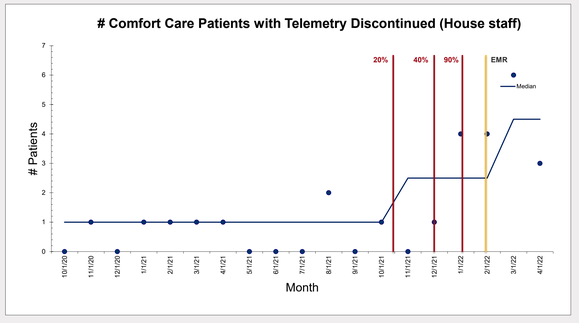
- % of comfort care patients with telemetry reordered after discontinuation

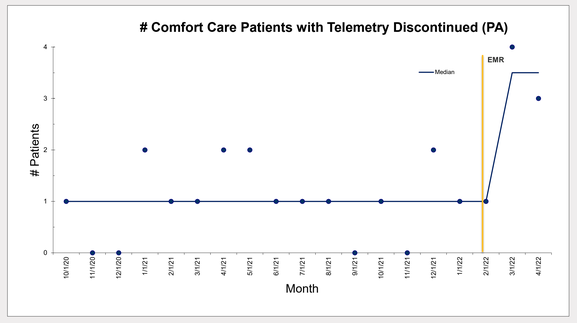


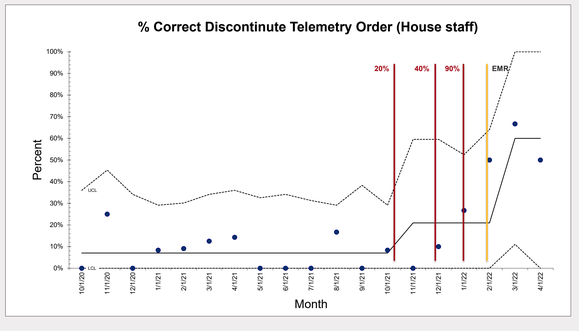


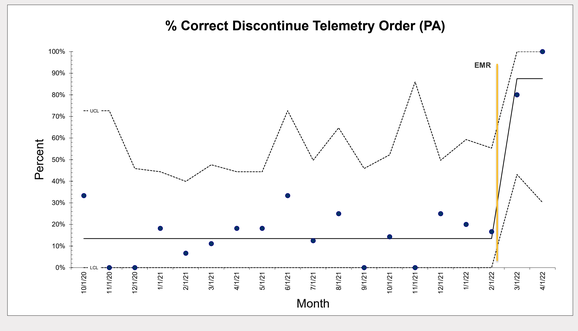


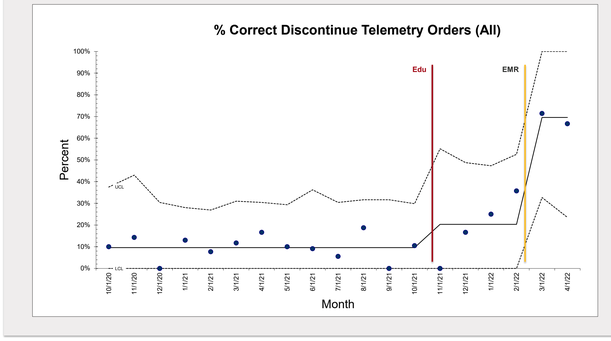


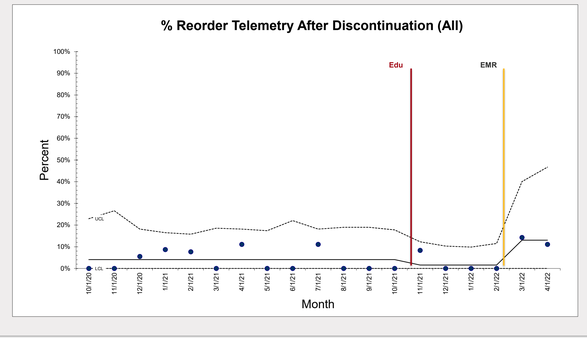












Results

By the end of the study period…

- The # of comfort care patients with telemetry orders decreased from a median of 18 to 11.5 per month, though the % of comfort care patients with telemetry orders remained stable
- House staff were more likely to place the correct order to discontinue telemetry than PAs, and they did so earlier
- The # of correct discontinue telemetry orders improved from a median of 1 to 4.5 in house staff and 1 to 3.5 in PA patients
- Similarly, the % of comfort care patients whose telemetry was discontinued improved
- There were no changes in the amount of telemetry reordered after discontinuation

Conclusions

- We observed an overall increase in number of discontinued telemetry orders in house staff teams since the start of education
- House staff are more likely to place the correct order to discontinue telemetry earlier
- There has been a large reduction in the overall number of comfort care patients with telemetry orders

LIMITATIONS

- Single center study with small sample size
- Our initial intervention (resident education) was primarily educational and relied on retention of knowledge within the house staff providers

Next Steps

- Analyze more data on the efficacy of the EMR change
- Knowledge retention surveys based on education sessions

Study of Telemedicine via Virtual Visits in Symptom Monitoring and Management of Cancer Patients Treated with Systemic Therapies in Brooklyn

Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Uqba Khan MD, Jakyung Bang MD | May 25th, 2022

Weill Cornell Medicine
Quality Improvement Academy

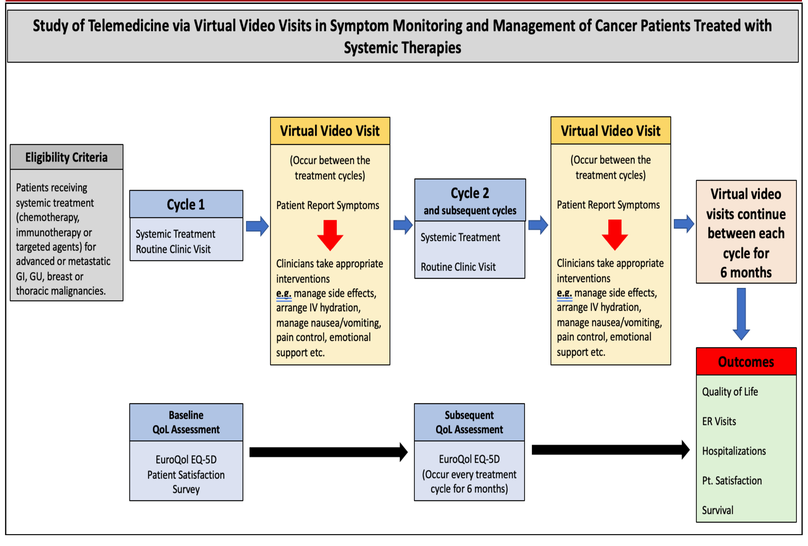
Problem Statement

- Symptoms are common among patients receiving treatment of advanced cancers (e.g., vomiting, diarrhea, pain, neuropathy, fever, cough etc.)
- Symptoms precipitate ER visits and hospital admissions
- Several symptoms are associated with worse survival in advanced cancer and lead to functional impairment and deconditioning
- Evidence suggests that clinicians frequently miss or underestimate the severity of patients' symptoms
- Development of systems to identify symptoms may enhance existing approaches to monitoring and managing symptoms, leading to improved outcomes.
- Racial and Ethnic minority patients are especially vulnerable due to lack of access to high quality care
- At NYP-Brooklyn Methodist Hospital, we see primarily underserved populations. Our institutional data shows more than 50% of our patients are racial and ethnic minorities.

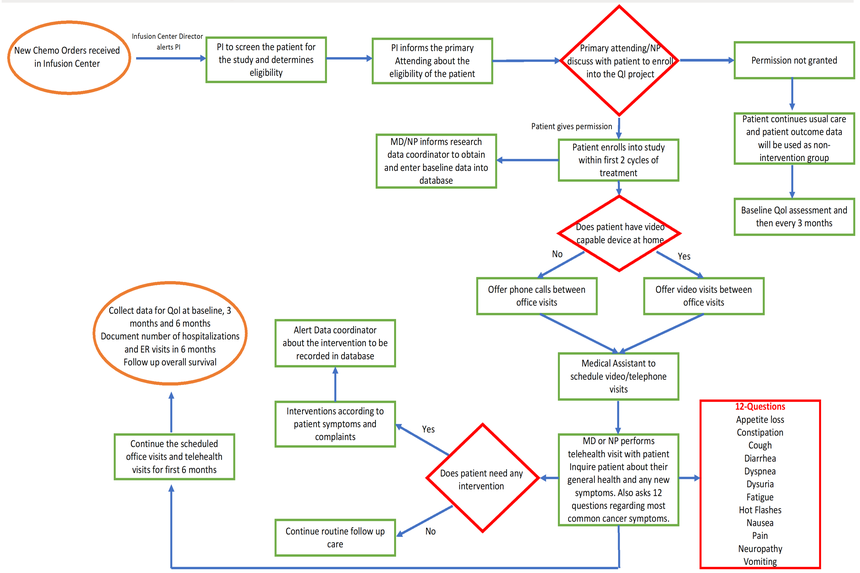
Aim Statement

- The aim of this project is to improve health-related quality of life by 6 points as measured by EuroQol EQ-5D and compliance of cancer patients with advanced solid organ malignancies treated at NYP-Brooklyn Methodist Hospital by incorporating telehealth visits between scheduled office/chemotherapy visits.

Design/Methods



Process Map



Inclusion Criteria

- Stage 4 or unresectable cancer patients

Outcome Measures

- Quality of life assessment
- Number of ER visits and hospitalizations

Process Measures

- % of patients whose QoL is improved by at least 6 points on EQ-5D
- Percentage of patients whose ER/Hospitalizations were reduced compared to average no. of ER visits and hospitalizations

Balancing Measures

- Patients' ability to use tech devices including knowledge on use, access to devices and/or internet
- Additional time to conduct these virtual visits

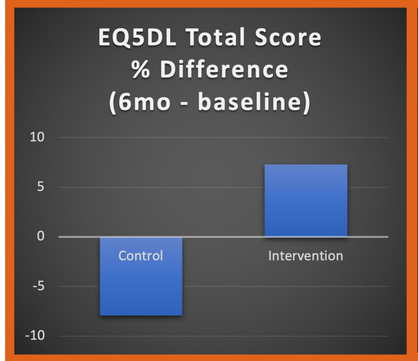
Analysis

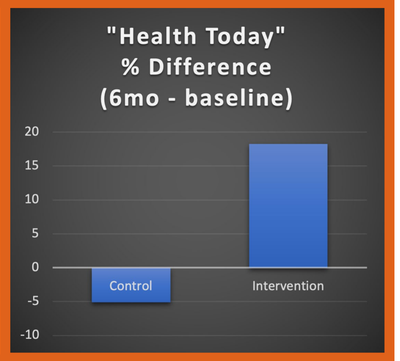
- Linear mixed model analysis will be performed where the EQ-5D score will be the dependent variable
- For ER and hospitalization endpoints, cumulative incidence functions will be calculated with death treated as a competing event.

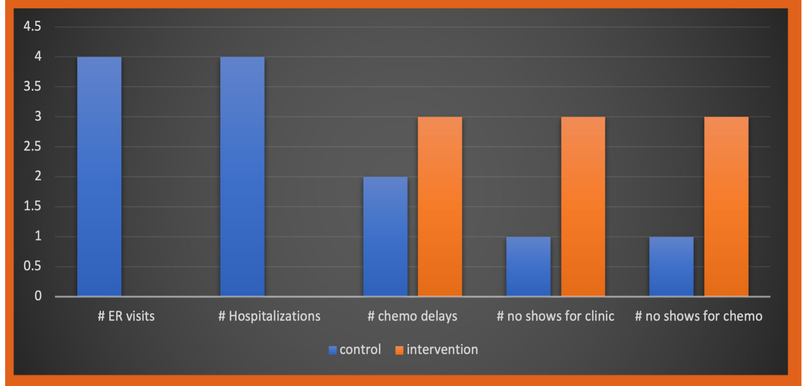
Results

- Study was limited by the number of data collected in this interim analysis (n=5, control; n=9, intervention).
- After 6 months since the start of systemic therapy, total score of EQ-5D decreased by 7.93% in the control group, while increasing by 7.31% in the intervention group (Figure 3).
- "Health today" score, determined by asking patients to rate their overall health on a scale of 100, also increased by 18.3% in the intervention group, while decreasing by 5.1% in the control group (Figure 4).
- Number of ER visits and hospitalizations were higher in the control group, even though intervention group had higher numbers of delays in chemotherapy, no shows for clinic visits and chemotherapy sessions (Figure 5).

Results







Conclusions/Lessons Learned

- Utilization of telemedicine in cancer patients undergoing systemic therapy may be an effective way to address the many cancer-related or therapy-related symptoms that patients experience and, therefore, can increase their quality of life as well as their perception of overall health.
- This use of telemedicine may also potentially prevent ER visits and hospitalizations, suggesting a cost-effective strategy to care for these patients.

Next Steps

- Further efforts will be made to increase the sample size, by continuing to follow up on the currently enrolled patients and by enrolling more new patients.

References

Basch E, Deal AM, Dueck AC, et al. Overall Survival Results of a Trial Assessing Patient-Reported Outcomes for Symptom Monitoring During Routine Cancer Treatment. *JAMA.* 2017;318(2):197–198. doi:10.1001/jama.2017.7156

Management of Risk Factors for Non-Alcoholic Fatty Disease After Liver Transplant: Decrease FAT (Fatty Liver After Transplant)

Weill Cornell Medicine Quality Improvement Academy

Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Emily Schonfeld, MD, Jihui Lee, PhD, Linda Gerber PhD, Arun Jesudian, MD, Rochelle Wong, MD, Anthony Choi, MD, Sonal Kumar, MD, Barbara Fishkin, R-PAC, Paige Whorley, RD, David Salerno, PharmD, Robert Brown, MD, Robert Kim, MD | May 25, 2022

Background:

Non-alcoholic fatty liver disease (NAFLD) affects about 25% of the world's population

NAFLD recurs post-transplant in about **24-31%** of patients who were transplanted for non-alcoholic steatohepatitis (NASH) or cryptogenic cirrhosis

Post-transplant immunosuppression predisposes patients to the development of HTN, DM and the metabolic syndrome, which increases the risk of recurrent or *de novo* NAFLD

There is no standard of care for post-transplant treatment of NAFLD and transplant programs inconsistently address risk factors and co-morbidities for NAFLD post-transplant

Project Goals:

The project goal is to provide a standardized method to consistently screen, diagnose, and treat patients with risk factors for post-transplant NAFLD

Aim:

The aim of the project is for 50% of post-transplant patients to be screened for NAFLD risk factors at 3-month intervals for the first-year post-liver transplant

and

That 75% of the patients who meet the criteria for substantial weight gain, new onset DM, post-transplant NAFLD be referred to see the appropriate specialty provider by one-year post-transplant

References:
El Atrache MM, Abouljoud MS, Divine G, Yoshida A, Kim DY, Marwan M et al. Recurrence of non-alcoholic steatohepatitis and cryptogenic cirrhosis following orthotopic liver transplantation in the context of the metabolic syndrome. Clin Transplant 2012; 26: E505- E512.
Gitto S, Villa E. Non-Alcoholic Fatty Liver Disease and Metabolic Syndrome after Liver Transplant. Int J Mol Sci 2016; 17(4): 490.
Yalamanchili K, Saadeh S, Klintmalm GB, Jennings LW, Davis GL. Nonalcoholic fatty liver disease after liver transplantation for cryptogenic cirrhosis or nonalcoholic fatty liver disease. Liver Transpl 2010; 16: 431-439.
Younossi ZM. Non-alcoholic fatty liver disease - A global public health perspective. J Hepatol 2019; 70(3): 531-544.

Methods:

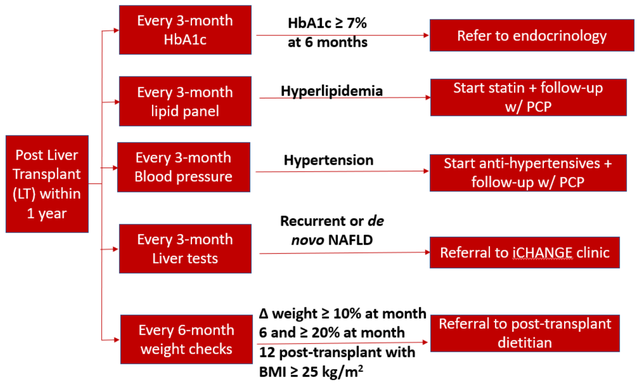
A standardized protocol for the Decrease FAT project was provided to the Center for Liver Disease and Transplantation providers at WCMC (Figure 1). Liver transplant recipients were followed during their first-year post-transplant to confirm that HbA1c, lipid panel, blood pressure, and signs of recurrent or *de novo* NAFLD were evaluated every 3 months, that weight was checked every 6 months, and that appropriate follow-up was provided based on the results.

A retrospective investigation into patients transplanted prior to the study initiation was conducted to evaluate previous practices at WCMC.

Methods:

Zoom meetings about the protocol were held every 1-2 months. EPIC, the electronic medical record, was used to create a smartphrase for clinic notes as well as a liver post-transplant synopsis section that focused on metabolic health. Clinic reminders were posted in clinic and providers were given a fact sheet about the study.

Figure 1: Process Map



Results:

The study was initiated on September 1, 2021. 40 patients were included in the post-intervention or prospective group and 84 in the standard of care or retrospective group. Table 1 demonstrates that the percentage of patients who had a lipid panel, HbA1c and BP check within the first year were similar between the two groups. Figure 2 and 3 demonstrate the rate of patients who had each variable assessed at 3, 6, 9 and 12 months after transplant.

Table 1

Study Time Period	HbA1c sent at any time in the first year	Lipid panel sent at any time in the first Year	BP check every 3 months in the first Year
Retrospective (n = 84)	54%	60%	75%
Prospective (n = 40)	58%	65%	60%

Figure 1

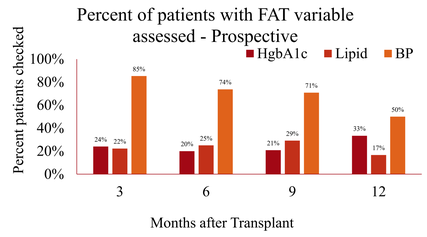
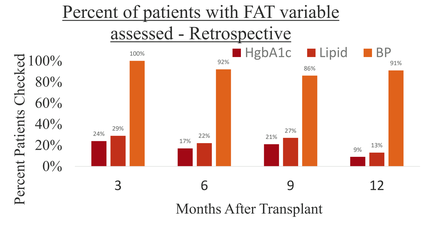


Figure 2



Conclusions:

Despite educational sessions and posted reminders, use of the tools developed to assess for FAT were not adopted as much as anticipated through the course of the study. This was likely due to the rise of video visits during the COVID-19 pandemic, which precludes frequent blood pressure checks in clinic, standardized lab order sets that do not include a lipid panel and HbA1c, and that metabolic health is not often part of post liver transplant note templates.

Next steps will include working with providers to use individualized shortcuts in the EMR for increased adherence to the protocol.

Weill Cornell Medicine
Quality Improvement Academy

Development of a Pediatric to Adult Transition Clinic for Young Adults with Type 1 Diabetes

Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Tiffany Yeh, MD || Division of Endocrinology, Diabetes, and Metabolism

Background

- Young adults with T1DM face challenges in managing their diabetes
- Physical, social, economic, and systematic **barriers** to transition from pediatric to adult endocrinology
- **Gaps in care** lead to ↑ HgbA1c, DKA, microvascular complications

Currently, **no formal transition process** at WCM

Objective/Aim Statement

- Establish a **joint pediatric to adult** clinic
- Assess the **feasibility** of this clinic by looking at: the % of patients who participate in Transition Clinic that have a completed adult endocrinology follow-up within 1 year.

Design/Methods

- Establish the Transition Clinic
  - Workflow
  - Logistics
  - Technology download capabilities
- Stakeholder survey

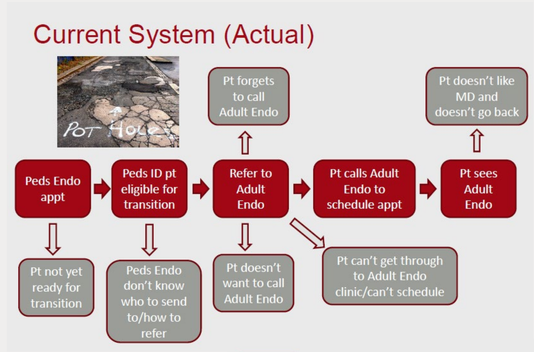
Pediatric Endocrinology Survey Results

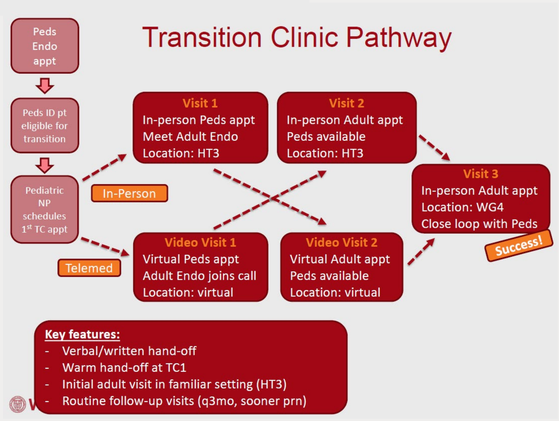
What prevents you from transitioning care?

- Ending a **long-term relationship**
- No established **protocol**
- I don't know **WHO** to transfer to
- Services: tech, mental health, social work

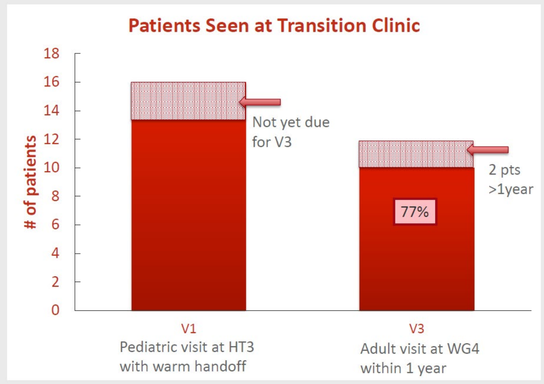
What would be MOST helpful?

