

The Maternal Fetal Triage Index

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Disclosures

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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)



Quality Triage Care



Should women have to wait to be triaged?



Do you have a standardized approach to women who present with hypertension or other non-labor conditions?

Three women arrive on a holiday eve

- | • Woman #1 | Woman#2 | Woman#3 |
|-------------------|----------------|----------------|
| • G3P2002 | G2P1001 | G1P0 |
| • 28 yo | 22 yo | 18 yo |
| • 39.0 wks | 29.2 wks | 38 wks |
| • Ctx q 2-3 | ↓ FM | c/o HA |
| • BOWI | No labor sx | no ctx |
- Holding abdomen w/ ctx

Who does RN see first?
Where do the others wait?

Triage is a process



Triage is not a place



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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**



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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.



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AWHONN's Definition of Obstetric Triage

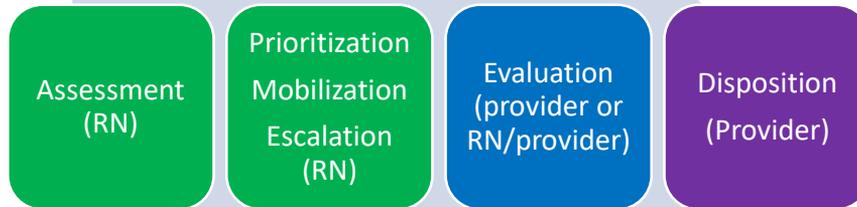
- Obstetric **triage** is performed by **nurses**.
- Triage is followed by the complete **evaluation** of woman and fetus by Qualified Medical Personnel (MD, CNM, NP, or RN who meets requirements)



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Triage and Evaluation



- **Mobilization:** process of moving people or resources
- **Escalation:** intensifying efforts



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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 acuity classification tool determines 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



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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

Comparing ED and OB triage

Emergency Department

- Value of triage RN- “The most important nurse in the ED—even more important than the charge nurse” (NH nurse)
- **Why so valuable?**
 - First line of defense
 - First to identify problems
 - First to mobilize staff and resources

Birth units

- Value of triage RN: Not a well-defined role until now so more challenging to establish value
- **Why so valuable?**
 - First line of defense
 - First to identify problems
 - First to mobilize staff and resources

ENA's triage qualifications

- ENA supports use of a reliable, valid 5-level triage scale
- Minimum one year experience as an emergency nurse
- Complete a comprehensive course and clinical orientation
- Ongoing competency validation



Emergency Nurses Association. (2017). Triage qualifications and competency.

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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?



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Do you use a triage acuity tool?



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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

*Infectious disease exposure if relevant



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Why standardize triage?

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



First come ≠ First served!

<https://www.youtube.com/watch?v=apzGT1zpHzg>

These reasons apply to OB units of every size, large and small



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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

*Review of 100 cases of alleged obstetric liability, 1985-2010.
Muraskas et al., 2012

Triage and Liability

- Failure to transport a woman to a tertiary center when indicated
 - 4th most common allegation*
 - 11% of professional liability claims*
- Case examples
 - Extreme prematurity, complicated twin gestations, triplets or higher orders, known congenital anomalies

*Review of 100 cases of alleged obstetric liability, 1985-2010.
Muraskas et al., 2012

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



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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

Over 100 nurses, physicians and midwives contributed to developing the MFTI!



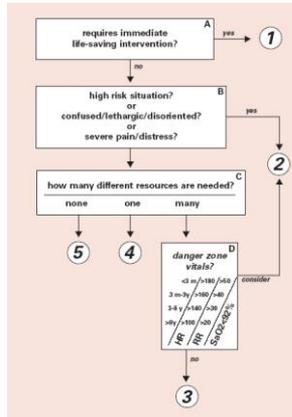
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Ruhl, Scheich, Onokpise
& Bingham, 2015

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Foundational acuity indexes

The Emergency Severity Index



Fla Hospital OB Triage Tool

Figure 1. Florida Hospital OB Triage Acuity Tool.

