The Obstetrical Triage Improvement Project (OB TIP)

Management of an Increasing Triage Census and Assessing Patient Acuity In a High Risk Prenatal Unit

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1 Background

The triage unit, not the office would appear to be the setting of choice for patient evaluation"[1]. This phenomenon has been demonstrated by seeing an increase in census and acuity for The Johns Hopkins Hospital's (JHH) Labor & Delivery (L&D) triage and volume is projected to grow 12% in Fiscal Year 2015. Staff identified the current triage process as a patient safety issue and potential risk. Currently when a patient presents for triage, there is reliance on unlicensed personnel to greet, register and, at times, assess the patient (i.e. Security and Patient Service Coordinator). Generally patients are assessed, registered and assigned to a triage room in order of arrival. If patient triage disposition is delayed, a more acute patient may present when all triage rooms are occupied. At times all triage rooms may be occupied by less acute patients. Additionally, the Federal Government mandates through EMTALA that all women who present to any triage facility must receive a timely assessment and treatment for their visit to be effective[7]. This along with the growing population.

2 Goals and Objectives

To develop & implement an evidence-based OB triage acuity process at JHH L&D

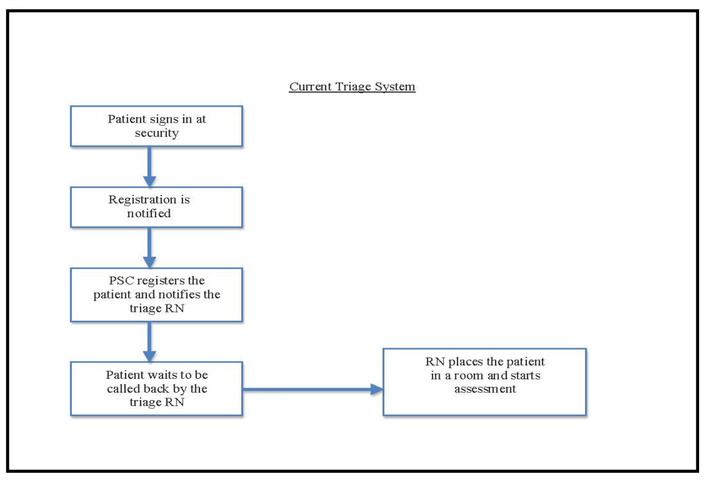
To develop, implement and evaluate and acuity based triage tool.

To decrease patient wait times by 50% from baseline data.

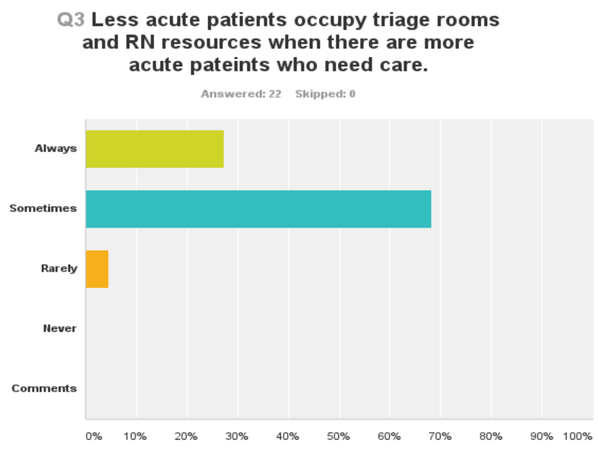
3 Methods

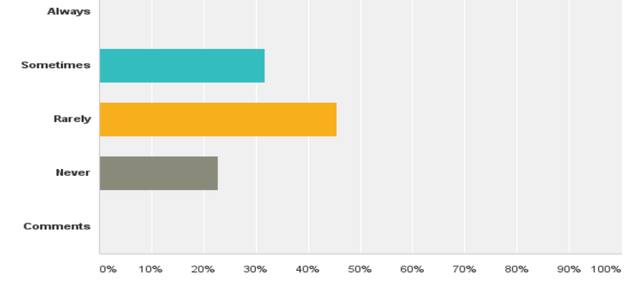
- Formed working team
  - Expert triage nurses voiced concern with current triage process and interest in changing triage process
  - Recruited team members
  - Completed literature review
- Set scope for initial project goal to focus on:
  - Initial nursing triage of presenting patients
  - L&D team awareness of triage patient census and acuity, to include waiting patients, i.e. "on deck" patients
- Drafted obstetric nursing triage acuity tool based on literature, triage committee and expert review
- Obtained key stakeholder buy-in
  - Obtained nursing and physician leadership support
  - Presented proposed triage process and acuity tool to nursing staff and CUSP membership
  - Posted proposed plan in L&D team room for staff review and feedback
- Met with IT expert to determine method for posting all triage patients (including "on deck") on team board
- Collected qualitative data: triage RN's perception of current triage process
- Reviewed 2 months of retrospective triage data
  - (Jan/Feb 2015) to determine:
    - Time from patient
    - presentation to nursing assessment
    - Wait times based on documented reason for visit compared with proposed best practice triage times using acuity designation
  - Developed A3 to track process
- Completed SWOT analysis

