Abstract 22 Figure 1

Objectives Our goal was to complete and document an ATO for 90% of eligible patients hospitalized on general pediatric medicine or surgery services within 12 months.

Methods A multidisciplinary quality improvement team developed an ATO process and electronic documentation

tool. Clinical pharmacists were responsible to initiate and document an ATO for pediatric medicine or surgery patients on or before the 5th calendar day of therapy. Interventions included education of pharmacists and physicians, as well as ATO audit and feedback to the pharmacists. We used statistical process control methods to track monthly rates of ATO completion from October 2017 through April 2019.

Results Among 647 eligible antimicrobial courses over the 17-month study period, the mean monthly documentation rate increased from 54.6% to 83.5% ($p < 0.001$) (figure 1). The mean ATO documentation rate increased from 32.8% to 74.2% ($p < 0.001$) for the pediatric medicine service and from 65.0% to 88.1% for the pediatric surgery service ($p = 0.006$). Among 302 notes assessed for quality, 35.8% had all the required data fields completed. A tentative antimicrobial stop date was the data element completed least often (49.3%) (tables 1 and 2).

Conclusions We successfully implemented a pharmacist-driven ATO, highlighting the opportunity for pharmacists to play an active role in antimicrobial stewardship. Defining treatment duration remains an important antimicrobial stewardship target.

Abstract 22 Table 1 Adjusted rates and odds ratios of note documentation by day of antimicrobial initiation.

Variable	Adjusted Documentation Rate, % (95% CI)	Adjusted OR (95% CI)	p value
Day of the Week			
Sunday	52.1 (41.6 to 62.4)	Reference	
Monday	64.9 (54.1 to 74.3)	1.70 (0.92 to 3.12)	0.089
Tuesday	71.5 (60.4 to 80.6)	2.31 (1.20 to 4.44)	0.012
Wednesday	78.8 (69.3 to 86.0)	3.42 (1.78 to 6.57)	<0.001
Thursday	82.8 (73.0 to 89.6)	4.42 (2.17 to 9.02)	<0.001
Friday	62.0 (50.9 to 71.9)	1.50 (0.81 to 2.77)	0.196
Saturday	46.5 (35.9 to 57.4)	0.80 (0.44 to 1.46)	0.464
Any (day 4 is holiday)*	28.9 (9.0 to 62.7)	0.37 (0.09 to 1.63)	0.191
Service			
Pediatric Surgery	72.9 (67.1-78.0)	Reference	
Pediatric Medicine	49.9 (41.9-58.0)	0.37 (0.26-0.53)	<0.001

OR, odds ratio

*Antimicrobial initiated on any day, when day 4 of therapy occurred on a holiday

Abstract 22 Table 2 Completion rates of the antimicrobial time-out note data fields.

Data Field	Number (Percent) Completed			p value†
	Total (N=302)	Pediatric Medicine (n=78)	Pediatric Surgery (n=224)	
First date of effective therapy	293 (97.0)	76 (97.4)	217 (96.9)	0.802
Tentative stop date	149 (49.3)	70 (89.7)	79 (35.3)	< 0.001
Adverse reaction/allergy	295 (97.7)	77 (98.7)	218 (97.3)	0.480
Enteral therapy exclusion	232 (91.0)*	36 (85.7)*	196 (92.0)*	0.192
Treatment indication	286 (94.7)	74 (94.9)	212 (94.6)	0.601
Clinician documented	267 (88.4)	57 (73.1)	210 (93.8)	< 0.001
All data fields completed†	108 (35.8)	42 (53.8)	66 (29.5)	< 0.001

† Chi-square test, comparing pediatric medicine to pediatric surgery

* Excludes patients already receiving enteral therapy at the time of the ATO. Total n=255, Pediatric Medicine n=42, Pediatric Surgery n=213

† Patients already receiving enteral therapy at the time of ATO were considered to have all data fields completed if the other five data fields were completed

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INCREASING CAPACITY FOR AUTOLOGOUS STEM CELL TRANSPLANTS BY OUTPATIENT CONDITIONING THERAPY: A QUALITY IMPROVEMENT STUDY

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Background Autologous Stem Cell Transplant (ASCT) patients have an inpatient length of stay (LOS) of 21–28 days. In a resource constrained environment, this leads to increasing wait times and limited ability to do transplants. We tried to create additional capacity for transplants at our institution by

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DECREASING THE LENGTH OF STAY IN ASCT PATIENTS.

Abstract 23 Figure 1

Abstract 23 Figure 2

Abstract 23 Figure 3

Abstract 23 Figure 4

Abstract 23 Figure 5

studying the root causes of this problem and designing improvement in our own resource constrained environment.

Objectives Our main objective or Big Dot aim was to increase the capacity of ASCT by 20% by Dec 2020 (figure 1). The project aim was to decrease the LOS in ASCT patients by 2 days by May 2020.

Methods A major root cause of increased LOS of ASCT patients was identified (figures 2, 3) and was targeted for improvement. The first PDSA ramps consisted of conversion of IP PowerPlan to OP for administration of Chemotherapy. The second PDSA ramps consisted of creation of a modified CoSTARS assessment tool used to determine the risk pathway for readmissions. The subsequent PDSA ramps consisted of education of Incharge Nurses, trainees and patients. The data of LOS was plotted on a Shewart Process Control Chart 'I Chart' using QI Macros software.

