

2022

UTHealth Quality Symposium 2022 Abstracts-2

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UTHEALTH QUALITY SYMPOSIUM 2022 ABSTRACTS-2, HOUSTON, TX

Poster 9: Evaluation of penicillin allergy labeling at Lyndon B. Johnson Hospital

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Emerging evidence suggests that patients with listed drug allergy have inferior outcomes than patients without listed drug allergies. Unverified penicillin allergy can lead to utilizing less efficacious antibiotics, increased length/cost of hospital stay, and adverse effects including antibiotic resistance and *Clostridium difficile* infections. Reports of penicillin allergy seldom reflect tested allergy. ~0.2% of patients that undergo drug allergy testing are truly allergic to the listed medication. This project's first aim was to assess the prevalence of penicillin allergy label in the Lyndon B. Johnson Hospital patient population: we found a 1.2% prevalence. We evaluated the reaction types and the most common reactions were rash (26%), hives (16%), angioedema/swelling (10%), and anaphylaxis (4%) – these values correlate with findings of a large, urban outpatient population. The most common subtype (36%) was undocumented/unknown reaction. There was a statistically significant difference in proportions of *C. diff*, MRSA, and VRE infections ($p < 0.001$) between patients with penicillin allergy label and without. Our data demonstrates a need for awareness and education regarding a complete drug allergy history. Most acute care hospitals, including LBJ Hospital, lack access to allergy specialists and penicillin allergy diagnostic testing. It is imperative that all providers have awareness of drug allergy assessments given the implications of unverified drug allergy labels and the fact that it is possible to de-label patients based on history alone. Part II of our study will focus on resident education of accurate drug allergy history/assessment to identify patients without IgE-mediated allergy and de-labeling.

Poster 10: Bone Health Monitoring and Management in Inflammatory Bowel Disease Patients in the Harris Health Gastroenterology Specialty Clinic.

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Introduction

Approximately 1.4 million people in the United States suffer from inflammatory bowel disease (IBD) and are at higher risk of developing osteoporosis and osteopenia than the general population. The prevalence of osteopenia and osteoporosis in patients with IBD ranges from 22%-77% and 17%-41%, respectively, with a 40 % higher relative risk of fracture. It is imperative that physicians recognize patients at risk for osteoporosis, screen appropriate patients, and prevent or treat accordingly. The primary objective of this study is to assess and improve the quality of bone health monitoring and management, which include both Vitamin D level and Dual-energy X-ray absorptiometry (DEXA) scan evaluation in patients with IBD in Harris Health (HH) Gastroenterology specialty (GI) clinic.

Method:

We retrospectively evaluated a total of 116 IBD patients seen in HH GI clinic from February 2019 to March 2020. We assessed the number of patients who had undergone DEXA scan and had their vitamin D level checked during clinic visits, which was found to be below the national standards. We developed a smart phrase (.IBDPH – Table 1) for electronic medical records, including the criteria for bone health screening and surveillance, vaccines in IBD, cancer surveillance, and nutritional management. This smart phrase also outlines the interval of bone health surveillance and provides a protocol for managing osteoporosis /osteopenia, making it easy for the team to implement it in a busy clinic. Each IBD patient chart is followed up after the clinic to assess if the smart phrase was used and protocol followed. Data was then prospectively collected for the month of July to November 2021.

Result:

Of 116 patients evaluated retrospectively from February 2019 to March 2020, 58 had undergone DEXA scan (50%) and 58 did not (50%). Of the 58 patients who underwent DEXA scan, 10 had osteoporosis (17.2%), 19 had osteopenia (32.8%) and 29 had normal bone density (50%). Vitamin D was checked in 98 patients (84.4%). There were 3 patients (2.5%) who developed fracture due to decreased bone density.

After the intervention in July 2021, 85 IBD patients were evaluated prospectively. Of the 85 patients, 73 patients (85.9%) had current DEXA scans, and 81 patients (95.3%) had current vitamin D levels. 13 (21%) patients were identified with osteoporosis and 27 (43.5) patients were identified with osteopenia. Both the study characteristics are summarized in table 2.

Conclusion:

With our intervention, we were able to increase DEXA scan compliance to 85.9% from 50% which translated into appropriate referral and treatment. We were able to identify the patients who are having osteopenia and initiate treatment to prevent osteoporosis and fracture which drastically improved the quality of life for these patients.