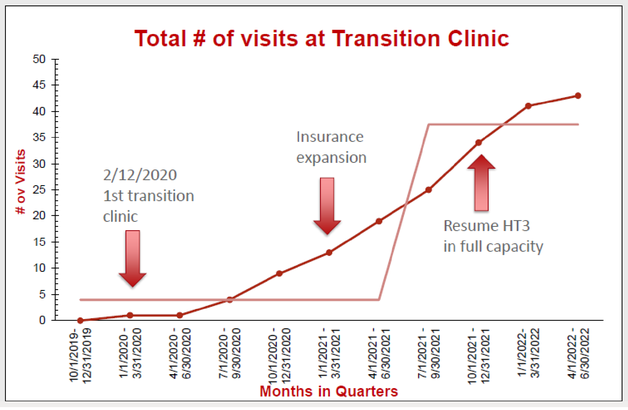
- **Joint discussion** with adult provider
- **Protocol** for referring patients



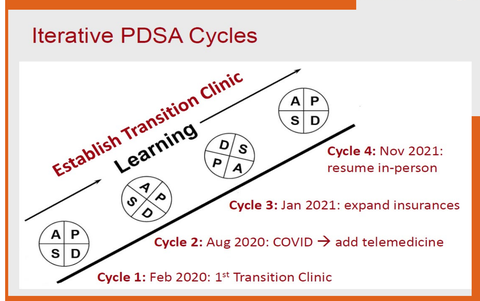


Data Analysis





Results



- **Launched** 2/12/20
- **43** total visits as part of Transition Clinic
- **16** patients entered Transition Clinic
- **12** patients successfully transferred to WG4
  - 2 patients took longer than 1 year to transition to adult care
  - 3 still en-route
  - 1 patient lost to follow-up

Conclusions/Lessons Learned

- **Established** a Joint Pediatric & Adult Endocrinology Transition Clinic for T1DM
- Key features: **warm hand-off**, **hybrid** workflow, joint visits
- Successful transition of 12 patients total (10 within the 1-year timeframe)

Next Steps

- Get **feedback** from patients
- Look at long-term adult **outcomes**
- **Expand** adult provider access
- Expand to other medical conditions

Weill Cornell Medicine
Quality Improvement Academy

Medical Malpractice: Breaking the Culture of Silence to Improve Physician Wellbeing and Patient Care

Lucy Willis, MD | May 25, 2022

Problem Statement:

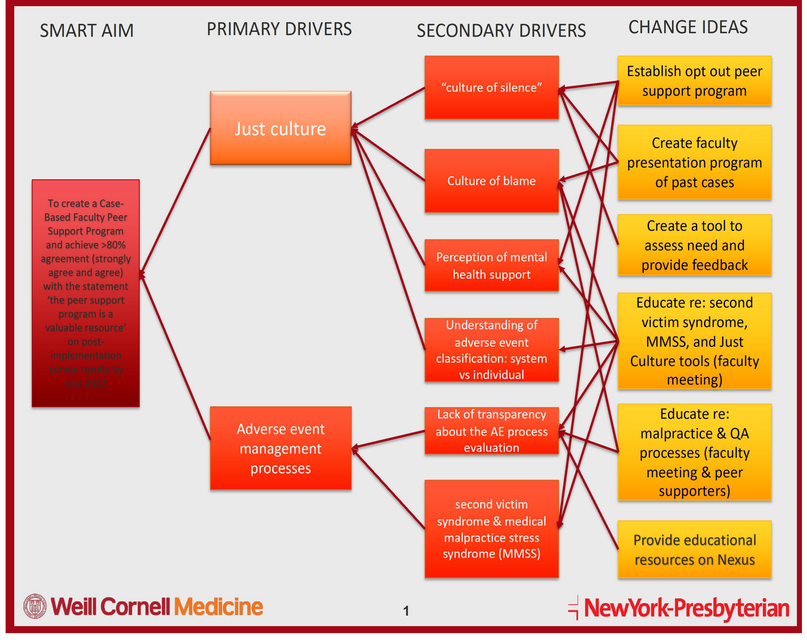
The majority of Emergency Physicians will be sued. This can lead to Medical Malpractice Stress Syndrome, characterized by isolation, guilt, anxiety, depression, anger, negative self-image, feelings of helplessness and hopelessness, and even suicide. This culture of silence and isolation is also antithetical to the QPS concept of Just Culture, which looks towards system-based causes and learning from medical error and bad outcomes.

Objective/Aim Statement:

To create an EM case-based peer support program and achieve >80% agreement (strongly agree and agree) with the statement 'the peer support program is a valuable resource' on post-implementation survey results by July 2022

Design/Methods:

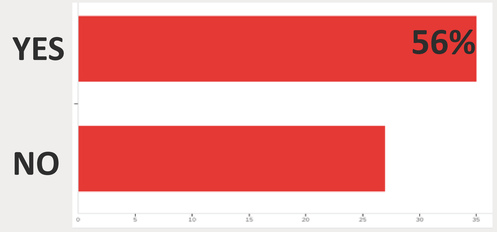
- Initial faculty survey to establish need and baseline
- Training & implementation of opt-out case-based peer support program
- 6 month post-implementation survey to evaluate efficacy of peer support program



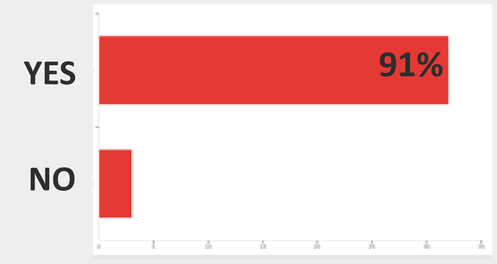
Initial Survey goals:

- Assess the amount of litigation within our faculty group (both past and present)
- Assess stress of faculty members caused by both the QPS and malpractice process
- Assess the desire to participate in a peer support program

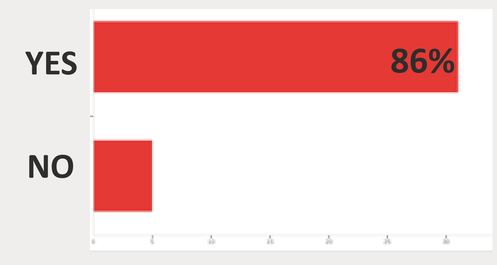
Have you ever been named in a lawsuit?



Did you experience any emotional distress because of the lawsuit?



Do you think it would have been helpful to be assigned another faculty member who had been through the process to serve as a peer supporter during this time? (with the option to opt out)



***Initial survey response rate: 66%**

Results:

Initial survey of all EM faculty physicians (both adult and pediatric) was conducted in October 2021. There was a 66% response rate, and it was found that a majority of respondents had been sued, did experience emotional distress from the experience, and thought it would have been helpful to have an assigned peer supporter who had been through a lawsuit themselves.

Conclusions/Lessons Learned:

There is both need and a desire for peer support amongst faculty emergency physicians going through a lawsuit. The survey also found that QPS review was similarly common and stressful and there was a desire for peer support in this context as well.

Next Steps:

Since December 2021, we have trained 15 out of our 100 adult EM faculty members to serve as peer supporters. We have paired 12 people with peer supporters. Three opted out. The current acceptance rate is 75%.

The next step is to conduct a post-implementation survey of both peer supporters and those who were offered peer support to assess outcomes of the program and solicit ideas for improvement.

2 South NeuroICU Botox for Sialorrhea

Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Judy H. Ch'ang MD, Mohamed Ridha MD, Shauna Linn PA-C, Eileen Magnuski RN, Elizabeth Hooker RN, Margert Huynh DO, Brock Daniels MD, Jennifer Lee MD| 5/25/22

Weill Cornell Medicine Quality Improvement Academy

Problem Statement

Patients in the NeuroICU have impaired swallowing mechanisms leading to intractable sialorrhea. In our experience, these patients have aspiration pneumonia, mechanical ventilation, and longer ICU stays. They often have contraindications to medications used to decrease sialorrhea. We have intermittently administered botox injections to parotid glands to help

Objective/Aim Statement

In patients admitted to the 2 South Neurointensive Care Unit over a 1 year period with acute primary neurologic injury and severe sialorrhea, we will standardize administration of onabotulinumtoxin A (Botox) to decrease frequency of suctioning and facilitate transfer out of the NICU.

Design/Methods

Observational, prospective

Inclusion Criteria Age > 18

All primary neurologic diagnoses (which include but are not limited by acute ischemic stroke, hemorrhagic stroke, traumatic brain injury, or autoimmune encephalitis)

Intubated or not intubated

Have at least 8 suctioning events per shift for 6 consecutive 12 hour shifts (oral +/- endotracheal) **OR** 8 suction events for 2 shift + soaked pads and/or skin breakdown **OR** less 8 suctioning events + 4 changed soaked pads

Severe or profuse sialorrhea based off of the drooling frequency and severity scale (DFSS) for 24 hours.

Have an anticipated ICU stay of >/=5 days

Contraindication to glycopyrrolate, scopolamine patch or oral atropine drops as determined by primary team.

Failure of glycopyrrolate, scopolamine patch or oral atropine drops for 48 hours.

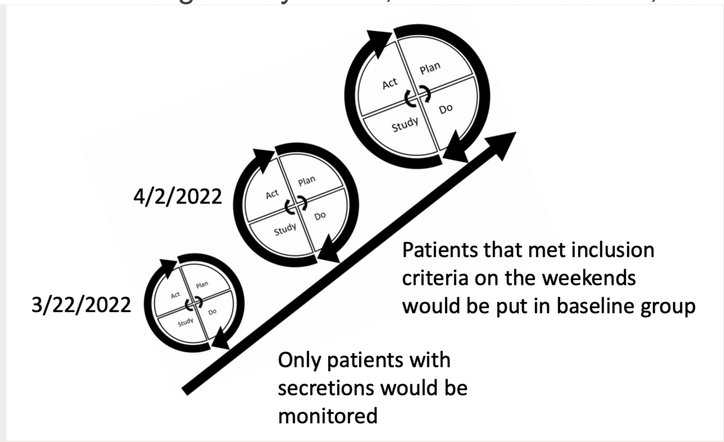


Fig 1. PDSA cycles times and subsequent changes

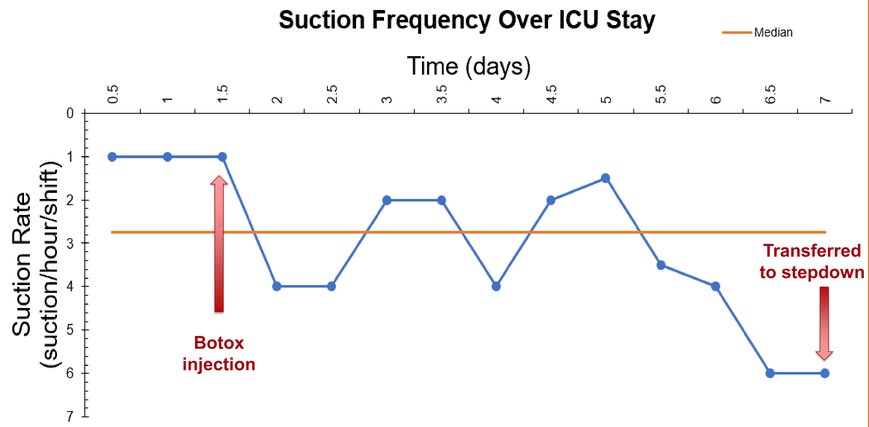


Fig 2. Run chart of first patient after Botox

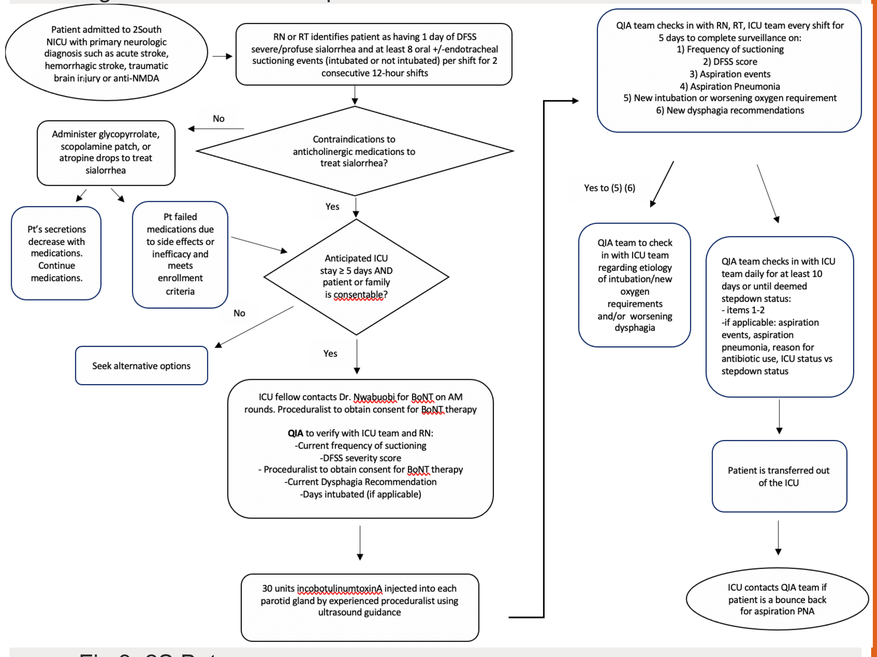


Fig 3. 2S Botox process map

Results

1 patient has received botox; 1 patient prospective baseline:
-Nurses to alert screening team
-M-Thurs pts receive botox
-Fri-Sun pts are prospective controls

Conclusions/Lessons Learned

-Ongoing PDSA cycles
-Continual feedback to different teams to sustain engagement

Next Steps

-Administering botox injections by neurocritical care attendings and fellows
-Continue to screen patients and educate staff

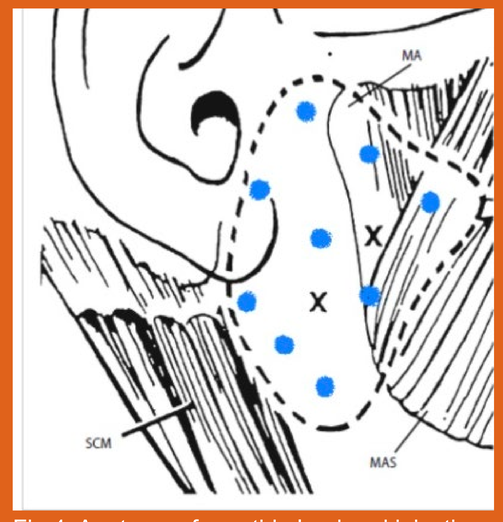


Fig 4. Anatomy of parotid gland and injection points

In Vitro Fertilization Treatment Patient Readiness Checklist

Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Feruza Esanova, MPA, BSN, RN, CNOR

Weill Cornell Medicine Quality Improvement Academy

NewYork-Presbyterian Weill Cornell Medical Center

PROBLEM

Fragmented care and miscommunication among healthcare professionals led to patient safety concerns, decreased patient satisfaction, and staff burnout. The success rate of In Vitro Fertilization (IVF) treatment depends on timely monitoring and smooth care transitions throughout the entire IVF process by multidisciplinary teams consisting of physicians, nurses, operating room technicians, embryologists, andrologists, and ancillary staff.

OBJECTIVE

The project aim is to have 100% compliance of the pre-op Patient Readiness Checklist (PRC) by May 2022. The PRC is administered by the charge nurse after the Pre-Op visit the day before surgery starting at 07:30 a.m. at the In Vitro Fertilization Center at NewYork-Presbyterian/Weill Cornell Medicine. The PRC includes surgical consent, H&P, medical orders (pre-op and post-op) for the day of the surgery, COVID test clearance, adult escort availability, and correct EPIC booking of the case (booked under correct surgeon). Missing components are addressed by the same charge nurse immediately via email, Tiger Connect communication system, in person, or a phone call.

METHOD

The PRC was developed in REDCap, an online platform to assist the charge nurse in making sure all aspects of patient readiness are completed the day before surgery. "Patient readiness" was defined as completion of surgical consent, H&P, COVID test clearance, medical orders, adult escort availability, and correct case booking in EPIC. The charge nurse used the schedule list for the operating room to go over each patient's chart and entered the data in REDCap. Any missing components were addressed after all charts were checked for the day and followed up until the chart was considered complete.

398 EPIC charts were reviewed by the same charge nurse between January 24, 2022 and March 3, 2022 starting at 07:30 a.m. on the day of the Pre-Op Visit (the day prior to the procedure).

Figure 1: Driver Diagram

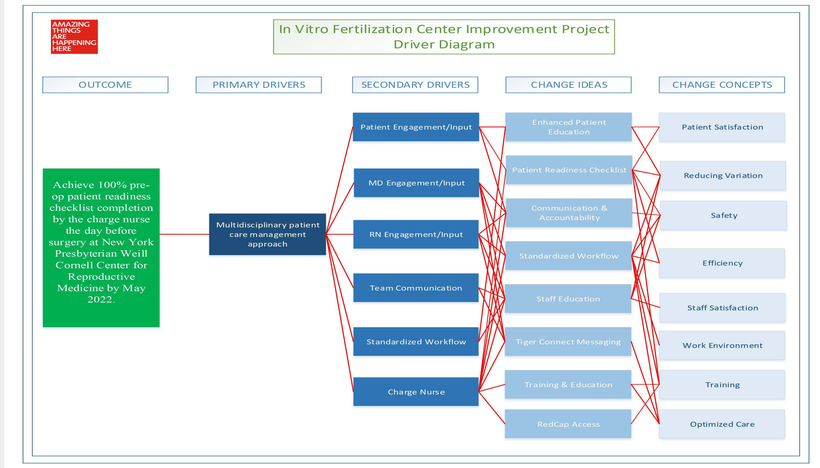


Figure 2: Reasons & Frequency for Incomplete Patient Charts

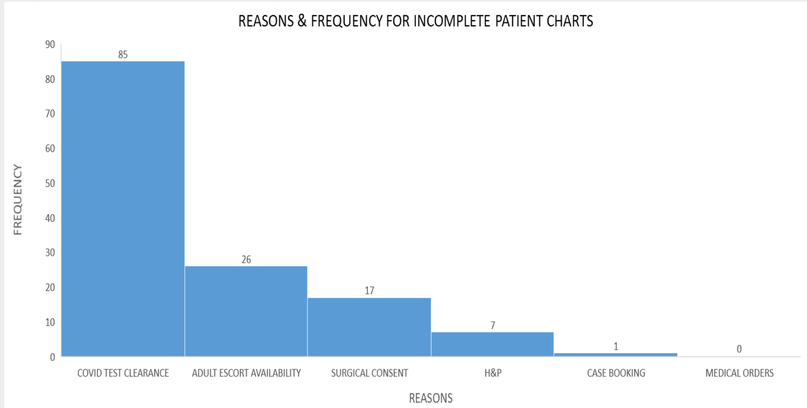
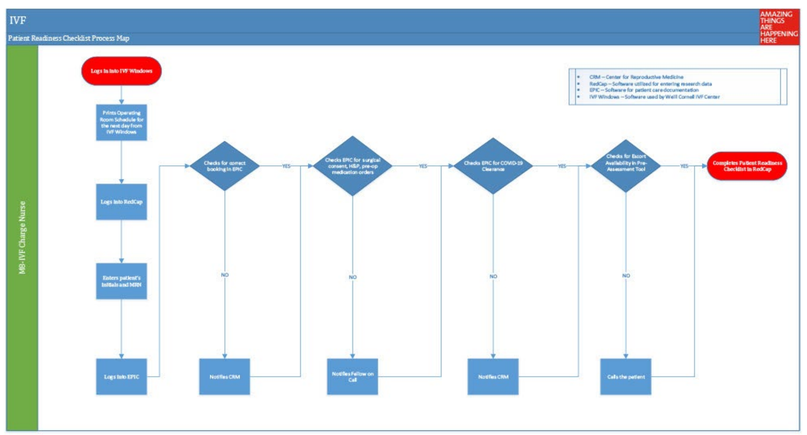


Figure 3: IVF Process Map



FINDINGS

- Of 398 charts reviewed, 109 (27%) were missing at least one element of the PRC.
- COVID test clearance (78%, 85/109) was the major contributor for incomplete PRC.
- Lack of adult escort availability after the surgery was the second major contributor (24%, 26/109).
- Medical orders which include pre-op and post-op phases of care were 100% complete.

DISCUSSION

Pre-op Patient Readiness Checklist helped identify areas leading to potential delays in IVF care. Checking patient charts the day before surgery gave an opportunity to address and correct any outstanding issues, prevented procedure delays or case cancellations, and allowed for a better workflow the day of the procedure.

Since absence of pre-op COVID testing was found to be the main contributor for an incomplete PRC, an emphasis was made by the team to address this component. Multiple meetings took place with leadership to identify the reasons for lack of COVID test clearance. There were several factors found and a plan was created to address them – patients would receive a COVID test 2-5 days before their scheduled procedure instead of the day before surgery.

To address the lack of an adult escort availability after surgery, we conducted an in-service for the nursing staff to learn about available paid escort services and flyers were provided with company information to patients as an alternative option. Additionally, we worked with the EPIC team to create an Adult Escort tab in the Pre-op Visit navigation window. This is now part of the workflow, which ensures that an escort is verified and documented.

CONCLUSIONS and NEXT STEPS

The pre-op Patient Readiness Checklist has been implemented as the standard patient screening process and is an ongoing effort to proactively identify problem areas to address them at the root cause.

Virtual Reality Visual Field Testing

Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Paul Petrakos DO MS, Anfei Li MD PhD, Nicholas Vassiliou, Jennifer Inhae Lee MD, Brock Daniels MD | May 25, 2022

Weill Cornell Medicine Quality Improvement Academy

Problem Statement

The measurement of visual field defects through standard automated perimetry (SAP) is the cornerstone of diagnosing and assessing ocular disorders. Unfortunately, patient and operator experience of visual field testing can be negative. Studies have identified visual field testing as the least preferred test used in glaucoma care from a patients' perspective.

They are labor intensive, time consuming, and difficult to clean between patients. The gold standard Humphrey Visual Field (HVF) also has challenging logistical requirements due to the large equipment set and requirement of a dark-quiet room. Virtual reality (VR) has shown much promise in ophthalmic diagnostics – especially in terms of freedom of head movement and precise control over experimental settings, besides being portable.

Objective/Aim Statement

AIM 1: Comparison of HVF to Virtual Visual Field (VVF) in patients being evaluated for glaucoma.

