Sturgeon Community Hospital (SCH) –Emergency Department General Internal Medicine (GIM) Physician Consultation and Triage Process

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Strategic Clinical Improvement Committee – Partnerships in Action

EPIQ

Define Opportunity

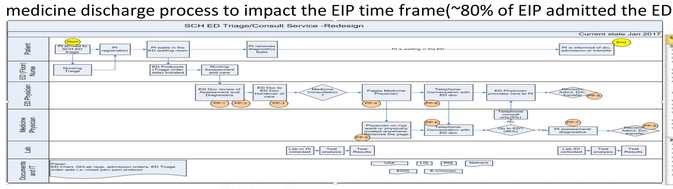
Background, Problem Statement, Goal Statement: The Sturgeon Community Hospital (SCH) has seen a steady increase (approximate 40% increase in in the last two years) in the number of emergency visits, due to multiple factors. Aging, frailty, and medical complexity as well the completion of city highway infrastructure are key determinants of patients demanding medical care at the SCH as such the need for a Medicine Emergency department (ED) consultation is growing. In 10 months (Aug 2015-June 2016) 3469 consultation calls were made resulting in 2604 medicine SCH admissions.

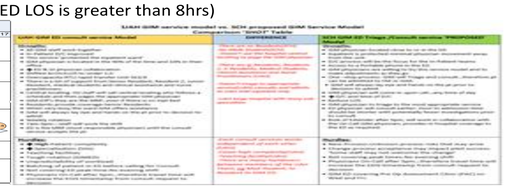
Problem Statement: Currently, within the SCH ED the medicine triage consultation (consult request to decision to admit) is delayed (out of the 2 hours AHS target) and patients are often not assigned to the most appropriate medical service team. Approximately ~2 hours/day a Medicine Physician is removed from the inpatient ward to perform ED consultations between the hours of 0700-1700. Delaying inpatient care and discharge processes. ED physicians faced with highly complex patients often debate which medical service should be consulted and batching of Medicine consultations requests result. All of the aforementioned, hinders the ED assessment timeframe, increases both workload and admitted patient boarding time in the ED.

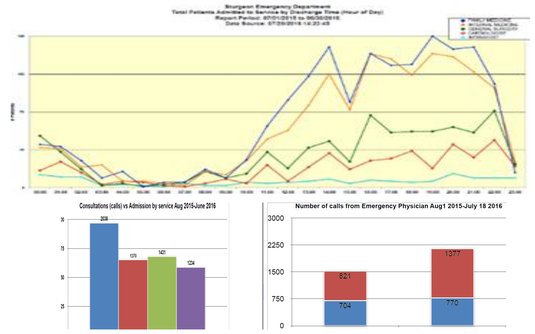
Aim Statement: Project aims to improve the Medicine patient flow in the SCH ED by expediting medical consultation/disposition and allocation of admitted patients to the most appropriate medical service team. May 31, 2017 develop an ED Medicine triage and consultation service with a % reduction in the following EDIS Timestamp measures:15% reduction in Door to Doctor,15% reduction Doctor to consult, 20% reduction in Consult time and 15% reduction in EIP LOS.