Table 1. IBD Preventive health smart phrase

<p>1) Vaccination History</p> <p>A. Hep A and Hep B immunity status:</p> <ul style="list-style-type: none"> - Check Anti- HBs total and Anti HAV to check for immunity if patient had vaccine before. - If non immune - Twinrix vaccine - First dose- Month 0 ***, Second dose - Month 2***, Third dose - 6 months*** <p>B. Annual influenza: Every year***</p> <p>C. Prevnar 13 and PPSV23 history: As per guidelines</p> <p>D. Tdap history: Within 10 years***</p> <p>E. HZ Vaccination history: Dose 1 - Day 0***, Dose 2: 2-6 Months from first dose ***</p> <p>2) Bone density evaluation</p> <p>A. Last Vit D 25 OH level: Check every year ***</p> <p>B. Last DEXA Scan: ***</p> <ul style="list-style-type: none"> - Baseline at the time of diagnosis or within 1 year - Every 2 yr if patient has osteoporosis at initial DXA scan and every year if they are being treated for osteoporosis. - Normal initial DEXA Scan - Check every 2-3 years in patients with risk factors (postmenopausal female, males more than 50 yr of age, history of vertebral fractures, steroid use within the prior 3 m, inactive disease but chronic steroid use of at least 1 yr in the prior 2 yr, inactive disease but maternal history of osteoporosis, inactive disease but malnourished or very thin, inactive disease but with amenorrhea). <p>Current Treatment: Mention Vitamin D replacement and osteoporosis treatment ***</p> <p>3) Colorectal Cancer surveillance: ***</p> <p>4) Tobacco Cessation: ***</p> <p>5) Last QuantiFERON-TB Gold test: ***</p>
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Table 2. The study characteristics of retrospective and prospective analysis

Characteristics	Retrospective data (N- 116)	Prospective data (N-85)
Age	46 +/- 12	47 +/- 17
Sex	Male – 57 Female – 59	Male – 49 Female – 36
Ethnicity	Caucasian – 36 African American – 15 Hispanic – 56 Other- 9	Caucasian – 17 African American – 19 Hispanic – 41 Other- 8
BMI	27 +/- 6	28 +/- 6

Type of IBD	Crohn's disease – 44 Ulcerative colitis – 72	Crohn's disease – 21 Ulcerative colitis – 61 Indeterminate colitis - 3
Medications	Biologics- 87 Immunomodulators – 27 Steroids – 15 5-ASA – 49	Biologics- 67 Immunomodulators – 21 Steroids – 43 5-ASA – 51
DEXA scan	Done – 58 (50%) Not done – 58 (50%)	Ordered – 73 (85.9%) Not ordered – 12 (14.1%)
DEXA scan result	Osteoporosis – 10 (17.2%) Osteopenia – 19 (32.5%) Normal bone density- 29 (50%)	Osteoporosis – 13 (21%) Osteopenia – 27 (43.5%) Normal bone density- 22 (35.5%)
Vitamin D	Checked – 98 Not checked – 18	Checked – 81 (95.3) Not checked – 4 (4.7)
Fracture	Present – 3 Not present – 113	Present – 3 Not present – 82

Poster 11: Improving Resident Education and Comfort with the EHR (Care4)

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Overview/Problem Statement:

Most of a resident's day is spent on our EMR Care4 for patient care and documentation, though we receive only 8 hours of formal Care4 training during intern orientation. Our aim is to develop standardized teaching for residents to improve both proficiency and efficiency.

Methods:

1. Pre-Survey given to Internal Medicine and MedPeds residents in 9/2021
2. Created a resident Care4 Guide available to residents through UT Share Drive
3. Delivered "Care4 Tips and Tricks" talk during resident noon conferences (1/31/22, 4/8/22, 4/25/22)
4. Post-Survey given to residents who attended our talks

Results:

Pre-intervention survey:

Results from 51 respondents. On a scale of 1-5, usefulness of existing Care4 training was 2.3; comfort level after 1 month was 3.4. 35% of respondents didn't feel confident until after 12 months. Only 60% of residents can add problems to a problem list, only 65% feel comfortable E-prescribing medications, and only 70% feel confident placing home health orders.

Post-intervention Survey:

Results from 29 respondents (41% interns). On a scale of 1-5, helpfulness of the Care4 Guide was rated 4.5. Confidence in Care4 use increased from 4.0 to 4.7 after intervention. *Figure 1* demonstrates self-reported knowledge of specific Care4 tasks from pre-survey and post-survey.

Conclusions:

Post-survey results show that a resident created Care4 Guide and "tips and tricks" talks during noon conference are effective in increasing resident confidence in Care4. Future PDSA cycles include rigorous training during intern orientation and monthly talks for reinforcement.