AIM 2: To compare patient experience using the HVF vs. VVF using a standardized question survey across domains of clarity, focus, comfort, ease of access, overall experience, clinical relevance and patient preference.

Design/Methods

Multi-site, cross-sectional observational study comparing the conventional Humphrey Visual Field to the Virtual Field.

Inclusion criteria:
- 18 years of age or older
- Ability to understand informed consent form

Exclusion criteria:
- Ocular media opacities
- Inability to fixate gaze
- Neuromuscular disorders
- Pregnancy
- Systemic problems that may affect concentration
- Cochlear implant

Figure 1: Virtual Visual Field (A) vs. Humphrey Visual Field (B)

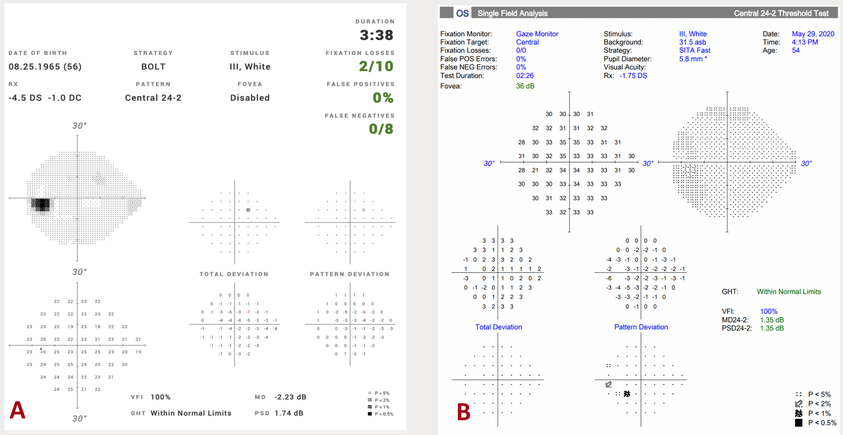


Figure 2: Sample Visual Field Report for VVF (A) vs. HVF (B)

Visual Field Survey

1. **Clarity of instructions:** Compared to my regular visual field test, I understood the instructions better and needed less assistance using the new Virtual Reality visual field test.
   ◯ Strongly agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly disagree
2. **Focus:** Compared to my regular visual field test, I was able to concentrate better and felt less distracted using the Virtual Reality visual field test.
   ◯ Strongly disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly agree
3. **Comfort:** Compared to my regular visual field test, I physically felt more comfortable using the new Virtual Reality visual field test.
   ◯ Strongly disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly agree
4. **Ease of access:** If I was given the Virtual Reality visual field device, I feel able to perform the visual field test at home, independently, or with a family member's help.
   ◯ Strongly agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly disagree
5. **Overall experience:** I found the new Virtual Reality visual field test more enjoyable than my regular visual field.
   ◯ Strongly disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly agree
6. **Clinical relevance:** I would be willing to perform more frequent visual field testing if it was with the new Virtual Reality visual field test.
   ◯ Strongly disagree ◯ Disagree ◯ Neutral ◯ Agree ◯ Strongly agree
7. **Patient preference:** For my next visual field visit, I would prefer the Virtual reality visual field.
   ◯ Strongly agree ◯ Agree ◯ Neutral ◯ Disagree ◯ Strongly Disagree

Figure 3: Patient post-testing survey

Preliminary data

Still early in the project and have only recently started using the device. We are on our third iteration of the patient survey and only six patients have completed it.

	Clarity	Focus	Comfort	Ease of access	Overall experience	Clinical relevance	Patient preference
Prefer VFF	3	4	5	5	5	4	5
Neutral	3	1	1	1	0	1	0
Prefer HVF	0	1	0	0	1	1	1

Table 1: Preliminary Survey Results

Based on our preliminary experience, patients slightly favor the virtual reality visual field. Testing results overall match their previous standard automated perimetry.

Challenges (Lessons Learned)

- Encountered significant delays obtaining device and approval for clinical use across multiple sites (Currently implementing only at Weill Cornell)
- Staffing shortage of technicians in clinic limiting the number of VVF we could perform in tandem with standard HVF (Patients are asked which they would prefer and plan to compare demographics for patients who prefer one over the other)
- Issues with patients filling out the survey incorrectly (Survey now moved to REDCap)

Next Steps

- Further data collection with aim of performing 50 VVF tests.
- Compare characteristics between patients who choose HVF vs. VVF.
- Future directions include expanded use of VVF in other clinical locations such as Neuro-Ophthalmology and at-home testing.

Weill Cornell Medicine
Quality Improvement Academy

Improving parental access to communication on rounds for non-English speaking families in the Pediatric Intensive Care Unit to reduce safety events

Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Megan Toal, MD| 05.25.2022

Problem Statement:
- Improved communication is associated with improved patient safety. Effects of interventions to improve communication between HCP and patients/families have NOT been extensively studies, particularly in the Pediatric Intensive Care Unit (PICU) setting
- Providing patients/families with high quality healthcare in the language of their choice is fundamental component of patient- centered care in pediatric settings.

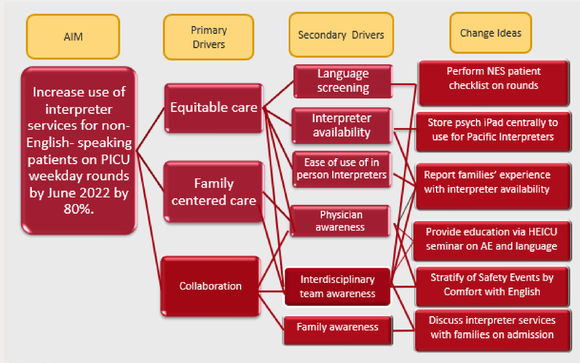
Project Goal:
- To develop a bundle to prevent safety events related to access to communication on family centered rounds in the PICU for non-English Speaking (NES) families

AIM Statement:
- To increase the use of interpreter services for NES patients on rounds to 80% of the time by June 2022.

Study Design:
- Observational time series with planned sequential experimentation
- Study Population: Patients admitted to the PICU at NYP/WCM who noted languages other than English as their primary language
- Outcome Measure:
  Rate of NES safety rate
- Process Measures:
  Rate of interpreter use on Rounds
  Validation of interpreter use via Inpreteter Services
- Balancing Measure:
  Timely completion of rounds

Analysis:
- Run charts and P charts were used to display and analyze data. API rules were applied to detect special cause variation/signals of change.

Driver Diagram



Plan Do Study Act Cycles

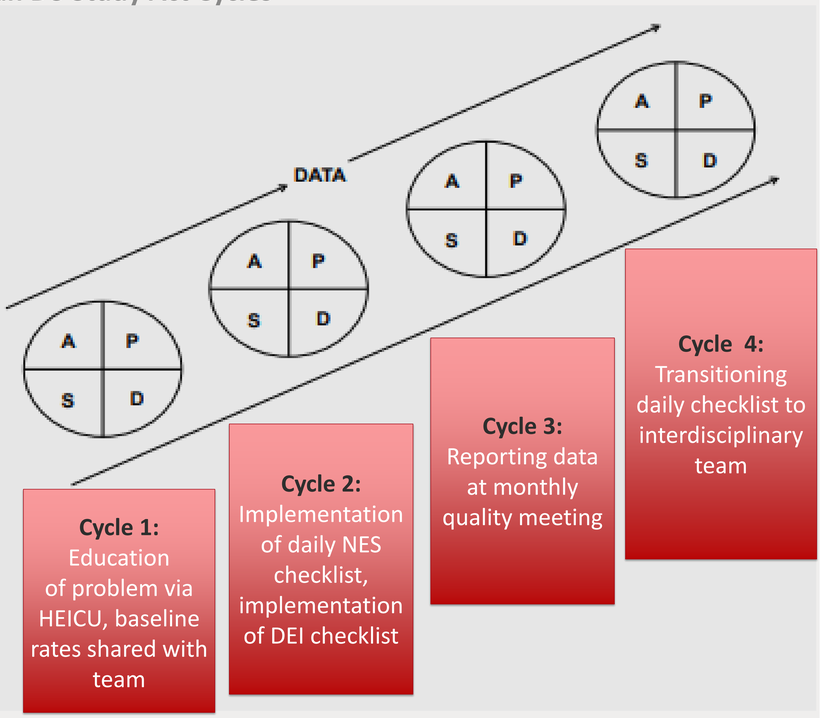
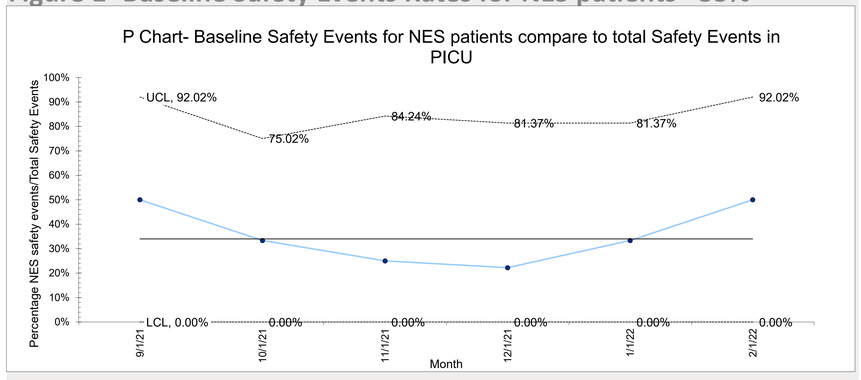


Figure 1- Baseline Safety Events Rates for NES patients ~35%



Results
- Rate of NES patients on 6S 21% (Feb-May 2022)

Figure 2- Number of interpreter calls on 6S including baseline data and and intervention, demonstrating upward trend

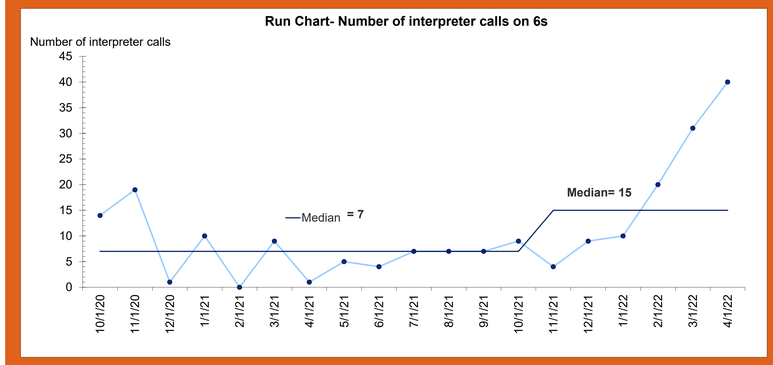
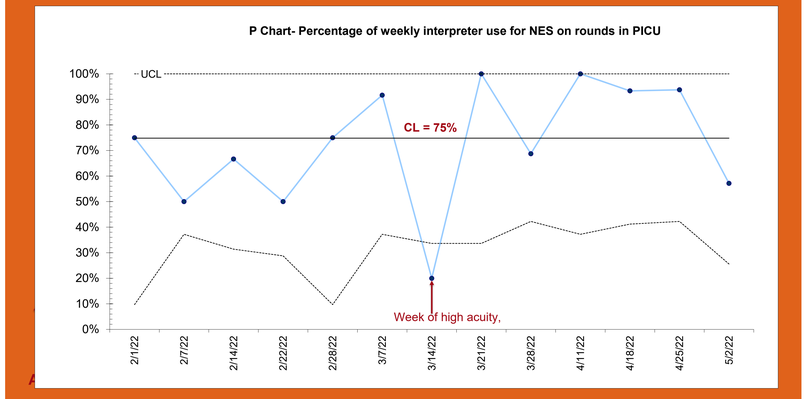


Figure 3- Percentage of weekly interpreter use for NES on rounds- approaching goal of 80%



Balancing Measure- no difference in timing of completion on rounds if interpreter was used or not

Conclusions/Lessons Learned
- A bundle including education, checklists and reviewing safety events through a DEI lens can increase interpreter use for NES families

Next Steps
- Transitioning daily checklist to interdisciplinary team
- Continuing to gather data regarding safety events to evaluate for signals of change

Acknowledgements- PICU fellows and faculty; PICU RNs and Drisdy Kee LCSW; Dr Nena Osorio. And Dr. JC Cowden at Children's Mercy-Kansas City for the use of the DEI checklist.

Weill Cornell Medicine
Quality Improvement Academy

"Improving Access to Multidisciplinary Breast Cancer Treatment

ImpACT

Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Vivian J. Bea, MD| 5/25/2022

Problem Statement

- ❖Breast Cancer is the number one cause of newly diagnosed cancers in U.S Women
- ❖At the end of 2019, the NYP-BMH Multidisciplinary Breast Cancer Program was established
- ❖In NYC, Brooklyn has highest breast disparities in all Burroughs
- ❖Early diagnosis and access to multidisciplinary breast cancer treatment improves outcomes
- ❖The Emergency Department (ED) at NYP-BMH annually codes over >100 breast related visits
- ❖The ED volume of breast related disease presents an opportunity to provide quality breast care access to patients in Brooklyn
- ❖Gaps remain in referral to our breast program

Objective/Aim Statement

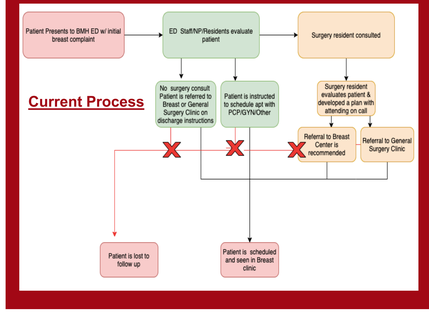
- ❖ To increase consultations to our multidisciplinary breast program by providing an avenue for improved referral for patients identified with breast disease in the Emergency Department by 20% over the next year

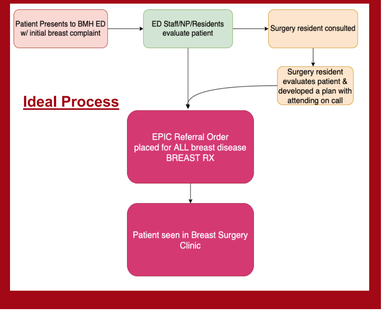
Design/Methods

A Longitudinal Interventional Study

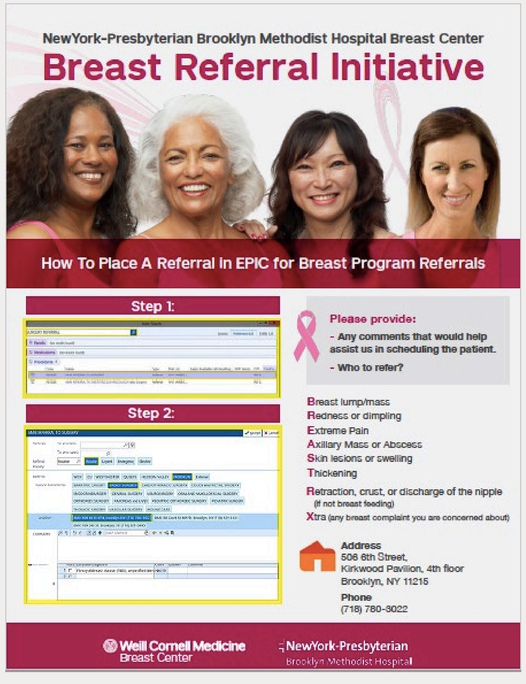
- ❖ **Physician/APP/Resident targeted focus groups**
- ❖ **Breast Referral Educational Sessions**
- ❖ **Targeted Ad Campaign**

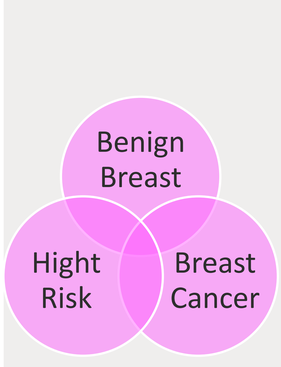
INCLUSION CRITERIA	EXCLUSION CRITERIA
○ Age >18 ○ Women & Men ○ Any Breast Disease ○ ED initial presentation ○ No established breast surgeon	○ <18 years old ○ Established breast surgeon/medical oncologist ○ Not interested in being referred

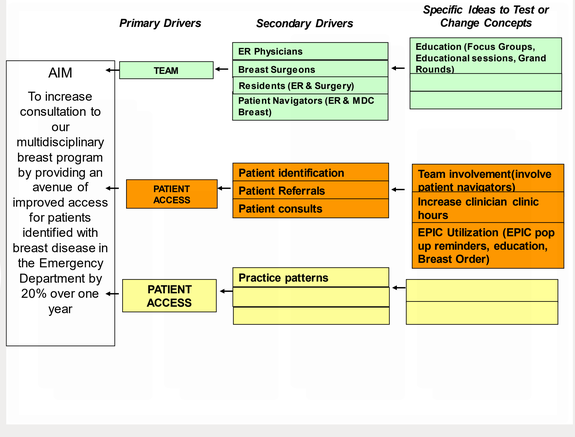




Multi-targeted interventions have led to increase in breast referrals from the ED to NYP-BMH breast program

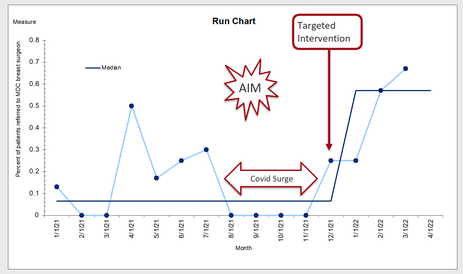






Results

Run Chart- Percentage of patients referred to MDC Breast Program



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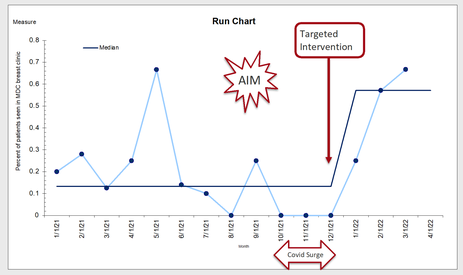
Run Chart- Percentage of patients seen in MDC Breast Clinic over time



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Conclusions/Lessons Learned

- ❖Multi-targeted intervention has led to >20% increase in referrals from the ED to the breast center over the first quarter of the study
- ❖There has also been a >20% increase in patients with breast complaint seen in ED that seen in the breast center

Next Steps

- ❖ Will continue to track referral and consultations over the next year
- ❖ Developing an automated EPIC dashboard
- ❖ Continued multifaceted education
- ❖ Track time from ED visit HD#1 to Clinic visit for continued improved breast outcomes

General Symposium Posters

Improving Accuracy and Efficiency of Regional Block Administration for Breast Surgery

Authors: Catalina Angel MD; Mike Yamakawa MD; Justin Chung MD; Vanessa Ng MD; Rebecca Ogunremi; Shao Ping Yu, MPH; Shelby Badani MD; Deirdre Kelleher MD

Department: Anesthesiology

1. Statement of the Problem

Pectoralis nerve (PECs) blocks for mastectomy procedures are associated with improved postoperative pain scores and reduced intra- and postoperative opioid requirements when compared to systemic analgesia or standard of care without PECs blocks1. At our institution, these blocks have been offered to some mastectomy patients as part of the postoperative analgesia plan. While some surgeons prefer to provide their own intraoperative block for analgesia, the performance of the block by the anesthesia regional block team can be requested from the surgeon prior to the case. Unfortunately, the electronic request for an anesthesia-administered block is not consistently accurate, including both day of surgery (DOS) block requests without previous electronic booking, as well as electronically booked blocks that are canceled perioperatively. Additionally, there is high variability in use of PECs blocks for mastectomy patients, often stemming from a perception that the block substantially delays the surgical start, which prevents the regional anesthesia team from standardizing the administration of PECs blocks to all patients booked for mastectomy. These concurrent problems result in inefficient use of regional anesthesia team resources and a potential failure in providing the highest quality care to patients undergoing mastectomy procedures.

2. Objective/Aim of the study

The project aims to improve accuracy of the block request process by 15% within 5 months. The objectives are to 1.) Increase the percentage of blocks performed that are appropriately requested in advance 2.) Determine the average time for block administration.

3. Project Design/Methods:

A review of the relevant literature and use of PECs blocks for breast procedures at peer institutions was performed. In collaboration with the surgical physician assistants (PAs), we created a value stream map of all the steps from office visit to DOS that take place before block administration (Figure 1). We identified the PAs as key stakeholders in ensuring blocks are requested appropriately (block confirmation accuracy only ~50% of cases). With this knowledge we made educational material explaining the booking process and reviewing the importance of accurate booking of blocks for both patient safety and surgical efficiency.

To determine the success of our intervention, we compared the accuracy of block booking from pre-intervention (August – November 2021) and post-intervention

(December 2021 – March 2022) for ambulatory adult patients undergoing simple mastectomy or mastectomy with reconstruction. We also analyzed the time needed to perform each block to help with future education of the surgeons and PAs. Of note, cases in December 2021 that occurred before the intervention were excluded from the dataset.

4. Results

Prior to our intervention, 75% of blocks performed (12 of 16) were booked in advanced compared with 100% of blocks (12 of 12) after our intervention (Table 1). Blocks did not appear to substantially lengthen OR team before or after intervention, with average block time being 6 minutes pre-intervention and 5 minutes post-intervention. Additionally, approximately 90% of blocks in both groups were performed in less than 10 minutes.

5. Conclusion

Appropriate advanced booking of perioperative blocks improves efficiency and assists in providing optimal care for patients. The use of value stream mapping in collaboration with the surgical service allowed us to identify the booking process in the office as a main area for improvement. Use of educational intervention as well as the collaboration itself allowed us to improve from 75% proper booking to 100% proper booking. We now will focus on educating the surgeons on the efficacy of PECs blocks for mastectomy procedures, including the information that blocks usually take less than 10 minutes of OR time, to further increase the standardization of block use at this institution.