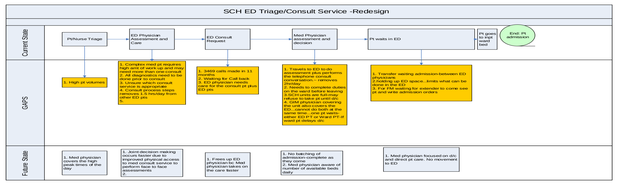
Build Understanding

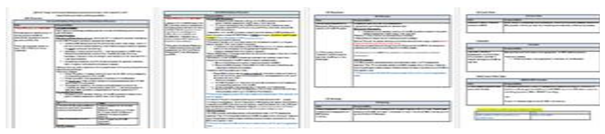
Process Assessment: Project team developed a cross functional map, reviewed EDIS data, performed a cycle time analysis of GIM inpatient physician, Gemba walk and comparison analysis of the UAH ED consultation process and performed an 8-waste analysis. Salient process learning include but not limited to: Consultations to more than one medical service occurs, holding patients in the ED-batching patient's in ED to be seen all at once, patients waiting to see physicians, ED physician waiting on medicine physician, Patients waiting on a ward bed, No dedicated space for GIM in ED with Phone/PC, After 5:00 pm medicine physician is not located in the SCH-travel time is required, Medicine Physician spends ~2hrs per day shift walking to ED and ED physician spends approximately 1.5hrs per day shift involved in the consultation process. Based on the baseline data the areas for opportunity include a medicine consult service covering peak ED time frames (1000-2300) within the ED also in partnership with a strong inpatient medicine discharge process to impact the EIP time frame(~80% of EIP admitted the ED LOS is greater than 8hrs)











Act to Improve

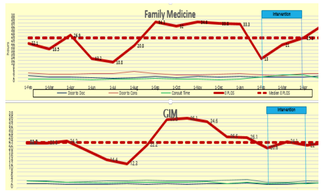
Improvement Selection and Implementation Plan: PDSA #1 Cycle-Feb 6-April 30, 2017

ED Time Frame	Intervention
Door to Doc: Time from triage to being seen by ED physician	○ Involvement in fewer telephone consults, ~1.5hrs per day given back to ED physician
Doc to Consult: Time from ED physician to medicine physician *wastes removed-ED physician waiting for GIM, batching of consults, reduce the ED to GIM physician handover time, multiple consults, patients waiting to see medicine physician	○ GIM ED Physician covers admissions to one of the four medicine services-**No** telephone consultations/admissions-**All hands** on Patient assessments ○ GIM ED coverage schedule-7:00 am-5pm Monday-Friday -located close to the ED and On-call GIM ED-5pm-7am (GIM Physician covers 0900-5pm on the ward and covers GIM ED on-call 5 days in a row) with Extender support when applicable ○ Role and responsibilities of all impacted care providers developed ○ One stop triage and consultation with support from other medicine subspecialties ○ EDIS timestamps entered by ED Unit Clerk ○ Efficiently decides and assigns EIP's to the specific wards ○ GIM ED hand over to On-Call GIM physician at 5:00 pm ○ Joint care plan developed between ED and GIM physician-increases communication and collaboration
Consult time: Time from medicine assessment to consult decision	○ Standard admission order
EIP LOS: Time from decision to admit to ED departure *waste removed- Patients waiting on a ward bed	○ GIM physicians assigned to inpatient wards not taking ED consult calls or going to ED(~2hrs/day given back to GIM ward physicians) focus on discharges-does not need to leave the ward

PDSA ED Physician feedback-captured real time- Google survey reviewed weekly by project team

ED Timestamps	Baseline data 2016						PDSA data 2017						Change (Hours and %) (NC=no change)					
	Feb		March		April		Feb		March		April		Feb		March		April	
	FM	GIM	FM	GIM	FM	GIM	FM	GIM	FM	GIM	FM	GIM	FM	GIM	FM	GIM	FM	GIM
Door to doc	3.0	2.0	2.4	1.9	2.3	1.8	2.2	1.8	2.2	1.8	2.3	2.4	27%↓	10%↓	8%↓	5%↓	NC	33%↑
Door to Con	4.5	3.4	3.8	3.4	3.7	2.9	3.6	2.9	3.2	2.9	4.2	3.4	20%↓	15%↓	16%↓	15%↓	14%↑	17%↑
Consult time	1.0	3.4	0.9	3.2	1.2	2.8	2.2	2.1	3.6	2.5	2.9	2.1	120%↑	38%↓	300%↑	22%↓	142%↑	25%↓
EIP LOS	22.1	23.2	18.5	23.3	26.9	24.2	13.0	20.6	21.0	24.1	26.3	21.6	41%↓	11%↓	14%↑	3.4%↓	2%↓	11%↓

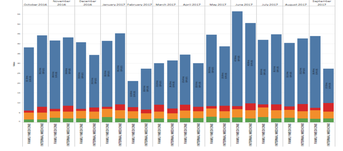
The ED timestamps were all positively impacted for the most part. FM consult time increased which was expected as all FM patients were physically seen by the GIM physician in the PDSA Model vs. the baseline practice of telephone consultation. April timestamp-Door to doc and Door to consult suggest possible higher patient volume or a ED physician schedule issue delaying the ED Physician to timely inititate the medicine consulation.