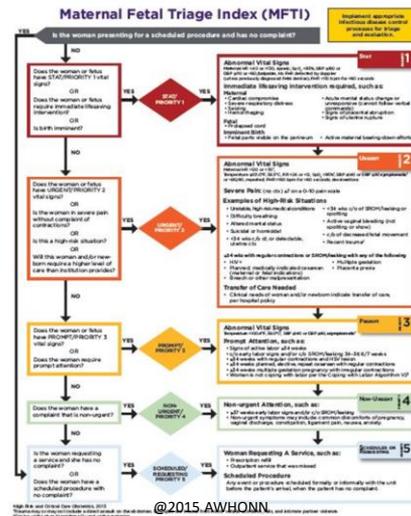
Florida Hospital OB Triage Acuity Tool ¹			
Patient should have Primary OB triage assessment within 10 minutes of arrival.			
1 - Immediate	2 - Urgent (*Within 15 min)	3 - Semi-Urgent (*Within 30 min)	4 - Less Urgent (*Within 60 min)
Always: Breathing Circulation Respiratory Distress Chest pain Trauma Hemorrhage Presenting fetal parts Prolapsed umbilical cord Impending Delivery Seizure	Resuscitative Active labor Regular contractions Severe pain (>7 on scale) PRETERM (20-30/37 weeks) Backache Contractions Tightening, "Cramping" Spotting Rupture of Membranes Rho Rupture of Membranes UTI symptoms VAGINAL DISCHARGE Heavy blood loss Passing clots FETAL WELLBEING No fetal movement Decelerations BLOOD PRESSURE Severe pre-eclampsia Epigastric pain Burned vision Severe headache	R/O LABOR Irregular contractions 37 weeks 5 mts apart Severe pain (4-6 on scale) VAGINAL DISCHARGE Spotting >37 weeks SR(M) > 37 weeks FETAL WELLBEING Fetal Movement Non-stress Test (NST) BP checks History of high BP MENTAL/PSYCHOSOCIAL History of suicide OTHER FACTORS Severe Cramps In Labor Recent trauma Falls	R/O LABOR Early labor Mild regular contractions Backache > 37 weeks Mild pain (1-3 on scale) VAGINAL DISCHARGE Bloody show Mucous Rho infection MENTAL/PSYCHOSOCIAL Non-OB Complaints Insomnia Psychosocial problems "not feeling out" OTHER FACTORS Aches and pains Nausea Hypertensives Mild Pain (1-3 on scale) 5 - Procedure Testing (* >120 min) FETAL WELLBEING

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Agency for Healthcare Research and Quality, 2012

Paisley, Wallace & DuRant, 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



- Exemplary clinical conditions on the right
- Vital signs are suggested values-Use FIRST set.

Ruhl, Scheich, Onokpise & Bingham, 2015 28

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Agency for Healthcare Research and Quality, 2012

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Stat (Priority 1) (abbreviated version)

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



*Vital signs are suggested values

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Urgent (Priority 2) (abbreviated version)

- Does the woman or fetus have **URGENT/PRIORITY 2 vital signs**? **OR**
 - Is the woman in **severe pain unrelated to contractions**? **OR**
 - Is this a high-risk situation? **OR**
 - Will this woman and/or newborn require a higher level of care?
- **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
 - FHR >160 bpm for >60 seconds; decelerations
 - **Severe Pain: (not ctx) ≥7 on a 0-10 pain scale**



*Vitals signs are suggested values

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Urgent (Priority 2) (abbreviated version)

- 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 ctx
 - <34 wks c/o of SROM/leaking or spotting
 - Active vaginal bleeding (not spotting or show)
 - c/o of decreased fetal movement
 - Recent trauma²
-
- ≥34 wks with regular contractions or SROM/leaking with any of the following
- HIV+
 - Planned, medically-indicated cesarean (maternal or fetal indications)
 - Breech or other malpresentation
 - Multiple gestation
 - Placenta previa



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Prompt (Priority 3) (abbreviated version)

- Does the woman or fetus have **PROMPT/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.”

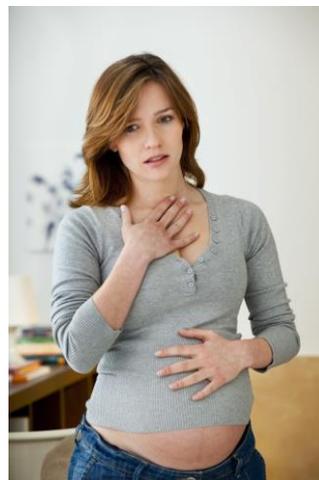


Photo used with permission from
 Brianne Fallon, RN, Shawnee Mission
 MC, Shawnee Mission, KS



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



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

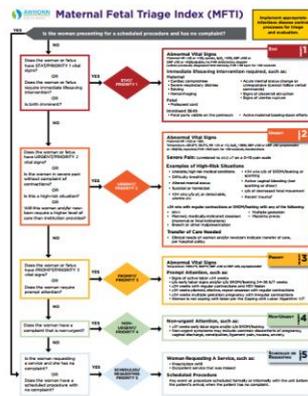


Figure 1. Maternal-fetal triage index. (Reprinted from Ruhl C, Scheach B, Onkajise B, Bingham D. Content validity testing of the maternal fetal triage index. J Obstet Gynecol Neonatal Nurs 2015;44:703-9.)