Improving Accuracy and Efficiency of PECS Block Administration for Breast Surgeries

2022 Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium, May 25, 2022

Residents: Catalina Angel MD, Mike Yamakawa MD, Fellows: Justin Chung MD, Vanessa Ng MD

QI Mentors: Rebecca Ogunremi B.S., Shao Ping Yu MPH, Faculty Mentors: Shelby Badani MD, Deirdre C. Kelleher MD

Problem Statement

Pectoralis nerve (PECs) blocks for mastectomy procedures are associated with improved post-operative pain scores and reduced intra- and post-operative opioid requirements when compared to systemic analgesia or standard of care without PECs blocks[1]. At our institution, these blocks have been offered to some mastectomy patients as part of the **post-operative** analgesia plan. While some surgeons prefer to provide their own **intra-operative local anesthetic** for analgesia, the performance of the block by the anesthesia regional block team can be requested from the surgeon prior to the case. Unfortunately, the electronic request for an anesthesia-administered block is not consistently accurate, including both day of surgery (DOS) block requests without previous electronic booking, as well as electronically booked blocks that are canceled **peri-operatively**. Additionally, there is high variability in use of PECs blocks for mastectomy patients, often stemming from a perception that the block substantially delays the surgical start, which prevents the regional anesthesia team from standardizing the administration of PECs blocks to all patients booked for mastectomy. These **challenges** result **in inefficient use of regional anesthesia team resources and a potential failure in providing the highest quality care to patients undergoing mastectomy procedures**.

Objective: The project aims to improve accuracy of the block request process by 15% within 5 months. The objectives were to

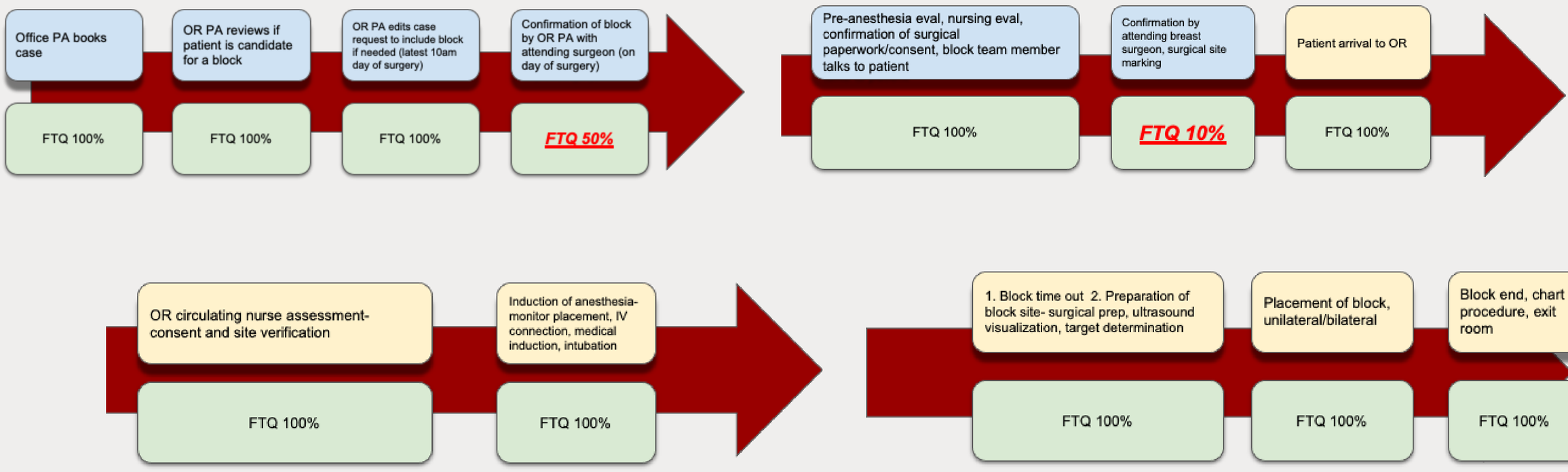
1) Increase the percentage of blocks performed that are appropriately requested in advance
2) Determine the average time for block administration

Methods:

A review of the relevant literature and use of PECs blocks for breast procedures at peer institutions was performed. In collaboration with the surgical physician assistants (PAs), we created a **value stream map** of all the steps from office visit to DOS that take place before block administration (Figure 1). This helped **to identify** the PAs as key stakeholders in **ensuring that** blocks are requested appropriately **by confirming with the attending surgeon.** With this knowledge**,** we made **educational material for surgical team members explaining the booking process and reviewing the importance of accurate booking of blocks for both patient safety and surgical efficiency**.

To determine the **efficacy** of our intervention, we compared the **accuracy of block booking** from **pre-intervention (August – November 2021)** and **post-intervention (December 2021 – March 2022)** for ambulatory adult patients undergoing simple mastectomy or mastectomy with reconstruction. We also analyzed the time needed to perform each block to help with future education of the surgeons and PAs. Of note, cases in December 2021 that occurred before the intervention were excluded.

Figure 1: Pre-Intervention: Value Stream Mapping



FTQ = First Time Quality: percent of time process step was accurate and complete the first time

Results

Prior to our intervention, 75% of blocks performed (12 of 16) were booked in advanced compared with 100% of blocks (12 of 12) after our intervention (Table 1). Blocks did not appear to substantially lengthen OR team before or after intervention, with average block time being 6 minutes pre-intervention and 5 minutes post-intervention. Additionally, approximately 90% of blocks in both groups were performed in less than 10 minutes.

Table 1: PEC Block Administration for Mastectomy Cases

	PRE	POST
Block duration (median)	6 minutes	5 minutes
% Blocks performed ≤ 10 minutes	89.5%	93.5%
% Blocks performed that were booked	75%	100%

Conclusions

- Appropriate advanced booking of **peri-operative** blocks improves efficiency and assists in providing optimal care for patients. The use of value stream mapping in collaboration with the surgical service allowed us to identify the booking process in the office as a main area for improvement. Use of **an educational** intervention as well as the collaboration itself allowed us to improve from 75% proper booking to 100% proper booking.

- **As a future initiative to improve utilization of PEC blocks for appropriate patients, we** will focus on educating the surgeons on the efficacy **and efficiency of** PECs blocks **performed by the regional anesthesia service for** mastectomy procedures**.**

Reference: 1. Zhaosheng Jin1 , Ru Li1 , Tong J Gan1 , Yaohua He2 , Jun Lin1. Pectoral Nerve (PECs) block for postoperative analgesia-a systematic review and meta-analysis with trial sequential analysis. Int J Physiol Pathophysiol Pharmacol 2020;12(1):40-50

Palliative Care in the Emergency Department

Quality Improvement and Patient Safety Poster Symposium

Anna Krakowski, MSN, RN, AGPCNP-BC, ACHPN, CHPN
Karen Antequera MSN, RN, MEDSURG-BC
David Bodnar, MD, Interim Director, Lower Manhattan Hospital ED
Brenna Farmer MD, MBA, MA, Vice Chief of Clinical Services, NYP BMH

May 25, 2022

Problem Statement

Patients with chronic progressive illnesses frequently visit the Emergency Department (ED), where aggressive life-support measures may occur. The ED is a fast paced, intense and time limited environment where palliative care is not typically part of standard ED interventions. Early referral to palliative care(PC) is uncommon in the ED historically, but it has been shown to lead earlier interventions resulting in improved quality of life, decreased health costs, decreased hospital resource utilization and downstream care utilization(Wang & Heidt, 2021). Given the constraints of the Emergency Medicine providers and acuity of the patients, the ED is a key location to expand the support of palliative care services.

Our LMH ED, due to its demographics, is well suited for palliative care as it serves primarily the Chinatown and Lower East Side, where one third of patients is 65 years or older and many patients have comorbid life-limiting medical problems leading to frequent ED visits and end-of-life care.

Objective/Aim Statement

The primary aim of this Quality Improvement Project was to increase utilization of palliative care services in the ED to ensure that clinical care is aligned with patients' wishes and to improve efficacy of ED nurses and providers with initiating goals of care discussions.

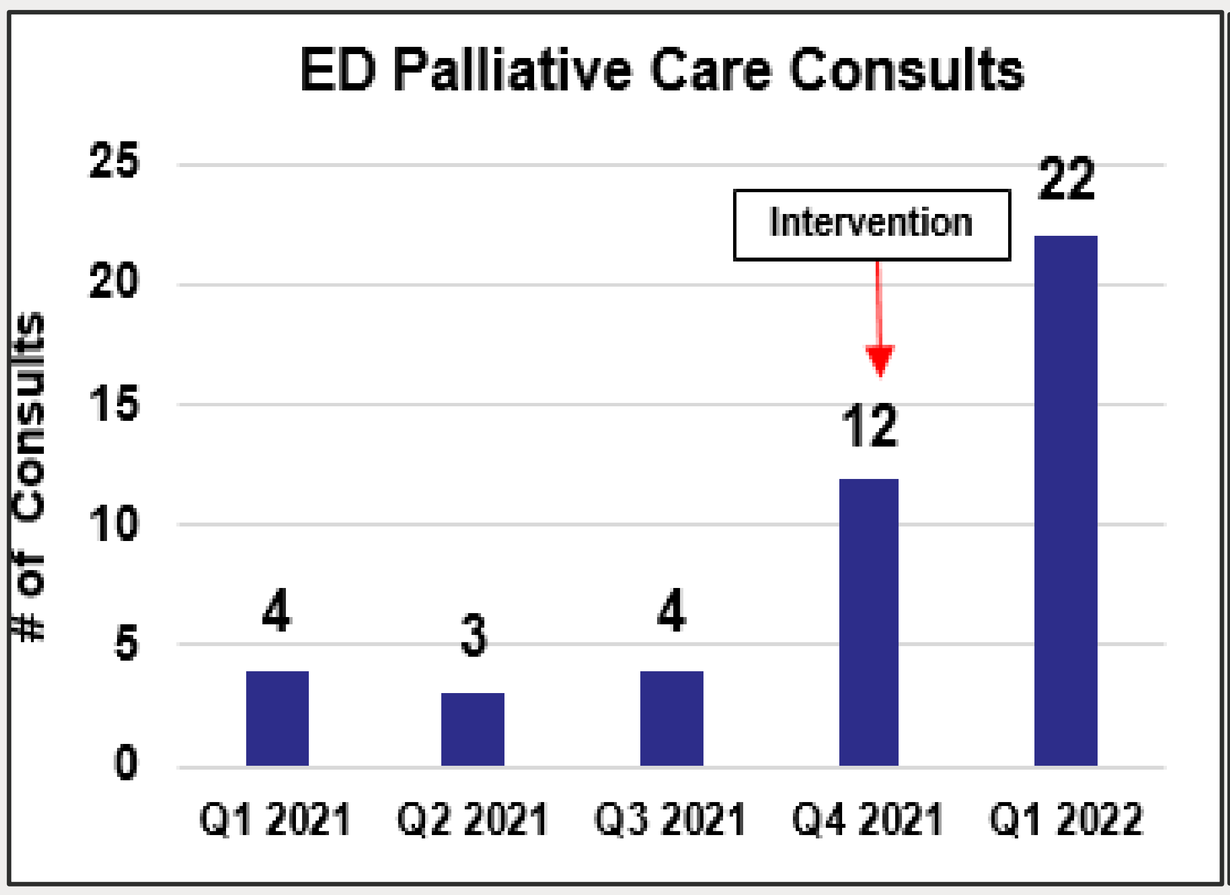
The secondary aim was to decrease ED, hospital, and ICU length of stay along with subjectively improving patient, family and clinician experience.

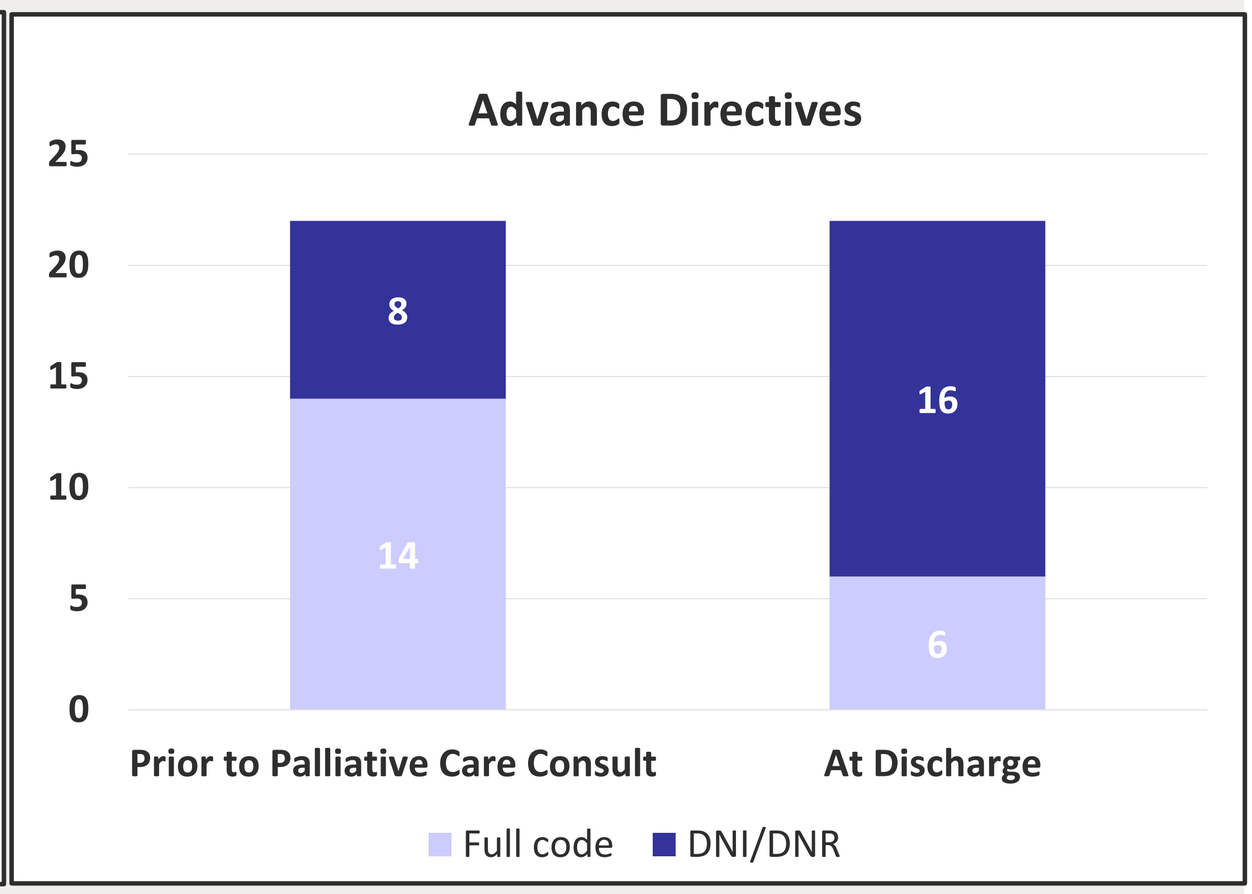
Design/Methods

Multiple steps were taken for this QI Project starting with developing a referral criteria for palliative care consult to serve as a guide for selecting patients for palliative care interventions. Palliative care NP attended multiple ED meetings and nursing huddles to discuss the criteria for palliative care consult. Palliative care case studies were presented at monthly educational sessions (30-minutes sessions, with 20 minutes case presentation and 10 minutes for questions and answers).

Eligible patients: All adults (> 17 years old) ED patients who met the following criteria: Stage 4 cancer, COPD on home oxygen, Congestive Heart Failure, Dementia or Neurological Disease, Kidney Failure (ESRD) in combination with any one of these criteria: multiple recent prior ED visits or hospitalization with same symptoms, difficult to control symptoms related to serious medication illness such as pain, dyspnea, psychological, or spiritual distress, patient or family requests for palliative care, DNR order/goals of care conflicts, patient has a serious illness and is technology or care dependent (e.g., inotropic infusions, hemodialysis, oxygen, artificial nutrition, bed/chair bound) or patients who present to emergency department from home hospice are screened by ED team for unmet palliative care needs.

Patient demographics and comparison of data pre and post-implementation of the above was performed.





Results

Since the inception of palliative care consultation service at Lower Manhattan Hospital in 2018, direct ED referrals to palliative care had been low: ranging from 0 in 2018 to 22 consults in the first quarter of 2022. After our interventions, in October of 2021, ED consults increased significantly from 12 consults in the 4th quarter of 2021, to 22 consults in the first quarter of 2022.

For the consults done in the first quarter of 2022, the primary diagnoses were septic shock, metastatic cancer, CVA, dementia and cardiac arrest. The average age was 86. Prior to consultation, 14 (64%) patients were full code, 8 (36%) patients had DNI/DNR orders. After consultation, 6 (27%) patients were full code and 16 (73%) patients decided for DNI/DNR. 14 (64%) patients were admitted to medicine, 6 (27%) admitted to ICU, 2 (9%) patients passed away in the ED. Out of 22 patients, 11 patients were transitioned to comfort care with median time from palliative care consult to transition to comfort care of 2.3 days.

Out of 20 patients who were admitted to either medicine or ICU; 4 (20%) patients were discharged to hospice bed program at LMH, 5 (25%) patient passed away in the hospital, 4 (20%) patients discharged to SNF with hospice, 1 (5%) patient was transferred to WCMC, and 6 (30%) patients were discharged to either home or subacute rehab(SAR).

Conclusions/Lessons Learned

Numerous opportunities exist in the ED to improve early access to palliative care services. Offering palliative care services in the emergency department, especially at the beginning of the hospital course may result in the decrease use of inappropriate utilization of acute care services. This quality improvement project describes collaborative efforts to improve care transitions by engaging a multidisciplinary team with palliative care consultation team. By incorporating palliative care in the culture of emergency department, we were able to meet the palliative care needs of patients who met specific criteria by ensuring goals of care were delineated, code status was clarified, and we were able to provide an emotional support in a very difficult environment. Additionally, the ED clinicians have expressed understanding of the importance and benefits of an early referral to palliative care. Importantly, timely response of palliative care providers to palliative care consults in emergency room and their assistance especially in challenging cases has further proven the benefits of an early integration of palliative care into the care of the patient.

Next Steps

The palliative care consultation service will soon be expanding to include a full time PC physician. The ED palliative care program will continue to support the ED staff with additional education sessions to improve their knowledge and level of comfort when discussing goals of care. The ED palliative care program will continue to monitor the quality metrics and in the future evaluate the patient and family's experience.

References

Wang, D. H., & Heidt, R. (2021). Emergency department admission triggers for palliative consultation may decrease length of stay and costs. *Journal of Palliative Medicine*, *24*(4), 554–560. https://doi.org/10.1089/jpm.2020.0082

Starting the Conversation: Early Initiation of Goals of Care (GOC) May Reduce Inpatient Mortality

Authors: Calvin Hwang, MD, Fernando Kawaii, MD, Caroline Keane, RN, Brigit Palathra, MD, Cynthia Pan, MD, Robert Crupi, MD

Department: NYP/Queens, Dept. of Medicine

1. Statement of the Problem

Reducing preventable patient deaths has long been at the center of patient safety efforts. But when patients nearing the end of life (EOL) are admitted, some well-intended providers may offer non-beneficial treatments that may hasten death or prolong the dying process, result in patient harms, create more suffering, and cause moral injury to families and providers. Non-beneficial care may also negatively affect hospital operations.

2. Objective/Aim of the study

NYP QPS goal #1 aims to reduce risk-adjusted inpatient mortality to <0.9. NYPQ DOM identified that an untimely goals of care (GOC) discussion was the largest mortality improvement opportunity. This project aimed to reduce in-hospital inpatient mortality by increasing discharges of hospice-appropriate patients to hospice.

3. Project Design/Methods

The study population included all adult patients admitted under the Medicine service at NYPQ. Primary metric was the mortality index. Process metrics included Palliative Care (PC) penetration rate, time to first PC consult and Hospice Conversion Rate. A balancing metric was IP Death after Hospice referral. PDSA methodology was used. In January 2021, we encouraged the voluntary use of the Hospice Quick Screen (HQS) featuring the "Surprise" question: “Would you be surprised if your patient died in the next 6 months?” An answer of "no" was supposed to prompt a GOC conversation. We found that this did not result in meaningful improvement. A second PDSA cycle was piloted in June 2021 aimed at "starting the conversation" within the initial 72-hrs of admission. This was performed by select hospitalists, PC physicians, trainees, and physician assistant champions. Immediate improvement of process metrics led to a hospital-wide third PDSA cycle in August 2021. All Medicine hospitalists, trainees, physician assistants and Case Managers were provided with a brief session on how to start a GOC conversation. Providers were instructed to consult PC if GOC discussions proved too challenging.

4. Results

The hospital mortality index continues to trend favorably. Process metrics such as PC penetration rate, ALOS admit-to-PC, and hospice conversion rate have begun to show consistent improvement in relation to internally set targets. IP death after hospice referral continues to trend below our historic rate of >20%.

5. Conclusion

A coordinated hospital-wide initiative for the early discussion of GOC may result in increased hospice discharges. During the 3rd cycle, our Palliative Care division and Case Management department experienced unanticipated staffing shortages. Despite this and other pandemic-related disruptions, our results remain positive. The workgroup has identified 2 potential improvement opportunities. First, despite our initial efforts, many staff can benefit from more communication skills training around mortality and GOC. Several of our leaders are currently spearheading a network-wide communication skills training program (GOComm). Second, provider feedback has highlighted the need to improve our Hospice DC process. Network-wide efforts have begun as well.

Starting the Conversation:
Early Initiation of Goals of Care (GOC) May Reduce Inpatient Mortality

Calvin Hwang, Fernando Kawai, Caroline Keane, Brigit Palathra, Cynthia Pan, Robert Crupi

New York Presbyterian/Queens

Problem Statement

Reducing preventable patient deaths has long been at the center of patient safety efforts. But when patients nearing the end of life (EOL) are admitted, some well-intended providers may offer non-beneficial treatments that may hasten death or prolong the dying process, result in patient harms, create more suffering, and cause moral injury to families and providers. Non-beneficial care may also negatively affect hospital operations.