Reinforce Ownership, Measurement, & Continuous Improvement: SCH ED project team will continue to gather data after PDSA 1 to determine main areas of impact giving rise to PDSA #2 Model. Review of roles and responsibility along with GIM Physician schedule covering peak ED admissions and protecting on ward discharges to continue. Discharge volume to be added to the measurement plan. Along with SCH Senior operations leaders, FM/HCT and Extender active project team involvement.

PDSA Model #2:

1. Physician schedule includes:
a. GIM Physician assign to ward-Protected Discharge process time from 0800am-1200am
b. GIM Physician covers ED-7am-5pm Monday-Friday -has no ward duties located within the SCH
*c. GIM On-call 5pm-midnight-Arr*ives to SCH ED performs consultation duties-Protected sleep time(0200-0700)
d. Redesign call schedule/recruitment obtain 24/7 Extender coverage with role and responsibilities
e. Develop GIM physician Roles and Responsibilities including weekend schedule
2. Develop clear ED admission protocols and include current ED admission process
Strengths such as for clear FM admission employ telephone consultation and admission process.
Develop with all salient stakeholders to ensure protocol acceptance and sustainment
3.Admission documentation standardized and written clearly –ensure real time feedback is provided when illegible and non- standard process is employed
4. Physician Assistant- assist on ward to support timely discharge



Sustain Results

Manage Change

Collaboration & Communication Strategies:

Collaboration Strategies: SCH operational and medical leaders support this project both locally and Edmonton zone wide. The project team included GIM Physicians, ED Physicians, ED nursing and QI consultants. Engagement with the UAH GIM ED consult team provided process insight and shared learning.

Communication Approach:

- Memos distributed from Clinical Section Head of General Internal Medicine through SCH
- Real-time survey to capture PDSA model feedback
- On-going emails and in-person check-ins with the project team to discuss progression
- and hurdles from the GIM Physician lead, ED physician lead and QI consultant
- Project feedback obtained from stakeholders via meeting, surveys, and 1:1
- Consistent messaging and operational tasks were reinforced by the Patient Care Manager and Unit Manager as well as the GIM physician project lead
- Feb 6, 2017 memo sent from Site Lead –Division of General Internal Medicine sent to all the all Medical Staff informing of the pilot details.
- March 13, 2017 a memo sent to share project details and to ask for feedback


Memorandum

Share Learning

Lessons Learned:

- Increased communication with ED and GIM-joint care planning with clear disposition decision
- Limited stakeholders engagement and clear communication with FM/HCT and ED prior to PDSA #1 sharing the ***WHY*** undertake this project, decreased PDSA change acceptance (limited trust, power struggles, process confusion) and increased process risk (multiple admission orders)
- GIM physician schedule not sustainable working Unit day shift and the On-call ED shift. A reason the ED boarding time gradually increased from Feb-April 2017(see graph above). GIM physician unable to start on the ward before 1000am; physical tired therefore ED boarding time increased as the Discharge time of day increased.
- Limited GIM, FM/HCT Extender and ED physician champions
- PDSA role and responsibility were not adhered it and was not build with all salient stakeholders therefore role confusion increased
- Project team meet monthly to share hurdles, strengths, and to make PDSA model modifications but without medical leadership support preventing medical staff deviations from the model limited project success.
- ED Admission guidelines are needed for example-clear FM admissions the PDSA process removed FM telephone consult &admission process-this increased the FM consult time and increased FM frustration
- Physician scheduling/ED coverage (implementing an evening shift-5:00pm-midnight)limited to physician compensation (fee for service)—see the admission pattern graph in the build understanding section