Before and After Care4 Teaching

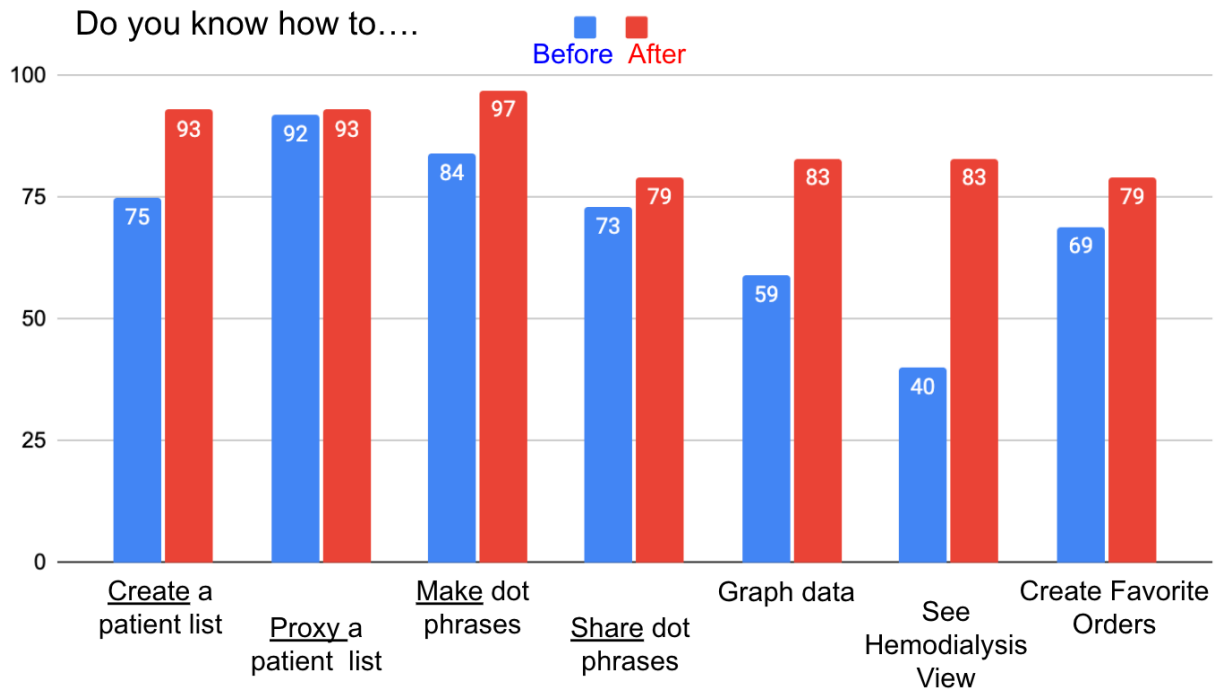


Figure 1: Knowledge of Tasks Before and After Care4 Teaching Session

Before data from Pre-Intervention Survey (09/2021).

After data from Post-Intervention Surveys given multiple dates after teaching sessions (1/31/22, 4/8/22, 4/25/22).

Poster 12: A Risk Adapted Strategy for Prevention of Tumor Lysis Syndrome (TLS): A Quality Improvement (QI) Project

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Background: TLS is a life-threatening oncologic emergency caused by increased spontaneous or therapy-related destruction of tumor cells. The best treatment of TLS is prevention.^{1,2} Our QI project objective is to prevent TLS by adhering to a protocol-based preventive approach using a standardized medical order set based on a risk-adapted prevention strategy.

Method: We have created an algorithm to prevent TLS outlining risk stratification with correspondent appropriate steps for each risk category. Patients at TLS risk are stratified into low, intermediate, and high-risk categories based on the underlying disease, WBC count, LDH, uric acid, renal function, and treatment modality. We are developing a computerized easy-to-use order set for TLS prevention collaborating with the Information Technology Department of Memorial Hermann at the Texas Medical Center. The order set will provide correspondent measures for each risk category including uric acid lowering therapies, specific fluids and electrolytes management, and laboratory monitoring. Using a schedule of consistent live presentations and a permanent easy access audio-visual tools for teaching strategy, we will educate providers on how to use the orders set in patients at risk for TLS.

Data Collection: The data collection will capture the incidence of TLS among hospitalized patients at MHTMC before (CY 2020-2022) and after incorporation of the order set. We hypothesize that a standardized evidence-based protocol should significantly reduce the incidence of TLS.

Conclusion: TLS is a common preventable oncological emergency. The implementation of a standardized order set for prevention of TLS should improve the care of patients at risk of TLS.

References

1. Cairo, M. S., Coiffier, B., Reiter, A., Younes, A., & TLS Expert Panel. (2010). Recommendations for the evaluation of risk and prophylaxis of tumour lysis syndrome (TLS) in adults and children with malignant diseases: An expert TLS panel consensus. *British Journal of Haematology*, 149(4), 578-586. doi:10.1111/j.1365-2141.2010.08143.x
2. Coiffier B, Altman A, Pui CH, Younes A, Cairo MS. Guidelines for the management of pediatric and adult tumor lysis syndrome: an evidence-based review. *Journal of clinical oncology*. 2008;26(16):2767-2778.