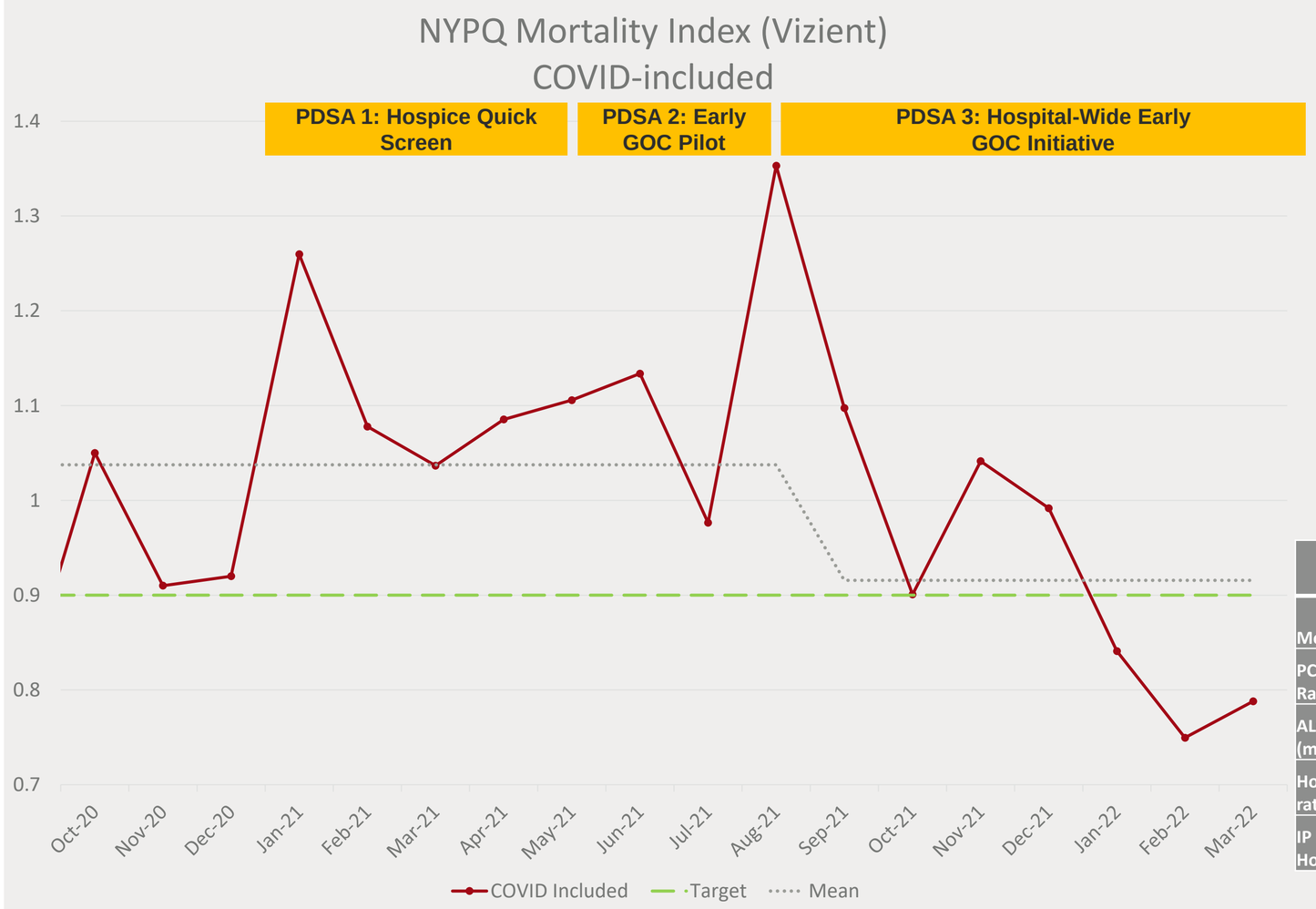
Objective/Aim Statement

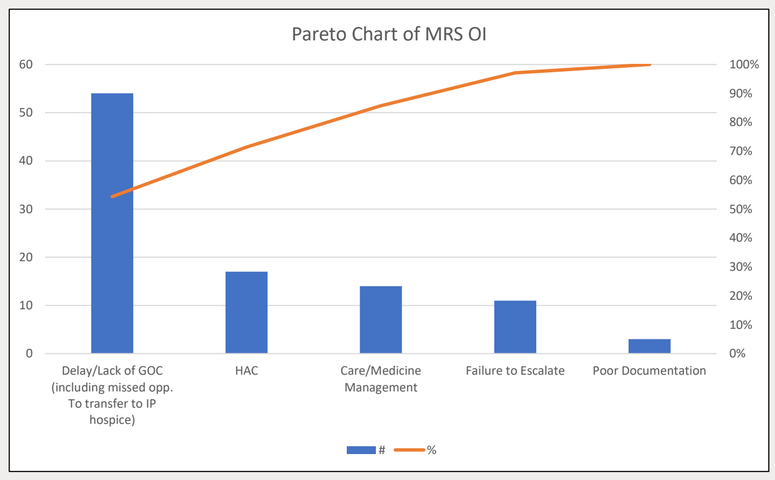
NYP QPS goal #1 aims to reduce risk-adjusted inpatient mortality to <0.9 (defined as # observed IP deaths/# expected IP deaths). Using a process-oriented standardized mortality review system, the NYPQ Dept. of Medicine identified that untimely inpatient goals of care (GOC) discussions was associated with the highest number of potential improvement opportunities. We implemented a project to reduce in-hospital risk-adjusted inpatient mortality by increasing discharges of hospice-appropriate patients to hospice by initiating early GOC discussions (defined as within 72 hrs of admission).

Design/Methods

The study population included all adult patients admitted under the Medicine service at NYPQ. Pareto analysis of the Mortality Review System findings identified top opportunities to improve (OI). Delayed GOC discussion was the most common OI. Ishikawa analysis suggested 3 main underlying drivers: inconsistent provider recognition of patients nearing end-of-life, absence of provider expectations with initiating conversations about dying, and an inconsistent hospice evaluation & discharge process. Primary metric was the mortality index. Process metrics included Palliative Care (PC) penetration rate (% of hospice patients w/ PC consult), time to first PC consult (ALOS Admit-to-PC) and Hospice Conversion Rate. A balancing metric was IP Death after Hospice referral (defined as % expired after referral to hospice services but prior to disposition). PDSA methodology was used.

In January 2021, we encouraged the voluntary use of the Hospice Quick Screen to prompt all admitting providers to think about GOC. The HQS featured the "Surprise" question: “Would you be surprised if your patient died in the next 6 months?” An answer of "no" was supposed to prompt a GOC conversation. We found that this did not result in measurable improvement.





	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Goal
Mortality Index	1.37	0.127	1.1	1.21	1.05	1.16	0.99	1.34	1.08	0.83	1.05	1.09	0.84	0.75	0.79	<0.9
PC Penetration Rate			67%			66%			73%	87%	71%	71%	65%	63%	81%	>75%
ALOS Admit-to-PC (mean)	5.32	3.59	4.54	6.75	6.48	7.33	4.37	4.38	4.19	2.93	4.08	3.79	4.35	5.27	4.47	<4
Hospice conversion rate	34%	36%	35%	32%	37%	35%	44%	38%	41%	40%	49%	52%	48%	60%	63%	>65%
IP Death after Hospice referral	27%	32%	29%	29%	12%	21%	19%	23%	22%	15%	22%	25%	27%	17%	14%	<10%

A second PDSA cycle was piloted in June 2021 aimed at "starting the conversation" within the initial 72-hrs of admission. This was performed by select hospitalists, PC physicians, trainees, and physician assistant champions. Immediate decreases in the ALOS prior to PC consult metric and positive subjective staff feedback prompted a hospital-wide expansion.

The third PDSA cycle was implemented in August 2021. All Medicine hospitalists, trainees, physician assistants and Case Managers were provided with a brief (30 min) inservice session on how to start a GOC conversation. Providers were instructed to consult PC if GOC discussions proved too challenging as long as patients/families were willing to continue the conversation. Case Managers were trained to use the Hospice Quick Screen criteria in daily multidisciplinary case manager rounds. We also actively engaged our 3rd-party hospice vendor to improve the hospice referral & evaluation process.

Results

The hospital mortality index continues to trend favorably despite recent hospitalization surges due to COVID variants. Process metrics such as PC penetration rate, ALOS admit-to-PC, and hospice conversion rate have also begun to show consistent improvement in relation to internally-set targets. IP death after hospice referral – historically in excess of 25% – continues to show a positive trend as well.

Conclusions/Lessons Learned

This initiative demonstrates that a coordinated hospital-wide initiative for the early discussion of GOC may result in increased hospice discharges. One potential benefit may be greater staff comfort with introducing GOC with patients and families as well as more familiarity with the hospice process.

During the 3rd cycle, our Palliative Care division and Case Management department experienced unanticipated staffing shortages. Though this negatively impacted some of our metrics (PC penetration rate, ALOS admit-to-PC), our metrics continue to demonstrate positive improvements.

Our experience demonstrates that continuous quality improvement remains critically important especially as healthcare institutions recover from pandemic-related disruptions.

Next Steps

The workgroup has identified 2 potential improvement opportunities. First, despite our initial efforts, many staff can benefit from more communication skills training around mortality and GOC. Several of our local leaders are currently spearheading a network-wide communication skills training program (GOComm). Second, provider feedback regarding the Hospice discharge process has highlighted the need to improve our Hospice discharge process. Network-wide efforts have begun as well.

MoMA Social Rx- Introduction to Watercolor Painting for People with Parkinson's

Authors: Abby Andrew, LCSW; Natalie Hellmers, MSN, RN, ACNP-BC; Lara Schweller; Harini Sarva, MD

Department: Weill Cornell Parkinson's Disease and Movement Disorders Institute

1. Statement of the Problem

This social prescription Introduction to Watercolor project was designed to target the gaps and barriers toward accessing social engagement and cognitive stimulation for patients with Parkinson's Disease (PD) to prevent the detrimental effects associated with isolation. Patients with chronic neurodegenerative disorders like PD may experience anxiety, depression, cognitive changes, and other mental health issues that coincide with their condition. These symptoms can be exasperated by isolation and lack of social stimulation.

2. Objective/Aim of the study

This social prescription Introduction to Watercolor program aims to combat social isolation and the detrimental health effects associated with it by fostering meaningful connections amongst isolated older adults diagnosed with PD and providing social engagement and stimulation through looking at, talking about, and making art. The project utilizes a social prescription model which looks at health and wellness through a holistic lens that considers the importance of social connection and community.

3. Project Design/Methods

The project was designed in collaboration with the Community & Access Program team at The Museum of Modern Art (MoMA). This social prescription program uses art-based programming to combat social isolation amongst seniors. The program was adapted to accommodate the unique needs of the PD community and entailed a 6-week Introduction to Watercolor program that introduced participants to watercolor techniques as well as a variety of artworks in the MoMA's collection.

4. Results

A total of 19 participants regularly attended each week (18 people with Parkinson's and one care partner). Of the 9 participants that responded to the feedback survey, 67% felt an increase in motivation and sense of purpose after attending this program. An increase in overall sense of well-being (emotionally, physically and/or spiritually) was also reported.

5. Conclusion

Overall, participants reported a positive response to this program. Patients found the program accessible, organized, inspiring, and valuable for their needs thus supporting the beneficial role of these virtual social prescription programs.

MoMA Social Rx – Introduction to Watercolor Painting for People with Parkinson's

Annual Weill Cornell Medicine Quality Improvement Poster Session

Abby Andrew, LCSW/ Natalie Hellmers, MSN, RN, ACNP-BC/ Lara Schweller/ Harini Sarva, MD | May 25th, 2022

Problem Statement

This social prescription Introduction to Watercolor project was designed to target the gaps and barriers toward accessing social engagement and cognitive stimulation for patients with Parkinson's Disease (PD) to prevent the detrimental effects associated with isolation. Patients with chronic neurodegenerative disorders like PD may experience anxiety, depression, cognitive changes, and other mental health issues that coincide with their condition. These symptoms can be exasperated by isolation and lack of social stimulation. Due to the COVID-19 pandemic and mobility limitations, many of the patients receiving care at the Weill Cornell Medicine Parkinson's Disease and Movement Disorders Institute have become increasingly isolated. With community centers and exercise programs closing, there was little opportunity for engagement and socialization.

Objective/Aim Statement

This social prescription Introduction to Watercolor program aims to combat social isolation and the detrimental health effects associated with it by fostering meaningful connections amongst isolated older adults diagnosed with PD and providing social engagement and stimulation through looking at, talking about, and making art. The project utilizes a social prescription model which looks at health and wellness through a holistic lens that considers the importance of social connection and community.

Design/Methods

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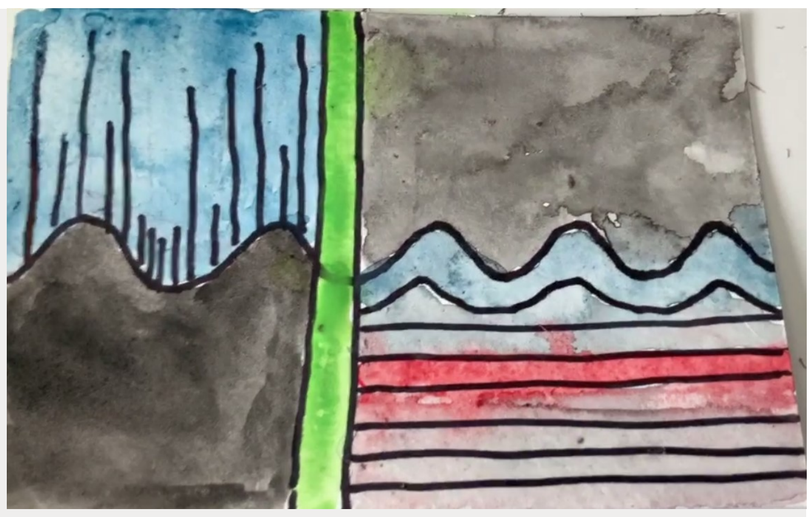
Participant Quotes/ Artwork

"It was wonderful to participate in this program. Because each exercise was broken into easy pieces we were able to feel more successful with our work. It was great to see others enjoying the class and sharing their work. I can't thank you enough for this wonderful experience that really helped break the monotony of pills and bills."

"Joy - I was doing something I'd never done before. I was learning. I was not being judged. It was fun to see what others had done. The music when on, was peaceful"

"I felt we developed a generous community."



"I was quite interested in learning and taking a chance to see if I could create something artistic. Participating in the class was a joyful experience."

"This was the first time I participated in a group of folks who share my Parkinson's diagnosis. The zoom format made it easier for me. I am perhaps a bit more open to joining another grouplike this than I was before I did this class. We'll see."

Results

A total of 19 participants regularly attended each week (18 people with Parkinson's and one care partner). Of the 9 participants that responded to the feedback survey, 67% felt an increase in motivation and sense of purpose after attending this program. An increase in overall sense of well-being (emotionally, physically and/or spiritually) was also reported. One patient reported that they liked "sharing art making and art seeing with people who, like me, have Parkinson's. I felt very tender hearted towards us." Almost half of participants reported feeling an increase in feeling connection to others during the program. This feedback supports the notion that bringing patients with PD together can foster connections that combat isolation. Another participant reported that they felt the program "developed a generous community." One participant reported that this was the first time they participated in a group with others diagnosed with PD and it made them less reluctant to joining other social groups in the future. Notably, 78% of participants who responded to the feedback survey reported that they used their art making materials outside of the hour program each week. The majority also reported an overall increase in art making activity after the conclusion of the program which emphasizes how even a short term social prescription program can result in a long term increase in engagement and therapeutic activity. Overall, 89% of participants would highly recommend this program to others.

Conclusions/Lessons Learned

Overall, participants reported a positive response to this program. Patients found the program accessible, organized, inspiring, and valuable for their needs thus supporting the beneficial role of these virtual social prescription programs. In addition, many continued to utilize the sketchpad between sessions emphasizing the positive effect of the class, social interaction, and learning new skills. Multiple aspects of emotional wellbeing were improved through this interactive, engaging program. Future programs like this may increase access to peer support and a sense of community and the success of this program emphasizes the benefits of the social prescription model and the importance of socialization and engagement when it comes to overall wellbeing.

Next Steps

Continue to utilize the social prescription model with patients diagnosed with neurodegenerative disorders in order to improve quality of life and prevent isolation.

Stop the Clot: A Collaborative Approach to Decreasing VTE Events

Authors: Jeffrey Rehnlund, BSN, RN, MEDSURG-BC & Yuliya Panina, BSN, RN, MEDSURG

Department: NYP Department of Nursing

1. Background

Healthcare-associated venous thromboembolism (HA-VTE) is a leading cause of preventable mortality and morbidity in acute care. Administration of pharmacologic prophylaxis can reduce HA-VTE by 70% (Lau *et al*, 2013), however it is estimated that between 10% and 30% of doses are not administered, with patient refusal documented as the leading cause of nonadministration (Wong *et al*, 2014). A low rate of VTE prophylaxis administration primarily due to patient refusal was noted in a small, urban hospital, and nursing and pharmacy representatives acknowledged the need to address the low rate to optimize care quality and prevent VTE events.

2. Purpose

To increase the rate of successful VTE prophylaxis administration and prevent HA-VTE events through a patient-centered, collaborative approach to addressing administration barriers.

3. Methods

Nursing leads collaborated with pharmacists to identify major barriers to administration of VTE prophylaxis and reasons for refusal and developed a pocket-sized reference card which supported nurses in addressing these barriers using a patient-centered approach. The card includes an algorithmic tool delineating steps a nurse can take when patients refuse VTE prophylaxis for commonly identified reasons, including use of the "halftime rule" in the safe rescheduling of prophylaxis if the patient refuses due to suboptimal timing. If frequency of injections is cited as a reason, the card provides recommendations to collaborate with the pharmacist to evaluate for drug changes that would result in fewer injections. In the case of other reasons, the card provides talking points to educate patients about the risks and benefits. The card, and in-services for nurses about its content and application, was piloted on a 20-bed post-surgical unit.

4. Results

From January-June 2021, before the intervention, the VTE rate was 4.82 per 1000 discharges on the pilot unit and in June 2021, the prophylaxis administration rate was

86.9%. Planning/implementation occurred July-August 2021, and from September-November 2021, the VTE rate on the pilot unit decreased to 3.44 and VTE prophylaxis rates increased to 96.3%.

5. Conclusion

Using a collaborative, patient-centered approach to addressing patient refusal and prophylaxis administration barriers optimized care quality and resulted in an increased rate of administration and a decreased rate of VTE.

6. References

1. Gantz O, Mulles S, Zagadailov P, Merchant AM. Incidence and Cost of Deep Vein Thrombosis in Emergency General Surgery Over 15 Years. J Surg Res. 2020 Aug;252:125-132. doi: 10.1016/j.jss.2020.03.022. Epub 2020 Apr 9. PMID: 32278966.

2. Lau, B. D., & Haut, E. R. (2013). Practices to prevent venous thromboembolism: a brief review. BMJ Quality & Safety, 23(3), 187–195. doi:10.1136/bmjqs-2012-001782

3. Wong, A., Kraus, P. S., Lau, B. D., Streiff, M. B., Haut, E. R., Hobson, D. B., & Shermock, K. M. (2014). Patient preferences regarding pharmacologic venous thromboembolism prophylaxis. Journal of Hospital Medicine, 10(2), 108–111. doi:10.1002/jhm.2282

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Lower Manhattan Hospital

Stop the Clot: A Collaborative Approach to Decreasing VTE Events

Jeffrey Rehnlund, BSN, RN, MEDSURG-BC & Yuliya Panina, BSN, RN, MEDSURG-BC

MAGNET RECOGNIZED
AMERICAN NURSES CREDENTIALING CENTER

Background

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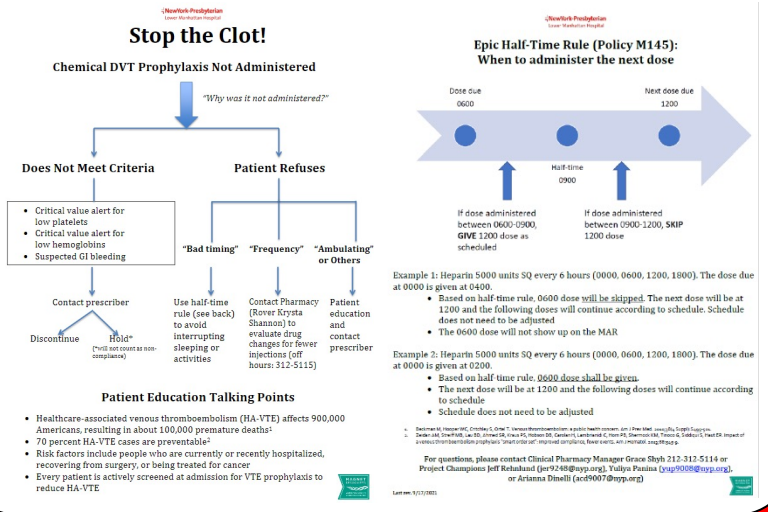
- Administration of pharmacologic prophylaxis can reduce HA-VTE by 70% (Lau et al, 2013), however it is estimated that between 10% and 30% of doses are not administered, with patient refusal documented as the leading cause of non-administration (Wong et al, 2014).
- A low rate of VTE prophylaxis administration primarily due to patient refusal was noted in a small, urban hospital, and nursing and pharmacy representatives acknowledged the need to address the low rate to optimize care quality and prevent VTE events.

Purpose

- To increase the rate of successful VTE prophylaxis administration and prevent HA-VTE events through a patient-centered, collaborative approach to addressing administration barriers.

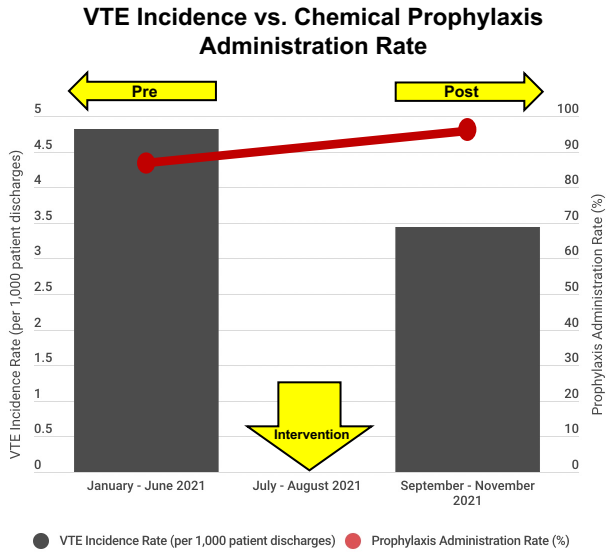


Methods

- Nursing leads collaborated with pharmacists to identify major barriers to administration of VTE prophylaxis and reasons for refusal, and developed a pocket-sized reference card which supported nurses in addressing these barriers using a patient-centered approach.
- The card includes an algorithmic tool delineating steps a nurse can take when patients refuse VTE prophylaxis for commonly identified reasons, including use of the "halftime rule" in the safe rescheduling of prophylaxis if the patient refuses due to suboptimal timing.
- If frequency of injections is cited as a reason, the card provides recommendations to collaborate with the pharmacist to evaluate for drug changes that would result in fewer injections. In the case of other reasons, the card provides talking points to educate patients about the risks and benefits.
- The card, and in-services for nurses about its content and application, was piloted on a 20-bed post-surgical unit.