“Recently developed , validated algorithms such as the Association of Women’s Health, Obstetric and Neonatal Nurses’ Maternal Fetal Triage Index could serve as templates for use in individual hospital units.”



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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



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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



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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



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Now it's your turn!

- Systematically assess the following cases always keeping in mind:
 - Vital signs
 - Pain rating for non-labor pain
 - Coping/not coping if in labor
 - Fetal movement?

Three **triaged** women on a holiday eve

- | • Woman #1 | Woman#2 | Woman#3 |
|------------------------|----------------------------|---------------------------|
| • G3P2002 | G2P1001 | G1P0 |
| • 28 yo | 22 yo | 18 yo |
| • 39.0 wks | 29.2 wks | 38 wks |
| • Ctx q 2-3 | ↓ FM | c/o HA, 5/10 pain |
| • BOWI | No labor sx | BP 126/72, FHR WNL |
| • Holding abd w/ ctx | VS, FHR WNL doppler | |
| • VS, FHR WNL | | |
| • Coping w/ ctx | | |

What are their MFTI priority levels?
Which woman gets the one available bed?

Assign the MFTI Priority

- 18 yo G1P0
- 37.3 weeks
- Denies ctx, unsure if water broke, pain=0
- Initial BP 146/74
- Denies preeclampsia sx
- Repeat BP 10 min later- 130/72
- Other VS and FHR WNL



Assign the MFTI Priority

- 32 yo G2P0010
- 23 weeks
- VS and FHR WNL
- States she doesn't feel ctx or tightening, active FM, no c/o
- Sent from office with short cervix, no ctx for further monitoring



Assign the MFTI Priority for Ms. L

- 32 yo, G3P2002
- 35.4 weeks
- c/o severe, constant upper abdominal pain (9/10), sweating
- c/o H/A (5/10), denies visual changes
- Says maybe mild ctx
- BP 144/88, P 122, R 20, T 98.9, FHR 150s



**There may be more than one
reason for your answer!**

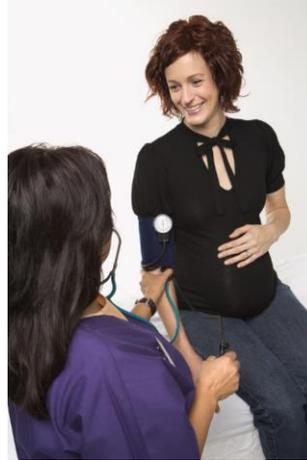
Benefits of the MFTI for Ms. L

- 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 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

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AWHONN's MFTI Communities

- Over 120 hospitals participating, 2016 and 2017
- Peer support and AWHONN mentoring for implementation of the MFTI
- Integrated MFTI into EMR or used on paper
- Educated nursing staff with AWHONN's online, interactive MFTI module

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Lessons from AWHONN's MFTI Communities

1. Educate nursing staff on triage/MFTI
 2. Form a steering committee-multidisciplinary
 3. Identify shift champions
 4. Educate providers—grand rounds
 5. Identify a location for triage, if needed
 6. Implement the MFTI (paper or EMR)-trial
 7. Audit to promote correct use of MFTI
- **Conclusions to date:** education well-received, implementing MFTI is catalyst for overall triage improvements



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MFTI Community Chart Audits

- Most discrepancies in priority assignment placed woman at lower priority than MFTI indicated
 - Abnormal vital signs
 - Preterm ctx or LOF
 - Decreased fetal movement
 - Non-labor pain 7 or above



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Quality Triage Care



1. No women waiting , untriaged
2. Classify all women's acuity
3. Implement standardized approach to triage, evaluation and escalation



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Questions?

- For clinical questions about the MFTI contact Catherine Ruhl at cruhl@awhonn.org
- For questions about the MFTI educational module and implementation communities, contact Mitty Songer at msonger@awhonn.org



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Every BABY
deserves the best
start in life.



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