Poster 13: Case of the Mondays: Analysis of Day To Day GI Lab Utilization in a Safety Net Population

Tanmay Gaglani, MD; Keith R. Garrison, MD; Chase Miller, MD; Muhammed Vohra, MD; Nina Quirk MS3; Sean Ngo MS1; Scott Larson, MD PhD

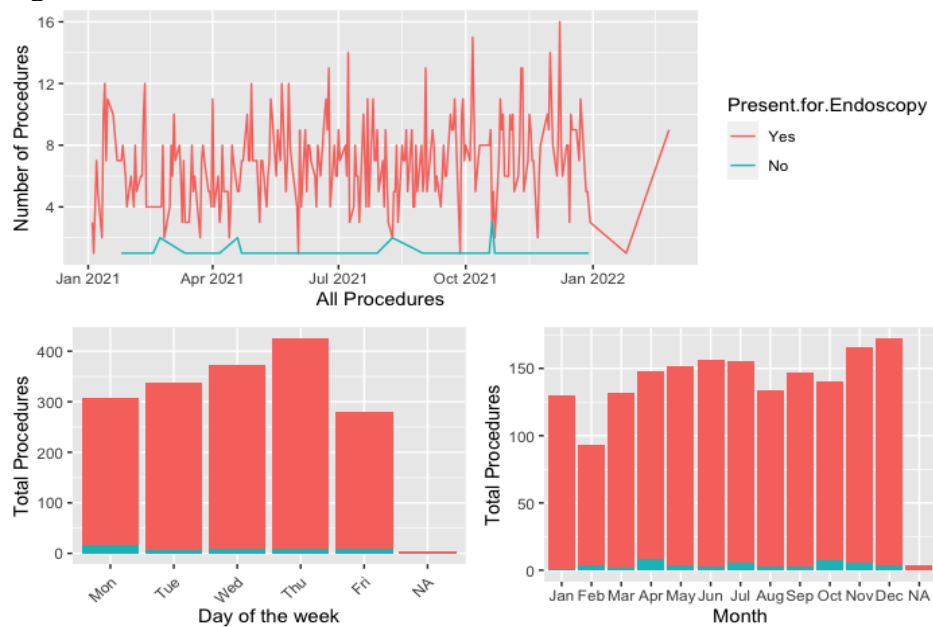
Introduction: Lyndon Baines Johnson General Hospital (LBJ) is one of the two major hospitals operated by the Harris Health System, a government entity that provides healthcare to the uninsured and underinsured population. Resource utilization is a key quality metric in this system as inefficiencies can reduce the accessibility of care. The no show rate for the LBJ outpatient GI lab was assessed to identify trends in patient's not completing outpatient endoscopic procedures.

Methods: Included patients needed to have completed a GI clinic appointment, conducted anesthesia screening, conducted COVID testing and not have been present for their outpatient endoscopic procedure. The no show rates were subsequently stratified based upon the days of the week to assess if a certain day was preferentially sub-optimized from a utilization perspective.

Results: Data was collected from 1761 endoscopic procedures conducted in the study period from January 2021- December of 2021 (Figure 1). When compared to other weekdays, patients were 2.93 times more likely not to show for endoscopy on Mondays ($P < 0.001$).

Conclusions: There may be various factors influencing the increased rate of attrition on Mondays. We plan to conduct further quality improvement interventions including implementation of text message reminders or Thursday morning phone calls for Monday procedures.

Figure 1:



Poster 14: Improving Resident Involvement in Variance Reporting

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Overview/Problem Statement:

Submitting safety events (Variance Reports) is a critical component of creating a culture of safety, but few physicians (residents/fellows) are submitting variances. We aimed to increase trainee participation in safety event submissions.

Methods:

- Surveyed Internal Medicine (IM) and Pediatrics (Peds) residents regarding Variance submissions (1/2022)
- Developed a “Variance Teaching Session” presented during IM and Peds conferences (1/31/22 and 2/4/22)
- “How to Variance” Cards placed on computers in IM/Peds workrooms (2/2022 - 3/2022)
- Obtained epidemiologic data from Variance submissions on reporting patterns (1/2021 - 3/2022)

Results:

Intro Survey: Results from 119 respondents. Only 34% have submitted a variance. IM/Prelim residents were less likely to report knowing what a Variance was (75% v. 92% Peds), less likely to know how to submit (26% v. 46% Peds) and less likely to have reported submitting (12% v. 41% Peds).

