Improving Obstetric Triage: AWHONN’s Maternal Fetal Triage Index

Catherine Ruhl, MS, CNM
Director, Women’s Health Programs
AWHONN

Objectives

1. Discuss the concept of “triage” as a nursing role and responsibility
2. Describe how a standardized approach to obstetric triage can improve processes and outcomes
3. Explain the development and use of AWHONN’s Maternal Fetal Triage Index (MFTI)

Should women have to wait to be triaged?
Ms. L

- 32 yo, G3P2002
- 37.5 weeks
- c/o severe, constant upper abdominal pain (rated as a 9), sweating
- Mild H/A, denies visual changes
- Says maybe mild ctx
- BP 144/88, P 122, R 20, T 98.9, FHR 150s

You are the triage nurse. What should you do next?

What is Ms. L’s Urgency for Provider Evaluation?

- 32 yo, G3P2002
- 37.5 weeks
- c/o severe, constant upper abdominal pain (rated as a 9), sweating
- Mild H/A, denies visual changes
- Says maybe mild ctx
- BP 144/88, P 122, R 20, T 98.9, FHR 150s

- Stat?
- Urgent?
- Prompt?
- Non-urgent?

Triage is a process

Triage is not a place
AWHONN’s Triage Initiative

- Re-define “OB triage”
- Reaffirm obstetric triage as a nursing role
- Improve quality of triage nursing care through standardization of acuity classification (the MFTI)
- Improve education for nurses about triage
- Test a triage quality measure

AWHONN’s Definition of Obstetric Triage

**Obstetric triage** is the brief, thorough and systematic maternal and fetal assessment performed when a pregnant woman presents for care, to determine priority for full evaluation.

Comparing ED and OB triage

**Emergency Department**
- “Triage” refers to the brief RN assessment to determine the urgency for evaluation
- Occurs in a triage intake area
- Nationally-accepted method for assigning priority for evaluation

**Birth units**
- “Triage” (pre-MFTI) refers to RN’s initial assessment and provider evaluation
- May occur on a separate unit or in the LDR
- Prior to MFTI, no national standard for assigning priority for evaluation

AWHONN’s Definition of Obstetric Triage

- Obstetric triage is performed by nurses.
- Triage is followed by the complete evaluation of woman and fetus by Qualified Medical Personnel (MD, CNM, NP, or RN who meets requirements)
Comparing ED and OB triage

Emergency Department
- Triage RN qualifications: standardized course and orientation
- Triage RN responsibilities: help out in ED when no triages

Birth units
- Triage RN qualifications? Orientation to triage?
- Triage RN duties: continue to care for pt during eval and obs, may be charge nurse, may have admitted pt assignments

Value of triage RN
- First line of defense
- First to identify problems
- First to mobilize staff and resources

Why so valuable?
- First line of defense
- First to identify problems
- First to mobilize staff and resources

@2015 AWHONN

ENA’s triage qualifications for the ED
1. Triage is performed by a registered nurse.
2. General nursing education does not adequately prepare the emergency nurse for the complexities of the triage nurse role.
3. Prior to being assigned triage duties:
   - complete a standardized triage education course that includes a didactic component
   - clinical orientation with a preceptor


Qualities of a successful triage nurse (ENA)
- Works under periods of intense stress
- Critical thinking skills
- Physical assessment skills
- Conducts a brief, focused interview
- Adjusts to fluctuations in workload
- Communicates understanding of patient and family
- Makes rapid, accurate decisions
- Understanding of cultural and religious concerns that may occur
- Ability to multitask yet focus
**Where do you triage?**

- How many have an intake area for triage?
- How many have a separate area or rooms for triage and evaluation?
- How many triage in the LDRs?

**Do you use a triage acuity tool?**

**Does your main ED use a triage acuity index?**

- Why should a hospitalized pregnant woman receive a different standard of care than a non-pregnant woman?
Triage Assessment Elements

- Chief complaint*
- Vital signs/ FHR
- Fetal movement
- Ctx/LOF/Bleeding
- Pain rating (non-labor complaint)
- Coping with labor

*Mental status
- Pregnancy history
- Past OB history
- Past med/surg history/ allergies
- Social history

Why standardize triage?

1. Improve nurse-provider communication
2. Decrease errors/potential liability
3. Standardize education on triage
4. Standardize triage assessment
5. Obtain valuable data

Triage and Liability

- Failure to triage and evaluate a woman appropriately
  - 2nd most common allegation
  - 21% of professional liability claims
- Case example
  - Failure of triage nurse to present an accurate picture of the case to the attending

Areas of Risk in OB Triage

- **Timeliness of**
  - assessment
  - response from OB Providers and consultants,
  - transfer of high risk patients to an appropriate facility equipped to provide the required level of specialized care. (Angelini, 2013).
- **Serious reportable events involved fetal deaths** related to timeliness of triage, evaluation and intervention
OB Triage Education

- Trinity Health System reports in 2015:
  - < 5% of OB RN Directors using an acuity tool OB triage.
  - None of the 35 birthing hospitals use a standardized education program to orient RNs to the role of the OB triage nurse.
  - Majority of hospitals assign RNs to work in the triage area after working a designated period of time in labor and delivery; usually a minimum of one year.
  - Lack of objective competency assessment

Classifying acuity gives you valuable data!