Results

- From January-June 2021, before the intervention, the VTE rate was 4.82 per 1000 discharges on the pilot unit and in June 2021, the prophylaxis administration rate was 86.9%. Planning/implementation occurred July-August 2021, and from September-November 2021, the VTE rate on the pilot unit decreased to 3.44 and VTE prophylaxis rates increased to 96.3%.



Conclusions

- Using a collaborative, patient-centered approach to addressing patient refusal and prophylaxis administration barriers optimized care quality and resulted in an increased rate of administration and a decreased rate of VTE.

References

Gantz O, Mulles S, Zagadailov P, Merchant AM. Incidence and Cost of Deep Vein Thrombosis in Emergency General Surgery Over 15 Years. J Surg Res. 2020 Aug;252:125-132. doi: 10.1016/j.jss.2020.03.022. Epub 2020 Apr 9. PMID: 32278966.

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Telehealth access in a multi-lingual urogynecology patient population

Authors: Laura S. Kim, MD; Rosalyn Chan-Akeley, MD; Marco Velastegui; Andrea Guzman

Department(s): Weill Cornell Medicine / NYP-Queens Hospital – Dept of OB-GYN; The Lang Center for Research and Education

Department: Pediatrics

1. Statement of the Problem

Telehealth access became an important way for patients to access care during the Covid-19 pandemic. However, this becomes challenging in a lower English proficiency (LEP) (55%) and digital elderly (50+ years old) urogynecology patient population. With EPIC-go-live, there seemed to be fewer connected televideo visits. Therefore, this QI project was to assess access via EPIC's "20+ clicks"for login, and compare it with Doximity's "4clicks" (our prior telehealth platform).

2. Objective/Aim of the study

The primary aim is to assess the proportion of scheduled televisits, that are completed via the EPIC application (EPIC) and Doximity application (Doximity). The secondary aim is to look for predictors for an EPIC vs. Doximity televisit.

3. Project Design/Methods

An initial PDSA cycle, revealed 76% of scheduled televisits were completed via Doximity, in the LEP, digital elderly urogynecology population at NYPQueens. EPIC-go-live occurred in June '21. This PDSA cycle included all scheduled televisits from August 1 to December 31, 2021.

EPIC is the default platform for televisits. However, if patients did not connect, a text message is sent to initiate a Doximity platform, telehealth visit. Abstracted data included televisit platform, age, language, need for login help, and zip code. Statistical analysis is conducted using SAS Studio Software. Descriptive statistics are used to summarize patient and visit data. Logistic regression is utilized for binary outcomes. Chi-square, and Fischer's used for categorical variables.

4. Results

93% (n=208) of the scheduled televisits (n=224) were completed. Independent login on EPIC, occurred in 27% of scheduled televisits with an average age (age) of 50 years old (yo), with 87% speaking English. 35% of EPIC visits (15% of scheduled visits) needed login help (age 68yo, 36% English speaking). Then 34% of scheduled visits occurred via Doximity. Independent login via Doximity occurred for 24% of scheduled visits (age: 60yo, 67% speaking English). The remainder of Doximity visits needed login help (age 69yo, 41% speak English). If unable to connect with either platform, phone visits (17% of

scheduled visits) performed with an age of 71 yo, 24% speaking English. Predictors for an independent login, EPIC visit include speaking English (OR 21.2, p = 0.0039, CI 2.665-169.9) and less likely if non-English speaking (OR 0.737, p =0.0074, CI 0.589-0.921) or older than 55 years (OR 0.174, p <0.0001, CI 0.089 –0.339).

5. Conclusion

In LEP and older patients, only a minority of telehealth visits are accessible via EPIC. Despite step-wise utilization of the televisit applications (EPIC, then Doximity), selecting out technology literate or English speaking patients, older (average 60yo) and LEP patients are able to independently login for Doximity visits. To improve health equity and access, minimizing barriers are important. Ease of use and language of application are such factors. A choice of televisit applications should be offered to improve access to care.

6. Next Steps

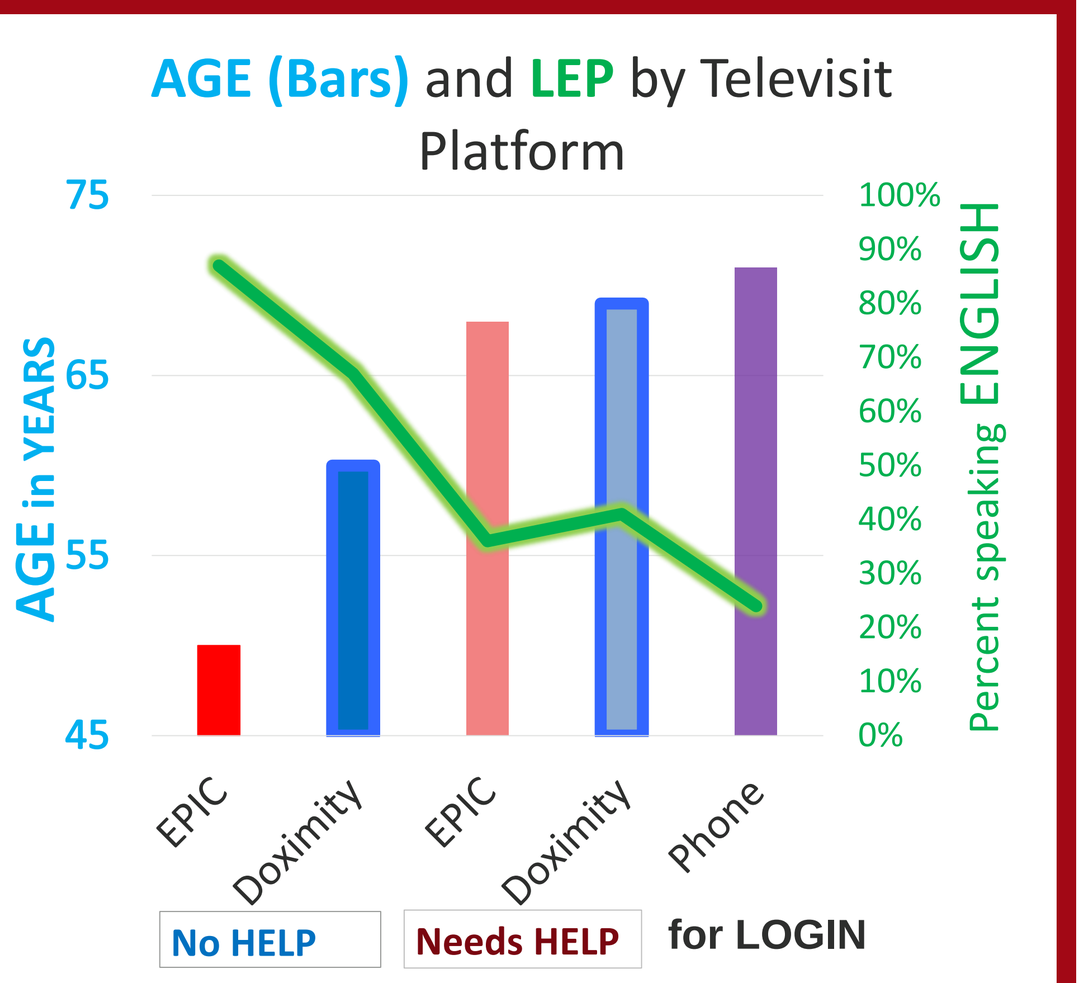
Despite perceived benefit of time and transportation costs, due to audibility of translation services and need for login help, are patient satisfied with televisits?

Telehealth Access in a Multi-lingual, Urogynecology Population

Laura S. Kim, MD[1], Rosalyn Chan-Akeley [2], Marco Velastegui[2]; Andrea Guzman[2]
1 - NYP-Queens Hospital Dept OB-GYN; 2 - The Lang Center for Research and Education

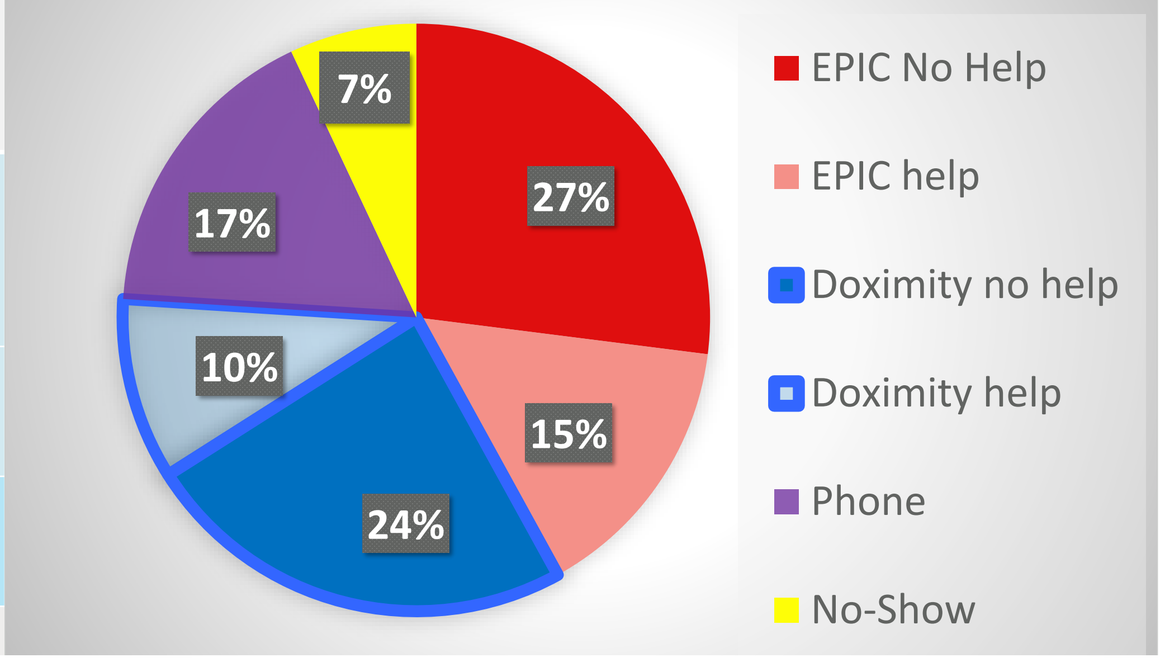
Doximity's "4 clicks" to start a video visit, i**mproves telehealth access and Health Equity for older** (average age 60) **and Lower English Proficiency (LEP)** patients compared to EPIC's "20+ clicks."

RESULTS:



Predictors for an independently logged in televideo visit in **EPIC**

	Factor	OR	p value	CI
LESS likely	**Non-English language**	0.737	0.0074	0.589-0.921
LESS likely	age **>55 yrs old**	0.174	<0.0001	0.089-0.339
MORE likely	English Speaking	21.2	0.0039	2.665-169.9



Problem:
- With **EPIC** Go-Live, fewer patients seemed to access televisits via **EPIC** 's MyChart for televisits.

Objective/ Aim:
- **Primary aim**: Assess the proportion of scheduled televisits that are completed via **EPIC** and **Doximity**.
- **Secondary aim**: Look for predictors for an **EPIC** vs. **Doximity** televisit.

Design/ Methods:
- An initial PDSA (Plan-Do-Study-Act) cycle revealed **76%** of scheduled televisits were completed via **Doximity** **PRIOR** to **EPIC** Go-Live in the LEP, digital elderly urogynecology population at NYPQueens.
- **EPIC** Go-Live occurred in June '21. This PDSA cycle included all scheduled televisits from August 1 to December 31, 2021. **EPIC** is the default platform for all televisits. However, if patients do not connect, a text message is sent to initiate a **Doximity** telehealth visit.
- Abstracted data include the televisit platform, age, language, login help, and zip code. Statistical analysis is conducted using SAS Studio Software. Descriptive statistics are used to summarize patient and visit data. Logistic regression is utilized for binary outcomes. Chi-square and Fischer's are used for categorical variables.

Conclusions/ Lessons Learned:
- In **LEP** and **older** patients, only a **minority** of telehealth visits are **accessible via EPIC**.
- Step-wise utilization of the televisit applications (**EPIC** first and if not connected, then **Doximity**), selected out technology literate and English speaking patients. Despite this, **older** **(average 60) and LEP** **patients are able to independently login for Doximity visits**.
- To improve health equity and access, **minimizing barriers** are important. **Ease of use** and **language** of application are such factors.
- A choice of televisit applications should be offered for access to care.

Next Steps:
- Is there higher patient satisfaction for televisits verse office visits (i.e. medication and results review, counseling)?
- Audibility of translational services and need for help with televisit login may offset perceived benefit of time and transportation cost.

Comparison of Intraoperative Breast Axillary Sentinel Node Frozen Section Diagnosis Concordance Between Digital Pathology and Glass Slides

Authors: Diana Berman, MD; Theresa Scognamiglio, MD

Department: Pathology and Laboratory Medicine

1. Statement of the Problem

Intraoperative frozen sections are an important component of patient care. They give surgeons and clinical teams information quickly about diagnosis, margin status, and cancer staging that can be used to influence decisions during the procedure. There are two gross rooms where frozen sections are performed. There is a centrally located main operating room (OR) in proximity to our main gross room and a more distant outpatient OR at the David H. Koch (DHK) Center with a second gross room. To address the distance between the two locations, the Aperio LV1 desktop slide scanner was implemented to quickly scan the slides prepared from the frozen sections by the Pathologists' Assistant (PA) at the DHK gross room to be reviewed by the pathology resident and attending through secure remote access in the main gross room.

2. Objective/Aim of the Study

The purpose of this investigation was to compare the concordance of breast axillary sentinel lymph node frozen sections with permanent controls using digital pathology versus glass slides.

3. Project Designs/Methods

The investigation was done as a retrospective review of frozen sections performed from January 2021 through December 2021. The data was organized by location and frozen sections done on breast axillary sentinel lymph nodes, the most common specimen sent for frozen at DHK, were identified. The frozen section diagnosis was compared with the final diagnosis, concordance was assessed, and a Fisher's exact test was performed to determine the statistical significance of the findings.

4. Results

There were 2724 specimen parts frozen in the main gross room with a total of 152 (6%) breast axillary sentinel lymph nodes. At the DHK gross room, there were 93 specimen parts frozen with a total of 53 (57%) breast axillary sentinel lymph nodes. Based on the frozen and final diagnoses listed in Table 1, we found 91% concordance in the main gross room and 94% concordance in the DHK gross room (Fisher's Exact p-value 0.7665). Upon further evaluation of the discrepancies we determined that in the main gross room, three were due to interpretation error, seven were due to sampling error, and three were due to another or unknown discrepancy. In the DHK gross room, two were due to sampling error and one was unknown and none were interpretation errors. We also evaluated turnaround time (see Figure 1) and found that the mean turnaround time was

29.9 minutes in the main gross room and 44 minutes in the DHK gross room (p-value 1.151e-05).

5. Conclusion

There is no statistically significant difference in the concordance of frozen and final diagnoses read in the main gross room by glass slides and at DHK through digital pathology. However, there is a statistically significant difference in the turnaround time which can be attributed to multiple factors including that the DHK gross room is staffed by a PA and only has one cryostat while the main gross room is staffed by a resident with other residents nearby to assist and has three cryostats. These findings are consistent with those seen in similar studies. Further studies should be done to compare concordance of frozen sections done in the main gross room and read by glass slides and those read remotely by an on-call attending via the Aperio slide scanner in the main gross room.

Improving Resident Preparedness for Rotations in the Pediatric Intensive Care Unit: A Pediatric Critical Care Fellow-Driven Quality Improvement Initiative to Optimize Orientation

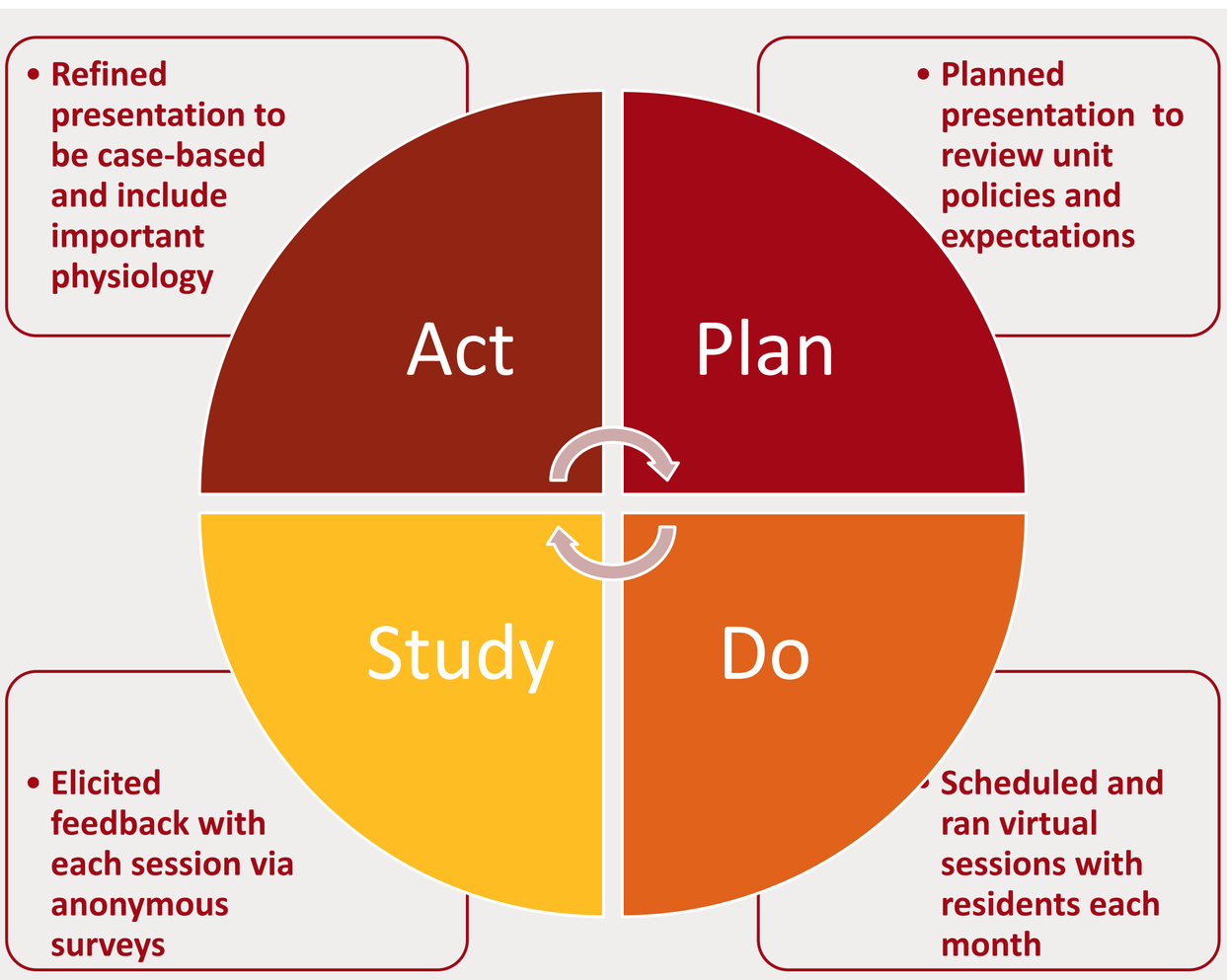
Eric Wilsterman, MD; Charles Bergman, MD; Priyanka Mehrotra, MD; Juliana Romano, MD; Jennifer Shenker, MD; Hera Mahmood, MD; Christine Joyce, MD; Megan Toal, MD

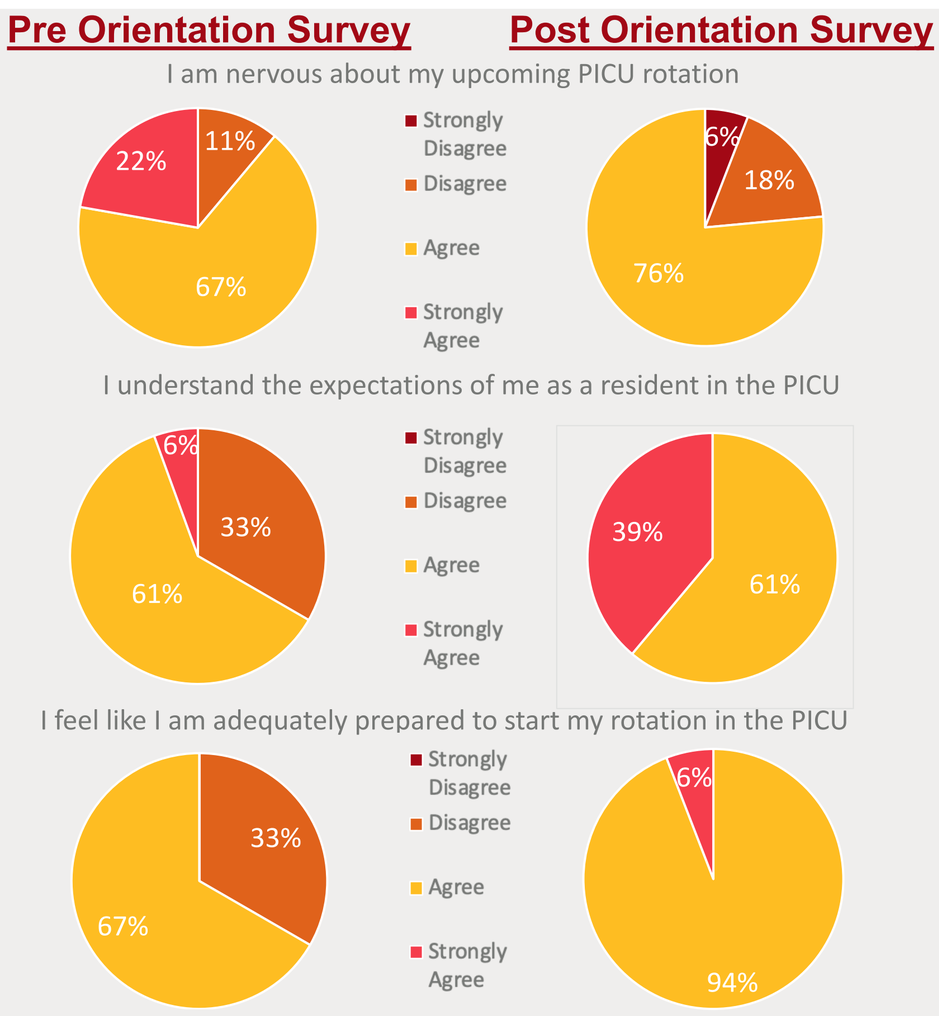
Problem Statement: **Resident comfort and preparedness for their rotation in the pediatric intensive care unit (PICU) is essential for them to deliver high quality care to critically ill children.**

Objective/Aim Statement: **To improve pediatric resident self-reported preparedness to 80% for their PICU rotation via a novel orientation curriculum by December 2021.**

Primary outcome: **Resident comfort after participating in the new orientation curriculum**

Process measures: **Percentage of residents participating in the new orientation curriculum and resident self-reported preparedness via surveys**





Results: **We found that residents felt less nervous about the rotation. Feedback from the post orientation survey suggested including high-yield PICU basics into the orientation and to change the timing, informing iterations of our future PDSA cycles.**

Conclusions/Lessons Learned: **Pediatric resident comfort can be improved via group interactive session at the beginning of the year and via monthly fellow-led orientation virtual sessions.**

Next Steps: **Moving forward, we hope to augment the orientation process with hands on, fellow-led simulation to potentially improve patient outcomes while increasing the skillsets of our pediatric residents.**

View our orientation slides!