4 Results



Survey Results: RN Perception of Current Process



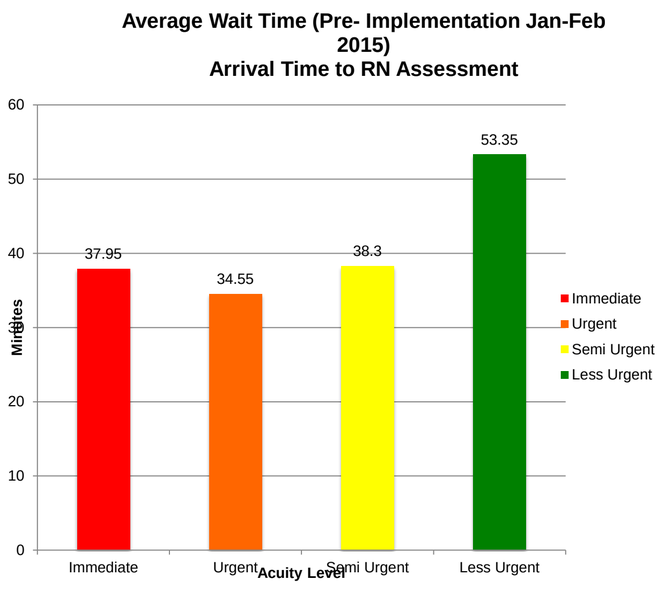


Proposed OB Triage Acuity Tool

OB TIP: The Obstetrical Triage Improvement Process

IMMEDIATE	URGENT (15 minutes)	SEMI-URGENT (30 minutes)	LESS URGENT (60 minutes)
Resuscitative Conditions: Airway, Breathing, Circulation **Respiratory Distress** • (e.g. shortness of breath, difficulty breathing, asthma exacerbation) **Trauma:** • Impact to abdomen (e.g. hit/kick to abdomen, or fall on abdomen) • Motor vehicle accident (With impact to abdomen) **Other:** • Chest pain • Hemorrhage • Presenting fetal parts • Prolapsed umbilical cord • Impending delivery **Neurologic Dysfunction:** • Seizing/recent seizure • Slurred speech • Muscle weakness or paralysis • Diminished level of consciousness (LOC)	**≥ 34 weeks:** • Contractions ≤ 5 mins apart • Severe pain ≥ 7 on verbal scale • Vaginal bleeding/spotting • Leakage of Fluid (Rupture of membranes) with contractions **Preterm (24-34 weeks):** • Backache/back pain • Contractions • Tightening, cramping, "baby balling up" • Vaginal bleeding/spotting • Rupture of membranes • UTI symptoms • Complaints or evidence of sexual assault • Suicidal ideation • Severe pain (e.g. sickle cell crisis; 6-10 on verbal scale) **Suspected PEC>20weeks/postpartum:** • Epigastric pain • Right Upper Quadrant pain • Visual disturbances • Headache **Fetal Status** • Decreased or no fetal movement (EGA > 24 weeks) • Referred from provider office or fetal assessment center for non-reassuring NST or Biophysical Profile (BPP) ≤ 8 **Objective Findings: *** • SBP <90 or ≥ 160 mmHg, • DBP <50 or ≥ 100 mmHg • Pulse <60 or >120 • Respiratory rate <14 or >24 • Blood sugar <60 or >150 • Fever ≥ 38.0C (> 100.4F) • O2 sat <94%	**≥ 34 weeks** • Irregular contractions • Moderate pain (4-6 on verbal scale) • Rupture of membranes without contractions • Bloody show • Abdominal pain **Preterm (< 24 weeks):** • Rupture of membranes • Vaginal bleeding/spotting • Abdominal pain **Other Factors**: • Blood pressure check • Complains of Fever ≥ 38.0C (> 100.4F) • Active vomiting/nausea • Moderate pain unrelated to labor (4-6 on verbal scale) • Referral from provider office or fetal assessment center for further evaluation (e.g. shortened cervix, r/o pre-eclampsia, r/o pre-term labor) • MVA without direct impact to abdomen • Dizziness	• Mild irregular contractions • Backache, pelvic pressure/pain >37 weeks • Mild pain (1-3 on verbal scale) • Vaginal discharge/mucus discharge • Betamethasone injection • Rhogam injection • HCG lab work • Pre-op for next day procedure • Recent non-traumatic injury non-life threatening (i.e. ankle injury, tooth pain) • Depression • Swollen legs/feet • Scheduled NST/BPP **Postpartum complaints:** • Wound check from incision (i.e. leaking, bleeding, separation) • Increased vaginal bleeding • Breast pain/tenderness **Non-OB complaints:** • Headache <20 weeks • Flu-like symptoms • UTI symptoms • Urinary retention • Diarrhea/constipation • Hemorrhoids

* Will be assessed by RN to assist in assigning acuity.



5 Conclusions

After looking at the data, it is evident that we must make changes to the current triage system at the JHH L&D unit.

These changes include:

- Decreasing wait times
- Changing the assessment protocol (triage tool and patient flow)
- Modifying staffing
-Creating a culture of safety

AWHONN Professional Practice Guidelines

- Initial triage process (10-20 minutes) requires 1 RN: 1 woman (includes fetal assessment)
- Ratio can change to 1: 2-3 as maternal-fetal status is determined to be stable
- Ratio should be 1: 2-3 during non-stress testing

6 Future Directions

- Trial proposed "best practice" triage process and acuity tool for 4 weeks
  - Dates: September 28, 2015 to October 23, 2015
  - Time frame: Monday to Friday from 11am -11pm
- Educate triage RNs on use of triage acuity system using clinical case scenarios
- Staff additional RNs in triage to ensure that patient is first seen and triaged by an RN (similar to ED model)
- 1st RN performs initial triage, assigning acuity, 2nd RN provides care once patient is assigned to a triage room
- Create heightened awareness of triage patient status
  - Develop a visual cue for all team members to know triage census and acuity (to include the waiting "on deck" patients)

7 References

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