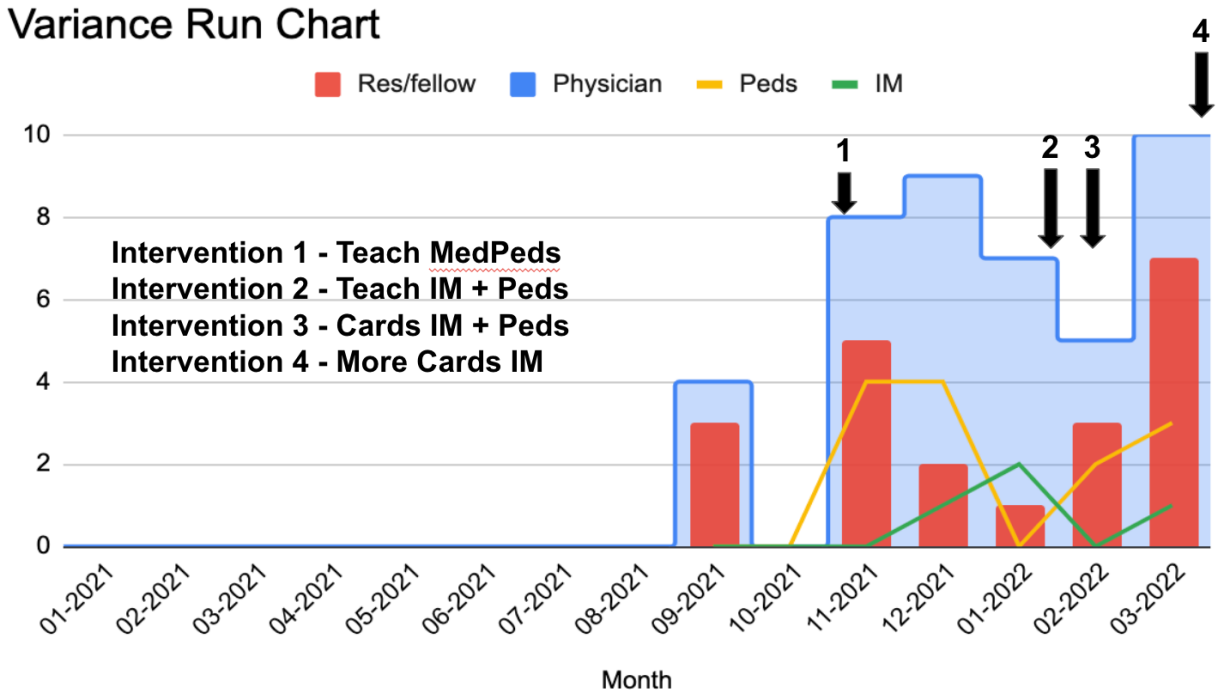
Barriers to submission: Knowing where to submit, lengthiness of submission form, time needed to submit, fear of retaliation, and unclear outcomes from submissions

Variance report data: Over 15 months (01/2021 - 03/2022) mean TMC-MHH submissions (per month) $\mu = 775$, Physician submissions $\mu = 3$. Major Categories: 49% Care Management, 16% Professionalism, 12% Medications. 49% Physician submissions were reported by residents/fellows, and of those 62% were Peds and 20% IM.

Conclusions:

Our intervention walked residents through the steps of submitting Variances. Variance reporting data showed that resident/fellow reporting increased after our interventions, though IM residents were still less likely to report than Peds residents.

Figure 1: Variance Run Chart



Poster 15: Measuring the educational effect of transforming the Morbidity and Mortality conference into a “Culture of Safety” conference

Lindsey Farmer, Nathan Box, Jorge Irizarry-Caro, Maneera Chopra, Akshitha Yarrabothula, Austin Armstrong, Christen Dillard, Kelly Galvis, Raamis Khwaja, Saradadevi Thanikachalam, Ameer Amin, Omowunmi Aibana

Background: All residencies are required to host Morbidity and Mortality conferences (M&Ms) as a key piece of the quality improvement curriculum. Traditional M&Ms have a negative connotation from the resident perspective. The UT Houston Internal Medicine (IM) residency rebranded their M&Ms to “Culture of Safety” (CoS) conferences in order to promote a safe educational environment for the peer review process. The goals of this change were to prompt open discussion and critical review of adverse events, increase awareness among IM residents about quality improvement processes, and identify actionable solutions to prevent future errors.

Methods: CoS conferences were carried out in a standardized format using the following structure: overview CoS goals, review of the previous case, presentation of the current case (with involved residents remaining anonymous), small and large group discussions, and presentation by a faculty member over a related medical learning point. Surveys were administered via Qualtrics before and after the conferences to measure changes in participant confidence in managing the topic at hand.