1. Acuity trends
2. Track time from presentation until triage complete, time to evaluation per priority level
3. Track patient LOS in triage/eval unit and overall flow based on acuity
4. Track adequacy of nurse staffing in triage r/t acuity
5. Measure women’s satisfaction with triage and evaluation
6. Track decrease in new reportable events r/t triage and evaluation

The gestation of the Maternal Fetal Triage Index (MFTI)

1. Expert task force drafted an acuity tool
2. Content validation (RN, CNM, MD)
3. Interrater reliability
4. Educational module testing

Foundational acuity indexes

- The Emergency Severity Index
- Fla Hospital OB Triage Tool

- Ruhl, Scheich, Onokpise & Bingham, 2015
- Agency for Healthcare Research and Quality, 2012
- Paisley, Wallace & DeRant, 2011
AWHONN’s Maternal Fetal Triage Index

- Five levels of acuity
- Key questions on the left
- Includes need to transfer to higher level of care

Stat (Priority 1) (abbreviated version)

- Does the woman or fetus have STAT/PRIORITY 1 vital signs?
  - Abnormal Vital Signs
    - Maternal HR <40 or >130
    - Apgar
    - SpO2 <93%
    - SBP ≥160 or DBP ≥110 or <60/palpable
    - No FHR
    - FHR <110 bpm for >60 seconds
  - Lifesaving interventions
    - Maternal
    - Fetal
  - Imminent birth

Urgent (Priority 2) (abbreviated version)

- Does the woman or fetus have URGENT/PRIORITY 2 vital signs? OR
  - Abnormal Vital Signs*
    - Maternal HR >120 or <50,
    - Temperature ≥101.0°F, (38.3°C), R >26 or <12,
    - SpO2 <95%, SBP ≥140 or DBP ≥90, symptomatic
    - or <80/40, repeated
  - Severe Pain: (not ctx) ≥7 on a 0-10 pain scale

- Is the woman in severe pain unrelated to contractions? OR
  - Will this woman and/or newborn require a higher level of care?

- Is this a high-risk situation?
  - Examples of High-Risk Situations
    - Unstable high-risk medical conditions
    - Difficulty breathing
    - Altered mental status
    - Suicidal or homicidal
    - <34 wks c/o of, or detectable uterine cbx
    - <34 wks c/o of PROM/leaking or spotting
    - Active vaginal bleeding (not spotting or show)
    - c/o of decreased fetal movement
    - Recent trauma
    - ≥34 wks with regular contractions or PROM/leaking with any of the following
      - HIV*
      - Planned, medically-indicated cesarean (maternal or fetal indications)
      - Breach or other malpresentation
      - Multiple gestation
      - Placenta previa

*Vitals signs are suggested values
Prompt (Priority 3)  
(abbreviated version)

- Does the woman or fetus have PRIORITY 3 vital signs?
- Does the woman require prompt attention?

Abnormal Vital Signs
- Temperature >100.4°F, 38.0°C1, SBP ≥140 or DBP ≥90, asymptomatic
- Prompt Attention such as: • Signs of active labor ≥34 weeks • c/o early labor signs and/or c/o SROM/leaking 34–36 6/7 weeks • ≥34 weeks planned, elective, repeat cesarean with regular • Woman is not coping with labor per the Coping with Labor Algorithm V2

Non-urgent (Priority 4)

- Does the woman have a complaint that is non-urgent?
- Non-urgent attention such as: • ≥37 weeks early labor signs and/or c/o SROM/leaking
- Non-urgent symptoms may include: common discomforts of pregnancy, vaginal discharge, constipation, ligament pain, nausea, anxiety.

Scheduled/Requesting  
(Priority 5)

- Is the woman requesting a service and she has no complaint?
  OR
- Does the woman have a scheduled procedure with no complaint?

Woman Requesting A Service, such as:
- Prescription refill
- Outpatient service that was missed
- Scheduled Procedure
- Any event or procedure scheduled formally or informally with the unit before the patient’s arrival, when the patient has no complaint.

What RNs are saying about the MFTI

- “I love the MFTI. It really prompts you to be aware of what priority your patients are.”
- “The MFTI is great and easy to use!”
- “I used to have difficulty trying to determine who needed my attention first.”
- “I really like the vital signs clearly listed as part of the MFTI. It really helps in our timely treatment of patients with hypertensive emergency.”

Photo used with permission from Brianne Fallon, RN, Shawnee Mission MC, Shaimae Moston, BS
Why is the MFTI unique?

- Mom AND baby
- The only national obstetric triage acuity tool for the entirety of pregnancy
- Multidisciplinary input
- Rigorous development by AWHONN

How can the MFTI improve care?