Management of Infants at Risk for Early Onset Sepsis

Authors: Colleen M. Springarn, MD; Erin K. Kelly, MD; Abieyuwa Iyare, MD; Jin-Young Han, MD, Ph.D; Jennifer I. DiPace, MD

Department: Pediatrics

1. Statement of the Problem

Neonatal early onset sepsis (EOS) is a rare but potentially life-threatening condition with a mortality rate of 3-4% of affected infants1. Guidelines for the evaluation and management of infants at risk for sepsis have historically erred on the side treating clinically-well, at-risk newborns with empiric antibiotics. After the introduction of intrapartum antibiotic prophylaxis, the EOS rate declined to 0.5 per 1000 live births. However, the clinical algorithm in place at our institution resulted in the antibiotic treatment of 3-4% of healthy late pre-term and term newborns with a sepsis risk factor in 2020.Multiple studies show an association between early antibiotic exposure and disease in childhood (i.e. obesity, wheezing)3-6. Research has demonstrated that the antibiotic treatment rate for at-risk, healthy newborns could be safely reduced through the use of a multivariate risk assessment, otherwise known as the Kaiser EOS calculator.

2. Objective/Aim of the study

Through the use of a multivariate risk assessment tool, we aim to decrease antimicrobial usage per 1000 days in the well appearing newborn ≥ 36 weeks gestation by 50% by December 2021.

3. Design/Methods

This quality improvement (QI) initiative took place in a single center Level 2 nursery in an urban academic center, utilizing the Model for Improvement framework and a time series design. An interdisciplinary team created a key-driver diagram and baseline data on antibiotic usage rates in newborns admitted to the Level 2 nursery was collected. The intervention consisted of the application of the sepsis risk calculator and assignment of a sepsis risk score (SRS) to all infants. Clinical management was based on the SRS and supported by a newly-generated clinical practice guideline. The primary outcome measure was use of antibiotics in clinically-well newborns ≥ 36 weeks gestation in the first 24 hours of life, measured by antimicrobial usage per 1000 days in this population. A second outcome measure was percentage of newborns who received a sepsis evaluation with a CBC upon admission. Monthly data was collected; data were summarized and analyzed using run charts.

4. Results

From December 2020 through May 2021 the antibiotic usage per 1000 days was 776. Subsequent to institution wide implementation, the antibiotic usage per 1000 days was 154, an 80% reduction. Prior to initiation, 25% of infants underwent sepsis evaluation

with a CBC. This rate decreased to 6% upon SRS incorporation, significantly reducing phlebotomy exposure. Last, the rate of blood cultures, our balancing measure, did increase but only by 2-3% which is likely an acceptable amount. The rate of newborn readmission to our institution was tracked and no cases of missed early onset sepsis were identified.

5. Conclusion

Through the use of a multivariate risk assessment tool that allows estimation of an individual infant's risk of EOS, we were able to successfully reduce the percentage of infants exposed to empiric antibiotics and phlebotomy without apparent adverse effects.

Management of Infants at Risk for Early Onset Sepsis

2022 Annual Weill Cornell Medicine Quality Improvement and Patient Safety Poster Symposium

Spingarn, Colleen M.; Kelly, Erin K.; Iyare, Abieyuwa; Han, Jin-Young; DiPace, Jennifer I. | May 25th, 2022

Problem Statement

Neonatal early onset sepsis (EOS) is a rare but potentially life-threatening condition with a mortality rate of 3-4% of affected infants[1]. Guidelines for the evaluation and management of infants at risk for sepsis have historically erred on the side treating clinically-well, at-risk newborns with empiric antibiotics. After the introduction of intrapartum antibiotic prophylaxis, the EOS rate declined to 0.5 per 1000 live births. However, the clinical algorithm in place at our institution, endorsed by the Centers for Disease Control, resulted in the antibiotic treatment of 3-4% of healthy late pre-term and term newborns in 2020. Early antibiotic use is associated with a 4-fold increase in late initiation of breastfeeding and 2-fold increase in non-medically indicated formula supplementation[2]. Multiple studies show an association between early antibiotic exposure and disease in childhood (i.e. obesity, disruption in the gut microbiome, wheezing)[3-6]. In addition, evaluation and treatment of these healthy infants results in newborn separation from parents and exposure to phlebotomy within the first 24 hours of life. Research from other institutions has demonstrated that the antibiotic treatment rate for at-risk, healthy newborns could be safely reduced through the use of a multivariate risk assessment, otherwise known as the Kaiser EOS calculator.

Objective/Aim Statement

Through the use of a multivariate risk assessment tool, we aim to decrease antimicrobial usage per 1000 days present in the well appearing newborn ≥ 36 weeks gestation by 50% by December 2021.

Key Driver Diagram

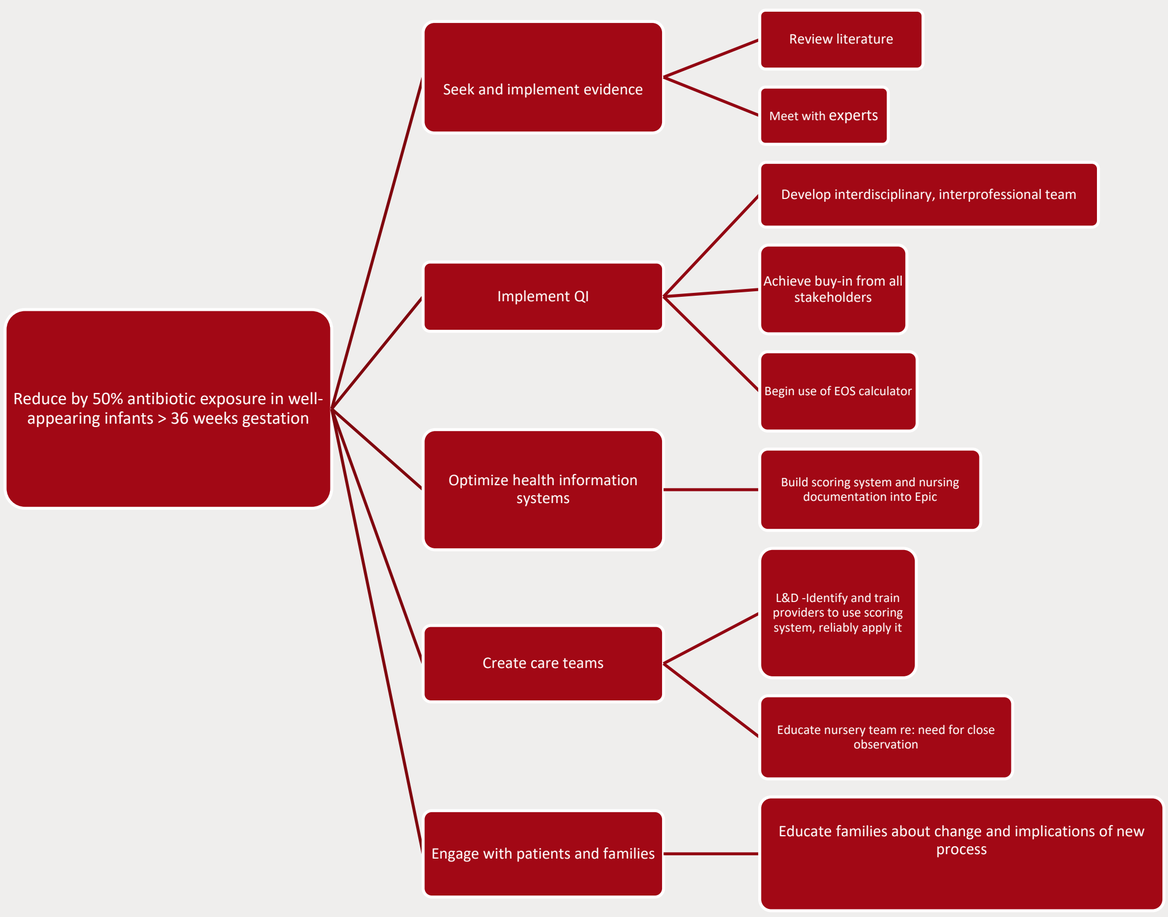


Figure 1

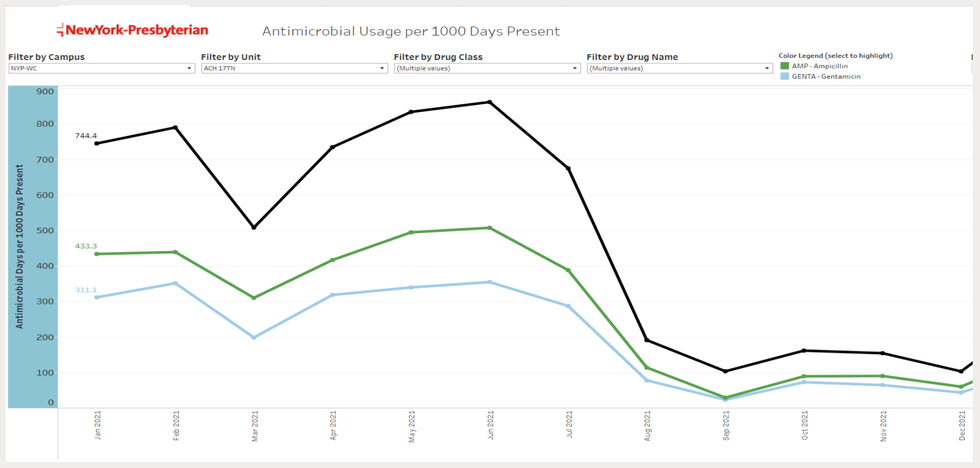
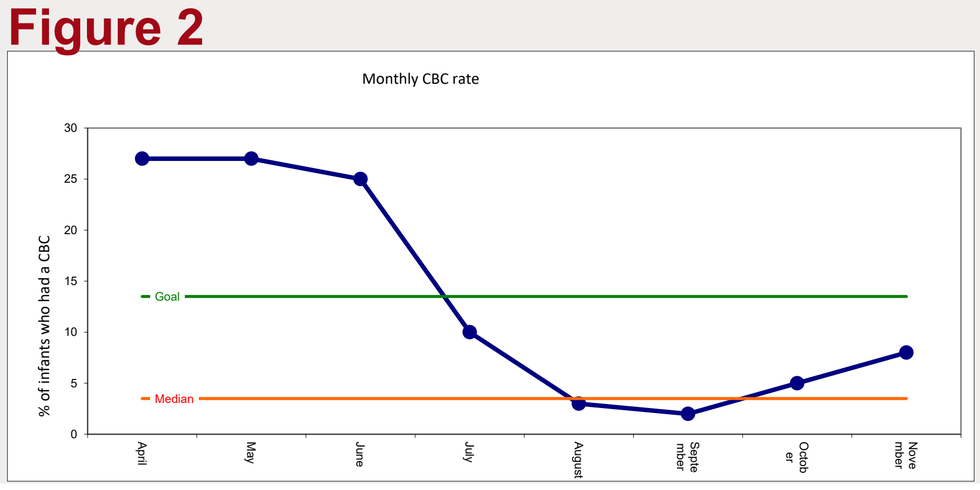


Figure 2



Design/Methods

This quality improvement (QI) initiative took place in a single center Level 2 nursery in an urban academic center, utilizing the Model for Improvement framework and a time series design. An interdisciplinary team conducted a key-driver diagram and collected baseline data on antibiotic usage rates. The intervention consisted of the application of the sepsis risk calculator and an assignment of a sepsis risk score (SRS) to all infants. The management of the infants was based on the SRS and supported by a new clinical practice guideline. The primary outcome measure was use of antibiotics in clinically-well newborns ≥ 36 weeks gestation in the first 24 hours of life. A secondary outcome measure was percentage of newborns who received a sepsis evaluation with a CBC upon admission. A balancing measure was the number of infants who a blood culture drawn in the first 24 hours of life. Monthly data was collected; data were summarized and analyzed using run charts.

Results

From December 2020 through May 2021 the antibiotic usage per 1000 days was 776. Subsequent to institution wide implementation, the antibiotic usage per 1000 days was 154, an 80% reduction. Prior to initiation, 25% of infants underwent sepsis evaluation with a CBC, a laboratory test that does not reliably predict sepsis in this patient population. This rate decreased to 6% upon SRS incorporation, significantly reducing phlebotomy exposure to an unnecessary test as a result. Last, the rate of blood cultures, our balancing measure, did increase but only by 2-3% which is likely an acceptable amount. The rate of newborn readmission to our institution was tracked and no cases of missed early onset sepsis were identified.

Conclusions

Through the use of a multivariate risk assessment tool that allows estimation of an individual infant's risk of EOS, we were able to successfully reduce the percentage of infants exposed to empiric antibiotics and phlebotomy without apparent adverse effects.

Impacts of Travel Time on Appointment Frequency and No Show Rates At A NYC Free Clinic

Authors: Gabrielle Ramirez; Xiaohan Ying; Hyejin Kim; Ashita Batavia, MD; Pamela Charney, MD

Department: Weill Cornell Community Clinic

1. Statement of the Problem

Consistent preventative and follow up visits are vital in ensuring continuity of care, but it is unknown how travel time affects care utilization. The Weill Cornell Community Clinic (WCCC) is a student-run free clinic that provides longitudinal primary care to uninsured patients from all 5 boroughs of New York City. The clinic is partnering with a ride hailing organization (RideHealth) to provide car service for its patients to further reduce challenges in accessing care. In order to better assess patients' commutes and need for transportation assistance services, this study examines patients' travel time and its impacts on in person visit frequency and no show rates.

2. Project Objectives

- To better understand challenges face by patients seen at a free clinic and explore possible solutions to address these challenges
- To evaluate the impact of travel time on free clinic utilization and attendance rates

3. Project Methods

All patients seen at the WCCC between January 01, 2019 and December 31, 2019 were retrospectively included. Frequency of visits, missed appointments, and addresses were extracted from clinic records. Travel time via public transportation and car between patients' homes and WCCC were estimated using Google Maps under the assumption of 6:00 pm arrival on a non-holiday Monday, in line with operating time for WCCC. Univariable analyses were performed using t-test for continuous variables.

4. Results

110 unique patients were seen in 2019, with a total of 404 appointments scheduled and 74 appointments missed. Average travel times were 32.2 minutes (SD 16.7, range: 3 - 72.5) by car and 49.3 minutes (SD 11.1, range: 6 - 134) by public transportation. 89 patients had travel time of more than 30 minutes by public transportation, with an average commute of 57 minutes. However, their average commute is reduced to 37 minutes via car. Compared to patients with shorter commutes ($\leq$ 30 minutes), those with longer commutes ($>$ 30 minutes) had a similar number of total scheduled appointments (3.8 vs 3.1, $p = 0.15$), but a higher rate of missed appointments (20.0% vs 9.5%, $p = 0.005$).

5. Conclusion

Many of WCCC's patients face various challenges while seeking care, including the burden of commuting in NYC. Patients who live further away from the clinic are found to be more likely to miss appointments and thus delay their care. Further analysis will be performed after partnering with RideHealth to better understand the impact of commute time on clinic utilization and visit attendance rates. For uninsured patients facing the additional burden of a long commute, transportation assistance services may help improve clinic no show rates for in person visits.

NYP CLER- House Staff Quality Improvement Poster Session Awardees

Improving Shingles Vaccination Rate at a Family Medicine Clinic in Washington Heights

Authors: Jenny Tobat, MD; David Killeen, MD; Amy Sun, MD; Megha Srivastava, MD; Roxanne Ko, MD; Carla Anderson, MD

Department: NYP/CUMC Family Medicine Residency Program

1. Statement of the Problem

About 1 in 3 persons in the US will develop shingles in their lifetime. About 1-4% of people will be hospitalized for complications. The shingles vaccine is 90% effective at preventing shingles and is available for patients 50+ years old. However, the vaccine is available only under Medicare Part D, so many clinics are unable to administer the vaccine due to financial limitations, and patients must go to pharmacies to receive the vaccine. At Farrell Family Medicine Clinic in Washington Heights, which serves an underserved population insured with Medicaid and Medicare, only 2.2% of patients who qualified for the shingles vaccine and were seen at the clinic in September 2021 were fully vaccinated.

2. Objective/Aim of the study

To increase the percentage of patients 50 years or older who have visits at Farrell in the last month and are fully vaccinated with shingrix from 2.2% to 5%

3. Project Design/Methods

Fishbone diagram and process charts were created to understand the barriers and workflow to patients getting the shingles vaccine. Our team also performed stakeholder interviews with providers, nurses, clinic pharmacist, and community pharmacists. Based on this background information, we created a flyer in both English and Spanish that reviewed what shingles is, how the vaccine is useful, and which nearby pharmacies provide the vaccine. We consulted with a health literacy expert to ensure that the language was easy to read and understand. The flyers were distributed to all exam rooms and providers were notified via email and all staff meetings about them and how to use them.

4. Results

Our monthly data collection plan will be to look back at the patients over 50 years old who had a visit at Farrell the past month and determine how many patients received both shots of the shingles vaccine. We expect a lag in the data given the time it takes for patients to visit a pharmacy after being told about the vaccine, as well as the vaccine being a two-dose series separated by 2-6 months.

5. Conclusion

Availability of the shingles vaccine to under-served populations remains limited due to insurance barriers, but patient education is a vital step in improving access to preventative care. We hope that with continued advocacy on a national level, coverage of this and other vital vaccinations can be expanded at clinics serving Medicaid and Medicare patients.

Improving shingles vaccination rate at a family medicine clinic in Washington Heights

Drs. Jenny Tobat, David Killeen, Amy Sun, Megha Srivastava, Carla Anderson, Roxanne Ko
NYP/CUMC Family Medicine Residency Program

NewYork-Presbyterian

BACKGROUND

About 1 in 3 persons in the US will develop shingles in their lifetime. About 1-4% of people will be hospitalized for complications.

The shingles vaccine is 90% effective at preventing shingles, and is available for patients 50+ years old. However, the vaccine is available only under Medicare Part D. Many clinics, especially those that care for an underserved population, do not have the vaccine available on site. Patients must go to a pharmacy that has the shingles vaccine available.

Farrell Health Center is a family medicine resident clinic that serves a large Medicaid population in Washington Heights. The surrounding community pharmacies do not all provide the vaccine.

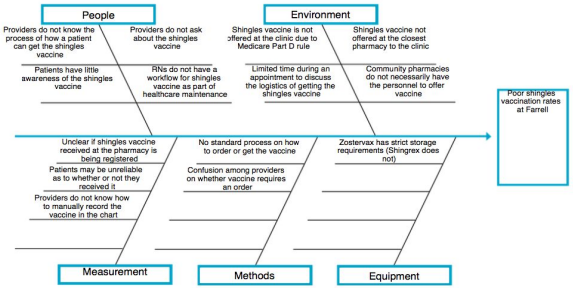
As of September 2021, only 2.2% of patients who qualified for the shingles vaccine and were seen at the clinic that month were fully vaccinated.

SMART AIM

To increase the percentage of patients 50yo or older who have visits at Farrell in the last month and are fully vaccinated with shingrix from 2.2% to 5%

METHODS

Fishbone diagram and process charts were created to understand the barriers and workflow to patients getting the shingles vaccine.



Our team also performed stakeholder interviews with providers, nurses, clinic pharmacist, and community pharmacists. Highlights include:

- Many providers mention the shingles vaccine as part of health care maintenance but simply send a prescription to the patient's pharmacy.
- Providers who do not mention the vaccine indicate difficulties coordinating how to get it as a barrier.
- Community pharmacists that provide the vaccine state patients do not need a prescription to receive it. Numbers have been lower since the COVID pandemic.

INTERVENTION

Our team created a flyer in English and Spanish that reviewed the shingles, the vaccine, and nearby pharmacies that provided the vaccine. We consulted with a health literacy expert to ensure that the language was easy to read and understand.The flyers were distributed to all exam rooms and providers were notified via email and all staff meetings about them and how to use them.

DATA COLLECTION

Our monthly data collection plan will be to look back at the patients over 50 years old who had a visit at Farrell the past month and determine how many patients received both shots of the shingles vaccine. We expect a lag in the data given the time it takes for patients to visit a pharmacy after being told about the vaccine.

FUTURE WORK

Address challenges and barriers for interdisciplinary involvement.
Outreach intervention by pharmacist students or medical students.
Working with leadership to get vaccine billed under Part D.