Results: The percent of participants reporting an improvement in confidence to manage the topic reviewed at each conference increased in the post surveys (Table 1). We identified barriers related to low survey participation rates.

Conclusions: Overall, the educational piece of CoS conference was effective in this new format. Further studies on resident satisfaction are warranted.

Table 1. Survey results for individual conferences with “Positive response” (i.e. Score ≥ 3 on 5-point graded scale)

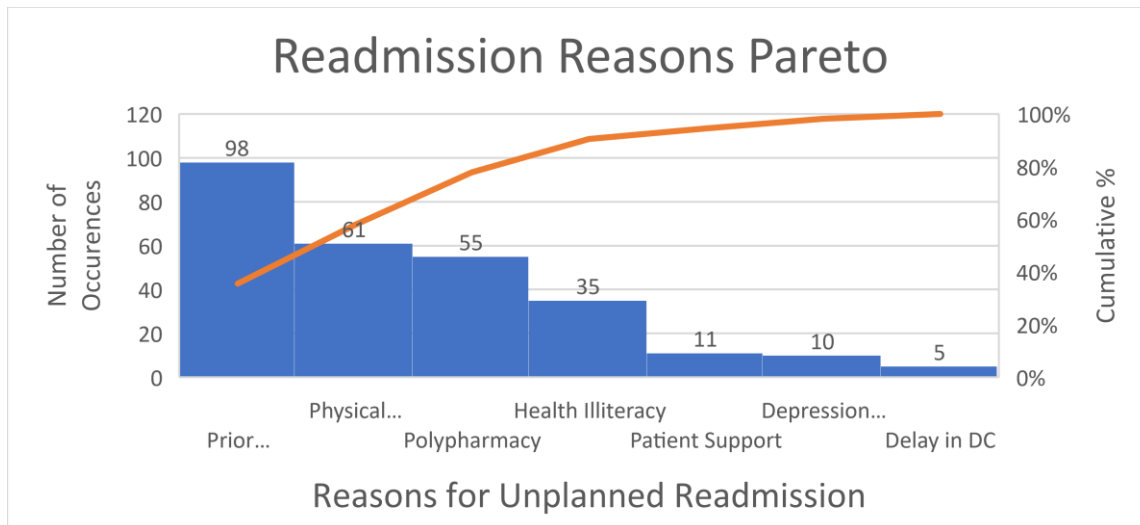
Date	Topic	Pre-conference Survey	Post-conference Survey
9/13	Management of hypercapnic respiratory failure, Beers criteria, and safe handoffs	n=11	n=7
	Positive responses to "How comfortable are you with acute hypercapnic respiratory failure?"	36.36%	85.71%
	Positive responses to "How comfortable are you prescribing high- risk medications in the elderly?"	18.18%	57.14%
	Positive responses to "How comfortable are you escalating care/transferring to the MICU?"	45.45%	71.43%
10/4	Management of advanced vascular access	n=7	n=27

	Positive responses to "How comfortable are you with recognizing the different types of advanced vascular access, the indications for each, and when to remove them?"	0.00%	Not asked
	Positive responses to "Do you feel this conference helped your knowledge of the lines used for hemodialysis?"	Not asked	85.19%
	Positive responses to "After having this conference how do you feel that your ability to identify lines in a patient and manage them has changed?"	Not asked	96.30%
12/6	Management of oliguric renal failure and patients with pacemakers requiring central access	n=24	n=27
	Positive responses to "How comfortable do you feel recognizing early oliguric renal failure?"	45.83%	66.67%
	Positive responses to "How comfortable do you feel placing central lines in the medicine floors?"	20.83%	29.63%
	Positive responses to "I feel confident managing the care of a patient with a pacemaker."	16.67%	Not asked
	Positive responses to "How useful was this presentation?"	Not asked	85.19%
1/10	Management of oncologic emergencies	n=25	n=6
	Positive responses to "How comfortable are you with managing tumor lysis syndrome on the floors?"	16.00%	16.67%
	Positive responses to "How comfortable are you with managing differentiation syndrome on the floors?"	4.17%	0.00%
	Positive responses to "How comfortable are you with managing leukostasis on the floors?"	12.00%	0.00%
	Positive responses to "How comfortable are you with managing DIC on the floors?"	24.00%	33.33%
2/7	Patient level of care when admitting from the emergency room	n=27	n=13
	Positive responses to "I understand the difference between observation and inpatient status"	70.37%	92.31%
	Positive responses to "When you disagree with the ED regarding either an admission or the patient status (floor vs IMU vs ICU), do you feel comfortable discussing this with them?"	48.15%	Not asked
	Positive responses to "I feel confident that I would know what to do if I disagreed with the ED regarding either an admission or the patient status (floor vs IMU vs ICU)."	Not asked	100%