Results The median LOS at the baseline was 24.5 days (range: 16–42) (figure 4). After the implementation of the change idea on 10 Dec 2019 till 1 April 2020, the LOS for ASCT decreased to 15.3 days (range: 14–17) (figure 5). The capacity for ASCT in our institution increased by 15% during the study period.

Conclusions Increase in the capacity for ASCT by decreasing the LOS by change of IP Conditioning Chemotherapy to OP setting is possible and feasible in QI framework. This is an

ongoing project at the time of abstract submission and full outcome of this study would be presented in detail at the IHI conference.

24 DEVELOPING A STATEWIDE HOSPITAL-BASED QUALITY IMPROVEMENT INITIATIVE TO BUILD HOSPITAL CAPACITY TO ADDRESS BIRTH EQUITY

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Background There are significant racial disparities in maternal mortality in Illinois (IL), with black women six times as likely to die of a pregnancy-related condition as white women. The Illinois Perinatal Quality Collaborative (ILPQC) is developing a

statewide hospital-based Birth Equity quality improvement (QI) initiative to build hospital quality improvement capacity using the IHI Breakthrough Series to improve birth equity through collaborative learning opportunities, rapid response data, and QI support.

Objectives Our objective is to describe the process ILPQC is using to develop the Birth Equity initiative for implementation.

Methods IL birthing hospitals voted to implement a Birth Equity Initiative in late 2018. ILPQC engaged stakeholders to identify Birth Equity as a statewide improvement initiative. We identified 5 interdisciplinary initiative clinical leads who provide clinical expertise on initiative development. ILPQC reviewed 3 state-based PQC's approaches to provide birth equity support to hospital teams, resources from 21 organizations, and 24 peer reviewed articles. We identified draft aims, measures, and tools to facilitate system-level changes that lead to clinical culture change.

Abstract 24 Table 1 Working key drivers, strategies, and measures for the Illinois perinatal quality collaborative birth equity initiative

Key Driver	Strategy	Possible Measure
1. Address social determinants of health during prenatal, delivery, and postpartum care to improve birth equity	1.1 Map resources that provide services for patients with identified social determinants of health, perinatal mood, trauma, substance use disorder, and social support and post for all hospital and outpatient provider clinic locations	Structure measure:% of hospitals with resource map in place (or working on it, or not started) and provided to all outpatient provider clinic locations
	1.2 Implement a brief social determinants of health tool and facilities coordinated connection to community resources and follow up	Process measure:% of sample of patient charts with social determinants screen/checklist completed and warm handoff facilitated prenatally and on L&D
2. Utilize race/ethnicity medical record and quality data to improve birth equity	2.1 Implement protocols for accurate collection and recording of race/ethnicity data based on patient self-reported race	Structure measure:% of hospitals with protocol for accurate collection and recording of race/ethnicity data in place (or working on it, or not started) and shared with all outpatient provider clinic locations
	2.2 Implement, review, and share with all providers and staff reports and dashboards of key maternal health measures by race/ethnicity	Structure measure:% of hospitals with provider and staff reports and dashboards in place (or working on it, or not started) and shared with all outpatient provider clinic locations
	2.3 Create a protocol for systematic review of hospital's patient satisfaction data stratified by patient race/ethnicity with feedback process to clinical team	Structure measure:% of hospitals with protocol in place (or working on it, or not started) and shared with all outpatient provider clinic locations
	2.4 Implement strategies for incorporating discussion of social determinants and discrimination in hospital maternal mortality reviews	Structure measure:% of hospitals with strategy for incorporating discussion of social determinants and discrimination in hospital maternal mortality reviews
3. Engage patients, birth partners, and communities to improve birth equity	3.1 Identify at least one patient advisor for your hospital quality improvement (QI) team	Structure measure:% of hospital teams with a patient advisor in place (or working on it, or no started) on their hospital QI team.
	3.2 Implement a protocol on how your hospital will engage doulas as partners in labor and delivery	Structure measure:% of hospitals with a protocol in place (or working on it, or not started) for engaging doulas as partners
	3.3 Implement and review and share data from a patient-reported experience measure (PREM)	Structure measure:% of hospitals with the PREM in place (or working on it, or not started) and being utilized to improve care Process measure:% of patients in monthly sample with PREM completed and documented
	3.4 Develop and provide patient education on urgent Maternal warning signs during pregnancy and in the year after delivery	Structure measure:% of hospital teams with patients receiving key education materials prenatally and prior to hospital discharge Process measure:% of patients in monthly sample with documentation of receiving Maternal Warning Signs education
4. Engage and educate providers and nurses to improve birth equity	4.1 Educate all providers on implicit bias and how they can address it in clinical care	Process measure:% of providers and nurses completing implicit bias training
	4.2 Educate providers/nurses in L&D, triage, emergency department, postpartum units on importance of listening to patients and patients feeling heard	Process measure:% of providers/nurses completing listening task with patients in monthly sample OR% of providers/nurses trained on listening to patients
	4.3 Implement hiring strategies to diversify providers and staff	Structure measure:% of hospitals with policy for addressing implicit bias in hiring health care providers