ACKNOWLEDGEMENTS

Thank you to Center for Family and Community Medicine;
Thank you to Dr. Urmi Desai, Dr. Joanne Dempster, Dr. Daniela Diaz

Increasing Healthcare Proxy Documentation in an Outpatient Geriatric Medicine Practice

Authors: Emily Coskun, MD; Kristina Fernandez, MD; Eliana Geller, DO; Shiran Porat, MD; Kelly Cummings, MD

Department: Weill Department of Medicine, Division of Geriatrics and Palliative Medicine

1. Statement of the Problem

Appointment of a healthcare agent (HCA) and subsequent completion of healthcare proxy (HCP) documentation is an integral form of advance care planning (ACP).1 Conversations about advance care planning prompt patients to have discussions about their wishes with their chosen agent.2 A HCA is especially important in patients without a surrogate, or with multiple surrogates (ie. multiple adult children) who may not know or make decisions based on the patient's wishes. Initiatives using the Electronic Health Record (EHR) have led to improved rates of advance care planning documentation.3 Our aim is to increase healthcare proxy documentation rates for patients in a geriatric medicine practice by 20% by July, 1st 2022.

2. Project Design/Methods

We interviewed key stakeholders (doctors, nurse practitioners, nurses, and other staff) to understand barriers to HCP documentation in the EHR. We also reviewed the current EHR process to understand the steps involved in documenting HCP. A HCP form must be printed, completed with a witness, scanned into media, and linked to the ACP tab to become active. Baseline data was collected via manual chart review on 60 patients seen in our clinic between September 1 and November 30 of 2021. Our first intervention consisted of education during the weekly faculty meeting explaining how to scan and activate HCP documentation in the EMR. For our second intervention, we placed blank HCP forms and a HCP job aid (Figure 1) in each patient exam room. We have been collecting data on 5 patients per week post-intervention. Outcome measures collected are: HCP documented in notes, HCP form completed and scanned, and HCA active on sidebar.

3. Results

Baseline data showed that HCP was documented in a note in 50% of patients, HCP was scanned for 48% of patients, and HCA was active on the sidebar for only 8% of patients. After our second intervention of placing blank HCP forms and a job aid in the exam rooms, there was improvement in all three observed outcomes (Figure 2).

4. Conclusion

Rates of baseline HCP documentation, scanned HCP forms and activated HCA in the EHR were low, and all three increased after our second intervention of placing blank HCP forms and job aid in exam rooms. While HCP documentation alone is important, scanning and activating in the EHR improves visibility of the ACP so it can be more readily accessed during transitions of care or when urgent decisions are needed. Future interventions include continued education of providers to document HCP, altering the geriatric practice's initial visit template to include HCP documentation, and creating signs to place in the waiting areas to encourage patients to enact a HCP.

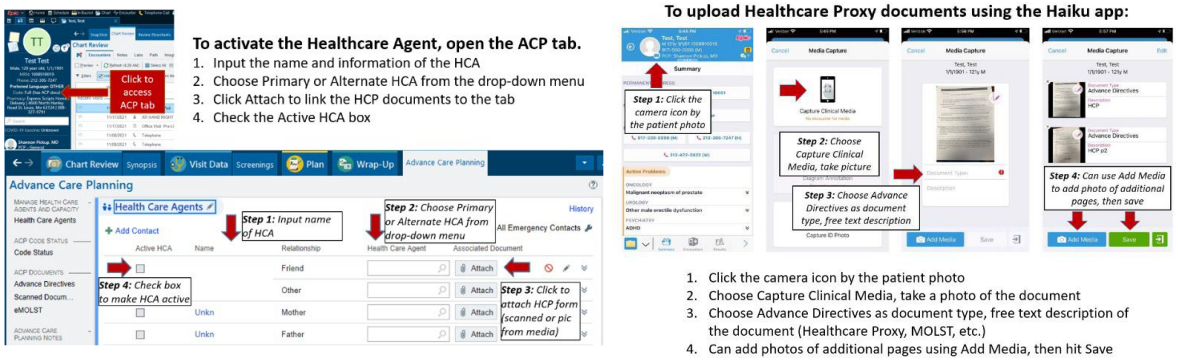


Figure 1: Job aid. Demonstrates how to upload a HCP form and activate a HCA in the sidebar on the Epic EHR.

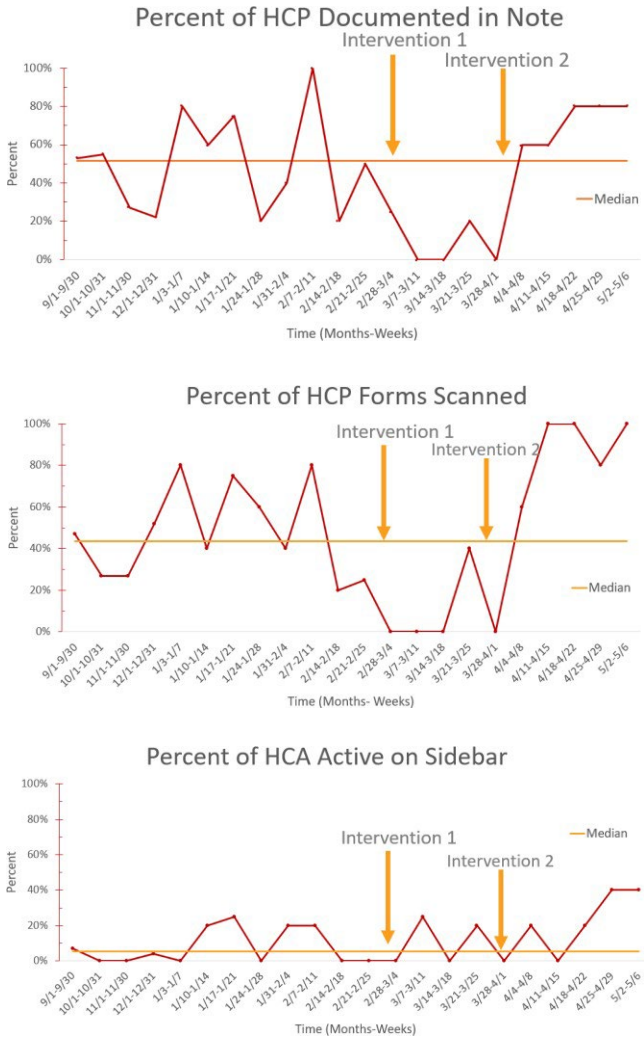


Figure 2: Outcome Measures. Percent of HCP documented in note, HCP forms scanned, and HCA active on sidebar.

References

1. Malhotra C, Sim D, Jaufeerally F, et al. Impact of a Formal Advance Care Planning Program on End-of-Life Care for Patients With Heart Failure: Results From a Randomized Controlled Trial. *J Card Fail*. 2020;26(7):594-598.
2. Dingfield, Laura, Kayser, Joshua. Integrating Advance Care Planning Into Practice. *CHEST*. 2017;151(6):1387-1393. doi:doi:10.1001/jama.300.14.
3. Gabbard J, Pajewski N, Callahan K, et al. Effectiveness of a Nurse-Led Multidisciplinary Intervention vs Usual Care on Advance Care Planning for Vulnerable Older Adults in an Accountable Care Organization: A Randomized Clinical Trial. *JAMA Internal Medicine*. 2021;181(3):361-369. doi:doi: 10.1001/jamainternmed.2020.5950.

Increasing Healthcare Proxy Documentation in an Outpatient Geriatric Medicine Practice

Emily Coskun[1], Kristina Fernandez, Eliana Geller, Shiran Porat, and Kelly Cummings
[1]Division of Geriatrics and Palliative Medicine; Weill Cornell Medicine, New York, NY, USA; ebc9006@nyp.org

Background

- Appointment of a healthcare agent (HCA) and subsequent completion of healthcare proxy (HCP) documentation is an integral form of advance care planning.[1]
- Conversations about advance care planning prompt patients to have discussions about their wishes with their chosen agent.[2]
- Initiatives using Electronic Health Record (EHR) have led to improved rates of advance care planning documentation.[3]

Aim Statement

- We aim to increase healthcare proxy documentation rates for patients at the geriatric medicine practice by 20% by July 1st, 2022.

Methods

- Interviewed stakeholders to understand attitudes and knowledge about HCP documentation in EHR. Created fishbone diagram. (Figure 1)
- Reviewed EHR process and interviewed stakeholders to understand the steps involved in documenting HCP. Created process map. (Figure 2)
- Collected baseline data via manual chart review on 60 patients who had visits at the geriatric medicine practice and then data on 5 patients per week post-intervention.
- Implemented first intervention of educational presentation during weekly faculty meeting explaining how to scan and activate HCP in the EMR.
- Implemented second intervention of putting blank HCP forms and HCP Job Aid (Figure 3) in each patient exam room.

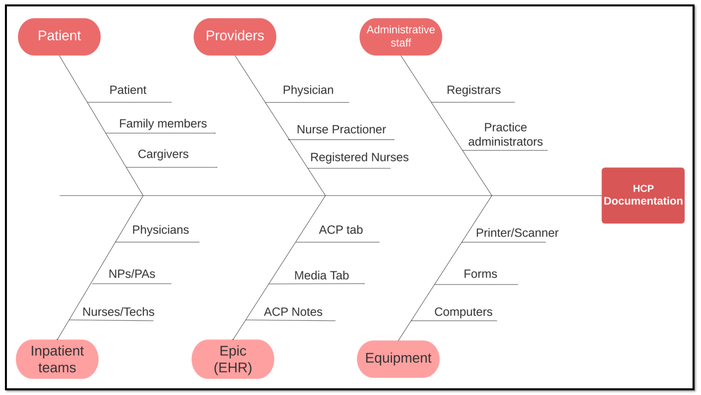
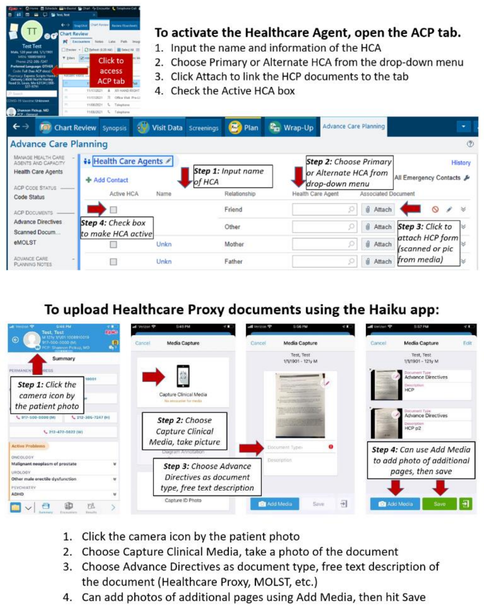
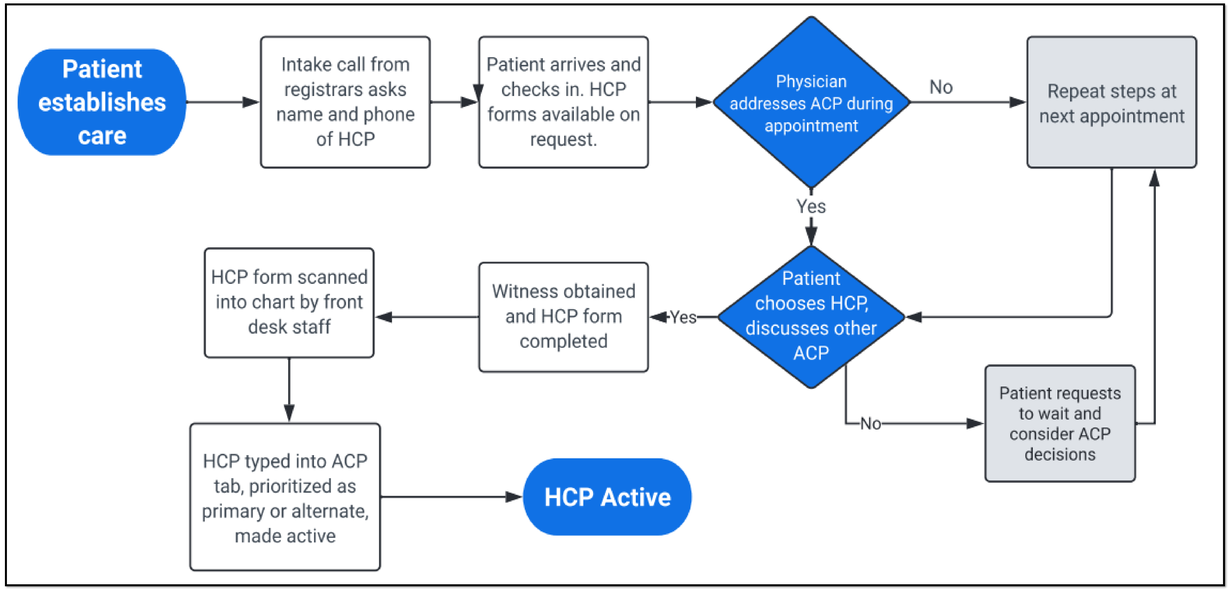


Figure 1 (above): Fishbone diagram: Stakeholders included providers, NPs, and other clinic staff.

Figure 2 (below): Process Map: A HCP form must be printed, completed with a witness, scanned into media, and linked to the ACP (advance care planning) tab to become active.

Figure 3 (right): Job aid: Demonstrates how to upload a HCP form and activate a HCA in the sidebar on the Epic EHR.





Outcome Measures

- HCP documented in notes
- HCP form completed and scanned
- HCA active on sidebar

Results

Figure 4: Baseline Healthcare Proxy Documentation Before Intervention

- Baseline data showed that HCP was documented in a note in 37% of patients, HCP was scanned for 30% of patients, and HCA was active on the sidebar for only 1.6% of patients.

Conclusion and Next Steps

- Baseline HCP documentation, scanned HCP forms and activated HCA in the EHR were low.
- Interventions were implemented aiming to increase completion of the three outcome measure.
- Data is currently being collected post-intervention and will be plotted on a run chart.

References

1. Malhotra C, Sim D, Jaufeerally F, et al. Impact of a Formal Advance Care Planning Program on End-of-Life Care for Patients With Heart Failure: Results From a Randomized Controlled Trial. *J Card Fail*. 2020;26(7):594-598.
2. Dingfield, Laura, Kayser, Joshua. Integrating Advance Care Planning Into Practice. *CHEST*. 2017;151(6):1387-1393. doi:doi:10.1001/jama.300.14.
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Improving Rates of Pneumococcal Vaccination in Pediatric Rheumatology Patients with Systemic Lupus Erythematosus at Hospital for Special Surgery

Authors: Lauren Robinson, MD; Leanne M. Mansfield, MD; Jheel Pandya, MD; Jessica Fennell, MD; William Ambler, MD; Alexa Adams, MD; Sarah F. Taber, MD; Karen B. Onel, MD; Nancy Pan, MD

Department: Pediatric Rheumatology, Hospital for Special Surgery and Weill Cornell Medicine

1. Statement of the Problem

Patients with Systemic Lupus Erythematosus (SLE) are at significantly increased risk for invasive pneumococcal infection (13-26x) compared to the general population, with infections occurring at younger ages and leading to increased need for intensive care. Pneumococcal vaccination is safe in patients with SLE and does not show reduced immunogenicity. Pre-visit planning in the pediatric rheumatology clinic setting has been shown to improve rates of pneumococcal vaccination among patients with childhood onset SLE (cSLE). Despite these findings, patients with cSLE are often not up to date with recommended pneumococcal vaccination.

2. Objective/Aim of the study

The objective of this study was to increase the percentage of patients with cSLE seen in our pediatric rheumatology clinic who are up to date with recommended pneumococcal vaccination from 6% to greater than 30% in a 6-month period.

3. Project Design/Methods

Baseline pneumococcal vaccination rates were obtained via retrospective review of all cSLE encounters for the 3 months prior to the project start date. Patients were defined as "up to date" with pneumococcal vaccination if they were not eligible to receive any additional pneumococcal vaccine doses by the end of each encounter. PDSA methodology was used. Interventions included educational sessions with the multidisciplinary team, use of a published pneumococcal vaccination algorithm, pre-visit planning, and weekly email reminders to providers. A process measure of successful vaccination execution (proportion of encounters that vaccine was given out of all encounters where patient was eligible for vaccine) was also followed.

4. Results

Our goal of 30% of cSLE patients being up to date with pneumococcal vaccinations was numerically surpassed after 3 months, reaching 83% by month 6. Each cycle of interventions led to numerically improved vaccination rates, which trended consistently upward throughout the study period. The process measure of successful vaccination

execution closely mirrored the trend of our primary outcome (percentage of cSLE patients up to date with pneumococcal vaccination).

5. Conclusion

This project demonstrates that prior published algorithms and relatively simple PDSA cycles lead to reproducible improvement in pneumococcal vaccination rates in the high risk cSLE population.

Improving Rates of Pneumococcal Vaccination in Pediatric Rheumatology Patients with Systemic Lupus Erythematosus at Hospital for Special Surgery

Lauren Robinson, MD,[1,2] Leanne M. Mansfield, MD,[1,2] Jheel Pandya, MD,[1,2] Jessica Fennell, MD,[1,2] William Ambler, MD,[1,2] Alexa Adams, MD,[1,2] Sarah F. Taber, MD,[1,2] Karen B. Onel, MD,[1,2] Nancy Pan, MD[1,2]

[1]Hospital for Special Surgery, New York, NY, USA; [2]Weill Cornell Medicine, New York, NY, USA

Disclosures: Authors have no relevant financial relationship(s) to disclose.

INTRODUCTION

- Patients with Systemic Lupus Erythematosus (SLE) are at significantly increased risk for invasive pneumococcal infection (13-26x) compared to the general population, with infections occurring at younger ages and leading to increased need for intensive care. [1,2]
- Pneumococcal vaccination is safe in patients with SLE and does not show reduced immunogenicity. [3]
- Pre-visit planning in the pediatric rheumatology clinic setting has been shown to improve rates of pneumococcal vaccination among patients with childhood onset SLE (cSLE). [4]

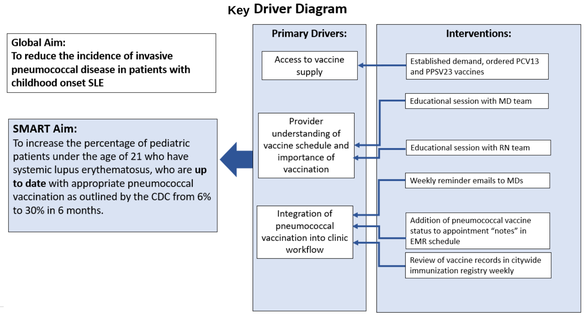
OBJECTIVES

- To initiate pneumococcal vaccination in our pediatric rheumatology clinic, starting with the cSLE population
- To work with a multidisciplinary care team (MDs, RNs, MAs, nurse managers, pharmacists) to implement a quality improvement (QI) initiative focused on vaccination and pre-visit planning

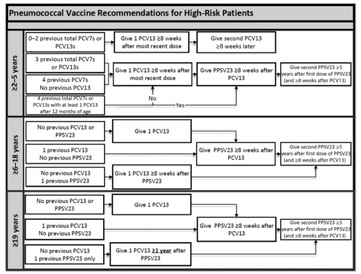
METHODS

- Baseline rate of cSLE patients up to date with pneumococcal vaccinations was obtained via retrospective review of all cSLE encounters for 3 months (May-June 2021) prior to the project start date
- Project dates: August 1, 2021 to February 1, 2022
- Patients were defined as “up to date” with pneumococcal vaccination if they were not eligible to receive any additional pneumococcal vaccine doses by the end of each encounter per Centers for Disease Control and Prevention (CDC) and Advisory Committee on Immunization Practices (ACIP) guidelines. [5]
- The plan-do-study-act (PDSA) method was utilized for this QI project
- Data was collected weekly and analyzed monthly
- Process measure was successful vaccine execution, defined as proportion of encounters that vaccine was given out of all encounters where patient was eligible for vaccine

INTERVENTIONS



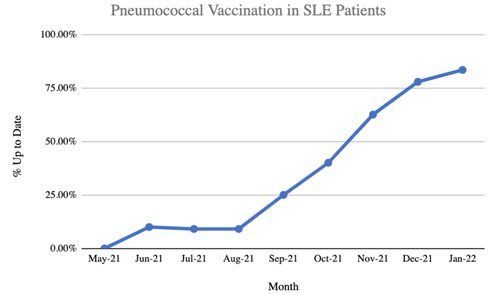
- PDSA Cycle #1:
  - Education
    - Educational session with MDs
    - Educational session with RNs
  - Ordering of vaccine supply
- PDSA Cycle #2:
  - Initiation of pre-visit planning
    - Fellows assess vaccination status ahead of weekly clinic using citywide immunization registry in EMR
    - Fellow determines which vaccination patient is due for, referencing published algorithm [4]
    - Fellows document the vaccine that is due in the “notes” section in the EMR schedule
- PDSA Cycle #3:
  - Weekly reminder emails sent to providers
  - Progress reviewed with MD team monthly

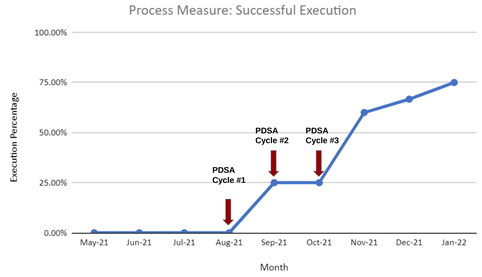


Sivaraman V, Wise KA, Cotton W, et al. Previsit Planning Improves Pneumococcal Vaccination Rates in Childhood-Onset SLE. *Pediatrics*. 2020; 145 (1):e20183141

OUTCOMES

- The mean baseline rate of cSLE patients seen in our clinic with up to date pneumococcal vaccination status per CDC recommendations was 6% in the 3 month period prior to our project start date
- Although there were too few data points to clearly identify a 6 point trend, following our initial interventions, there was a 5 point trend toward increasing percentage of cSLE patients who were up to date with pneumococcal vaccination
- Our goal of 30% of cSLE patients being up to date with pneumococcal vaccinations was numerically surpassed after 3 months, reaching 83% by month 6
- The process measure of successful vaccination execution closely mirrored the trend of our primary outcome (% of cSLE patients up to date with pneumococcal vaccination)





CONCLUSIONS

- We increased the percentage of pediatric patients under the age of 21 with cSLE who are up to date with appropriate pneumococcal vaccination from 6% to 83% in 6 months.
- The SMART aim was not only achieved, but exceeded with this QI project
- This project demonstrates that prior published [4] algorithms and relatively simple PDSA cycles lead to reproducible improvement in pneumococcal vaccination in the high risk cSLE population
- Efforts will continue to monitor for sustainability, with a plan for expansion of this project to include other immunosuppressed patient populations and clinics

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