Poster 16: Reducing 0-7 Day Hospital Readmissions Through Improving Inpatient to Outpatient Care Coordination

Samuel Mackoff, MD

Hospital readmissions are an important complication of inpatient care as they have a significant impact on patient outcomes and resource consumption.^{1,2,3} The Better Outcomes for Older Adults Through Safe Transitions (BOOST) score is a risk assessment tool used to reduce hospital readmissions. In this project, we seek to use the BOOST score to examine common characteristics among readmissions to academic general medicine teams at Memorial Hermann Hospital. Retrospective chart review of 0-7 day readmissions between May and October 2021 revealed the most common barriers to be physical limitations (61%), polypharmacy (55%), and afternoon discharge (66%). We plan on further analyzing this data to determine additional characteristics including most common diagnosis. We will then devise and implement an intervention to better facilitate discharge planning for high risk patients with the goal of reducing readmission rates among these teams by 50% within a 6-month period.



Durbin Jr, C.G. and Kopel, R.F., 1993. A case-control study of patients readmitted to the intensive care unit. *Critical care medicine*, 21(10), pp.1547-1553.

Siddiqui, Z., Berry, S., Bertram, A., Allen, L., Hoyer, E., Durkin, N., Qayyum, R., Wick, E., Pronovost, P. and Brotman, D.J., 2018. Does Patient Experience Predict 30-Day Readmission? A Patient-Level Analysis of HCAHPS Data. *Journal of hospital medicine*, 13(10), pp.681-687.

Upadhyay, S., Stephenson, A.L. and Smith, D.G., 2019. Readmission rates and their impact on hospital financial performance: a study of Washington hospitals. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 56, p.0046958019860386.

Poster 17: Implementing a Standardized Electronic Medical Record Order Set to Reduce Emergency Department Wait Times for Sickle Cell Patients in Acute Vaso-Occlusive Crisis

Ijele Adimora, Ugochi Ebinama, Alexandria Koney, Naveen Subramanian, Reid Davison, Ji Lin, Evan Abdullah, Jordan Thomas, Shelby Irwin, Arthi Sridhar, Modupe Idowu

Background:

Sickle cell disease (SCD) is a hemoglobinopathy that gives rise to acute pain episodes. Vaso-occlusive crises are the most common cause of emergency department (ED) visits and hospitalizations for SCD, and have a significant effect on morbidity¹.

Delay in appropriate pain control results in increased morbidity and decreased patient satisfaction. Our project was designed to address prolonged wait times in the ED for SCD patients presenting with acute vaso-occlusive crisis.

Methods:

We extracted data from FirstNet on patients seen at Memorial Hermann ED from June-September 2021 for acute vaso-occlusive crisis. We collected data on SCD genotype, ED check-in time, time at which intravenous fluids, non-opioid pain medications, and opioid medications were administered, and patient disposition. Our intervention addressing current wait times is ongoing. We intend to gather post-intervention data upon its conclusion.

Results:

Out of 75 patients with SCD, 30 (48%) received opioids prior to discharge. 14 (18.6%) patients received a non-opioid pain medication, and 31 (41%) of patients did not receive any pain medication prior to their disposition. The mean time of opioid administration was 5.44 hours, and the median time was 4.12 hours. The mean time of non-opioid pain medication administration was 4.65 hours, while the median time was 1.94 hours.

Conclusion:

The wait times for SCD patients at our institution are not in line with the current guidelines^{2,3} dictating management of acute vaso-occlusive crisis. It remains to be seen whether our intervention can improve the wait times of SCD patients in the ED setting.

References:

Schatz, A. A., Oliver, T. K., Swarm, R. A., Paice, J. A., Darbari, D. S., Dowell, D., ... & Carlson, R. W. (2020). Bridging the gap among clinical practice guidelines for pain management in cancer and sickle cell disease. *Journal of the National Comprehensive Cancer Network*, 18(4), 392-399.

Poster 18: Perspectives On Transition Readiness Among Youth With Sickle Cell Disease and Their Caregivers

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2. Dept of Preventive Medicine and Population Health, University of Texas Medical Branch
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Background: Disparate mortality rates in young adults with sickle cell disease (SCD) correspond to poor outcomes during transition to adult care. To assess the baseline needs of our local population, we measured transition readiness of youth with SCD and their caregivers.