- Not missing abnormal presenting vital signs
- Early identification of need to transfer to higher level of care
- Not missing scheduled women who have complaints
- Proper attention to
  - non-ctx pain
  - women not coping with labor
  - decreased fetal movement
  - possible preterm contractions

What is NOT in the MFTI?

- Cervical dilation
- Necessity of a FHR strip
- Time to provider evaluation based on priority level
- Frequency of RN reassessment while awaiting evaluation
- Not a diagnostic algorithm

Hospital-Based Triage of Obstetric Patients
ACOG Committee Opinion #667  July, 2016

Recommendations

- Hospital-based obstetric units are urged to collaborate with emergency departments and hospital ancillary services, as well as emergency response systems outside of the hospital, to establish guidelines for triage of pregnant women.
- Recently developed, validated obstetric triage acuity tools may improve quality and efficiency of care and guide resource use, and they could serve as a template for use in individual hospital obstetric units.
Clinical Judgment

- The MFTI guides clinical decision-making
- Some clinical presentations may not meet the exact criteria described in the MFTI
- Prioritize to the higher level when there is a lack of clarity

The MFTI can protect from cognitive bias

Assign the MFTI Priority

- 32 yo G2P0010
- 23 weeks
- Sent from office with short cervix, no ctx for further monitoring

Assign the MFTI Priority

- 32 yo, G3P2002
- 37.5 weeks
- c/o severe, constant upper abdominal pain (rated as a 9), sweating
- Mild H/A, denies visual changes
- Says maybe mild ctx
- BP 144/88, P 122, R 20, T 98.9, FHR 150s

Assign the MFTI Priority

- 18 yo G1P0
- 37.3 weeks
- Denies ctx, thinks her water broke
- Initial BP 146/74
- Denies preeclampsia sx
- Repeat BP 10 min later- 130/72

Assign the MFTI Priority for Ms. L

- 18 yo G1P0
- 37.3 weeks
- Denies ctx, thinks her water broke
- Initial BP 146/74
- Denies preeclampsia sx
- Repeat BP 10 min later- 130/72
Benefits of the MFTI for Ms. L

- Attention to abnormal vital sign (BP 144/88, pre-eclampsia sx, P 122)
- Attention to non-ctx pain (9/10)
- Timely evaluation
- Elimination of cognitive bias

AWHONN’s vision for triage

- Nurses “own” triage as their role
- Nurses are educated about triage
- Every birth unit in the U.S. will use an acuity index for triage (MFTI)
- The MFTI will be integrated into EMRs

AWHONN’s vision for triage

- Standardized triage practices will improve care, communication, tracking and staffing
- AWHONN triage quality measure will allow for targeted process improvement and better outcomes

AWHONN’s Perinatal Nursing Quality Measure on Triage

“The goal is that 100% of pregnant patients presenting to the labor and birth unit with a report of a real or perceived problem or an emergency condition will be triaged ….within 10 minutes of arrival.”

Learn more at: https://www.awhonn.org/awhonn/content.do?name=02_PracticeResources/02_perinatalqualitymeasures.htm
AWHONN’s MFTI Pilot Community

- January – June, 2016
- Almost 90 hospitals participating
- Peer support and AWHONN mentoring for implementation of the MFTI
- Share successes
- Brainstorm strategies to overcome obstacles
- Three 90 minute phone calls Jan-June, 2016
- Includes education for nursing staff about the MFTI (50 CNE seats)

Lessons from the MFTI Pilot Community

- 1st Educate nursing staff on triage/MFTI
- 2nd Identify shift champions
- 3rd Education for providers
- 4th Identify a location for triage, if needed
- 5th Implementation of MFTI (paper or EMR)
- 6th Audit to promote correct use
- Conclusions to date: education well-received, implementing MFTI is catalyst for overall triage improvements

Trinity Health MFTI System Implementation

- 9 pilot sites 2016
- System-wide 2016-2018
- Includes training with MFTI ed module for all OB triage RNs and OB providers and audits of triage accuracy with MFTI

Trinity Health MFTI System Implementation

- Outcomes to be measured
  - Achievement of AWHONN's Perinatal Nursing Care Measure 01: Triage of a Pregnant Woman
  - Reduction in new serious reportable events or professional liability claims in pregnant women related to delay in triage assessment, medical response time and transfer of triage patients to an appropriate facility
MFTI Implementation Community II

- Support from AWHONN
- Education for your staff
- Integration of MFTI into EMR
- Sharing best practices

**Still time to join!**

Goal: no more un-triaged women!

- Orientation call
  – Wed, 9-28-16
- Call #1
  – Wed, 11-30-16
- Call 2
  – Wed, 1-25-17
- Call #3
  – Wed, 3-29-17

Questions?

- For clinical questions about the MFTI contact Catherine Ruhl at cruhl@awhonn.org

- For questions about the educational module and Implementation Community II contact Mitty Songer at msonger@awhonn.org