Methods: This was a pilot study of youth with SCD and their caregivers at Texas Children's Hospital in 2021. Standardized transition readiness assessments (TRAs) were administered using REDCap and scored on unique Likert scales: transition importance (0-10), transition confidence (0-10), health and healthcare (0-40), and medicines (0-6). A mean score for each TRA section was calculated for youth and caregivers, among matched cases. Wilcoxon signed-rank test was performed to compare youth and caregiver scores. Correlations between these scores were assessed using Spearman's correlation coefficient.

Results: Eleven youth-caregiver dyads completed TRAs. Youth ranged in age from 14-19 years. The mean scores of transition importance, transition confidence, health and healthcare, and medicines among youth with SCD were 8.27, 5.82, 28.55, and 5.64, respectively. There were no statistically significant differences between youth and caregiver TRA scores. There was a positive correlation between youth transition confidence and caregiver transition confidence, which was statistically significant ($p=0.04$). No significant correlations were observed between youth and caregiver scores for other sections.

Conclusions: Transition readiness surveys provide an opportunity to assess perspectives of youth with SCD and their caregivers to inform our transition-focused quality improvement goals. The next steps are to gather additional surveys and organize stakeholder focus groups to enhance transitions between pediatric and adult providers.

Poster 19: Hyperbaric Oxygen Therapy (HBOT) for Irradiation Cystitis with Hematuria.

Joseph G. Nevarez, MD, Colett Asombang, NP-C

McGovern Medical School, UTHSC-H

Over 1 million people in the U.S. are diagnosed with invasive cancer annually. Approximately half receive radiation therapy and ~ 5% will incur serious complications such as Irradiation Cystitis (IRC) due to Late Effects of Radiation (LER). IRC can cause hematuria, urinary obstruction, anemia and exacerbate comorbid conditions. There is no satisfactory conventional treatment for IRC. Current treatment includes continuous bladder irrigation (CBI), transfusions, bladder fulguration, nephrectomy, and cystectomy. These have significant potential complications and are mostly only temporizing.

Hyperbaric Oxygen Therapy (HBOT) is approved by the Center for Medicaid & Medicare Services for treatment of IRC. Studies have found improved symptoms and few side effects with HBOT. Design and execution of randomized, controlled trials for HBOT are difficult and adequate trials are lacking. The Undersea Hyperbaric Medical Society has encouraged reviews to help support evidence of therapeutic effect with HBOT

Retrospective review of individuals who received HBOT for IRC due to LER. Patients who completed HBOT were assessed for reduction of major events such as hematuria, hospitalizations or invasive procedures as well as side effects or complications related to HBOT.

Primary:

HBOT reduced or eliminated need for all major interventions reviewed: ED visits, hospitalizations, CBI, bladder fulguration, transfusions, nephrectomy, or cystectomy.

Secondary:

HBOT was not associated with known major side effects.

HBOT is an approved therapy which is safe and demonstrated reduced ER and hospital admissions, transfusions and invasive procedures.

These findings should inform primary care physicians and specialists involved in the care of patients suffering with IRC.

Poster 20: Reducing Potential for Transmission of COVID-19 During Hyperbaric Oxygen Therapy

Joseph G. Nevarez, MD, Colett Asombang, NP-C
McGovern Medical School, UTHSC-H

In Hyperbaric Oxygen Therapy (HBOT) patients breathe 100% oxygen via a self-contained breathing apparatus, an "oxygen hood" within confines of an enclosed chamber. To decrease oxygen toxicity risk, a rare but serious side effect, the hood is temporarily removed during a planned "air break". During an air break the patients and staff are in proximity and exposed to shared chamber air.

COVID-19 is a novel coronavirus transmitted by respiratory droplets. Infected individuals may be asymptomatic or minimally symptomatic, yet it is highly contagious with significant morbidity and mortality. Risk of transmission during air-breaks, especially at the pandemic onset, was not well known. Exposure of patient and staff in proximity during air breaks posed a theoretical risk desirable to avoid while not increasing risk of oxygen toxicity.

The "Kindwall Treatment Table", with no incorporated air breaks, was substituted for critical patients normally prescribed U.S. Navy Treatment Table #5 at a depth of ~3 ATA. The air break was eliminated without otherwise altering the standard "Wound Healing Treatment Table" prescribed for non-emergent conditions requiring only 2ATA.

Primary:

We reviewed episodes of seizure with and without airbreaks.

Incidence of seizure:

without air break - 1 seizure in 2145 treatments

with air break - 1 seizure in 3382 treatments

Secondary:

No seizures seen in either high risk group treated for carbon monoxide toxicity.

Number of HBOT prescribed was not affected.

Eliminating air-breaks did not appear to alter treatment effectiveness, is safe and a reasonable measure to mitigate risk of COVID-19 transmission during HBOT.