British Columbia Obstetric Triage Acuity Scale Guidance

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Perinatal Services BC
Provincial Health Services Authority

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British Columbia Obstetric Triage Acuity Scale (OTAS) Guidance

To determine pregnant individual's primary reason for presentation to hospital, recognize and intervene to complications and abnormalities, escalate care based on condition, and respond to presenting condition in a timely manner. To assess uterine contractions and fetal heart rate pattern in labour, recognize abnormalities and respond appropriately.

Definitions and Abbreviations

MEOWS – The Modified Early Obstetric Warning Score (MEOWS) is a way of formalising measurement of physiological variables. The values of the observations are then translated into a summary score which has a critical threshold, above which medical review and intervention is required. It is believed that small changes in the combined physiological variables measured by MEOWS may pick up deterioration earlier than an obvious change in an individual variable. Early detection will trigger subsequent prompt intervention that will either reverse further physiological decline or facilitate timely referral to appropriate personnel.[1]

Triage – Triage is a standardized process to determine which patients need to be assessed urgently and which patients can safely wait. Triage is a process, not a place.

MRP – The Most Responsible Provider, or most responsible practitioner, generally refers to the physician, or other regulated healthcare professional (i.e., registered midwife), who has overall responsibility for directing and coordinating the care and management of a patient at a specific point in time.[2]

Key Practice Points

- All patients presenting to the obstetric triage area should be triaged according to the OTAS tool.
- The appropriate OTAS tool should be used, based on presenting patient's stage of pregnancy.
    - Early Pregnancy (0-20 weeks gestation)
    - Pregnancy (greater than 20 weeks gestation)
    - Postpartum
- To ensure consistent practice, and help ensure patient safety when triaging, standard questions

should be asked when determining the woman's/individual's presenting complaint.

- All pregnant and postpartum women/individuals presenting to triage need to have a primary and secondary OTAS assessment and have a primary and final OTAS score assigned.
- Secondary assessment shall include the use of four modifiers.
    - hemodynamic stability: colour, blood pressure and pulse
    - respiratory distress: respiratory rate, oxygen saturation, signs of distress
    - fetal well-being – fetal heart rate
    - cervical dilation
- The final OTAS score shall be assigned following secondary assessment. Modifiers maintain or increase the original OTAS score.
- If more than one patient presents to obstetric triage area simultaneously, the OTAS primary assessment and resulting OTAS score are to be used to sort and prioritize patients for care/treatment.
- **Clinical judgment** may be exercised by the Triage RN when a situation is determined to be outside the parameters provided in this guideline and/or the regional or site-specific policy. If a deviation from this guideline is determined to be appropriate or necessary, documentation of the rationale should be included on the Triage and Assessment record.

Background

The Obstetrical Triage Acuity Scale (OTAS), developed by Watts and Gratton et al., was formed to establish a national standard around obstetric assessment to evaluate acuity level and set recommendations for timely care. The three OTAS tools have been "modeled on the 5-category CTAS tool" that is a standard in emergency rooms across Canada.[3,4] All modifiers within each OTAS category are derived from the modified early obstetric warning system (MEOWS) (London Health Sciences, 2012), which allow for the collection of specific client data that aid in the assignment of an OTAS score.

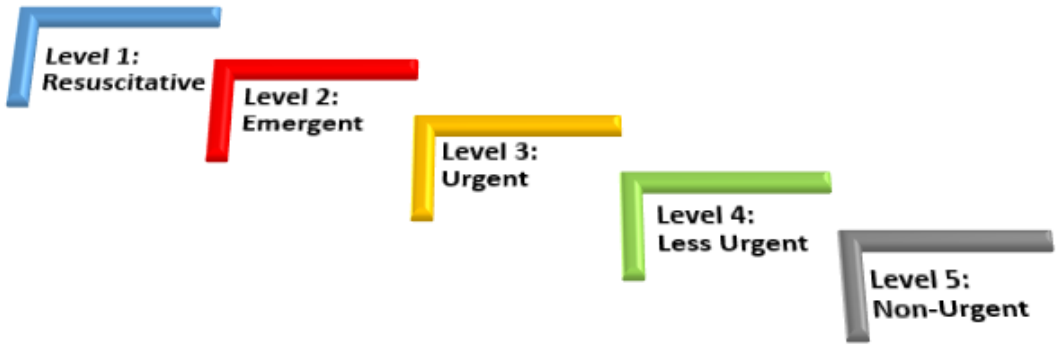
The OTAS system:

- Standardizes a consistent approach to identify and classify women/pregnant individuals based on acuity.
- Supports the triage of women/pregnant individuals according to the type and severity of their presenting signs and symptoms.
- Prioritizes the care requirement(s) of a woman/pregnant individual by systematically assessing if/when they are in need of urgent or life-threatening care.
- Methodically categorizes and prioritizes women/individuals with less urgent acuity seeking treatment.
- Provides guidance regarding ongoing assessment of women/individuals waiting in the triage area.
- Provides parameters for speed of notification to the most responsible provider and when a woman/individual presenting to the obstetric triage area is to be seen and assessed.
- Supports team communication, quality and safety of patient care, acuity distribution and bed utilization.

OTAS Elements

Five (5) Acuity Levels

The OTAS system uses five color coded acuity levels that support triaging of perinatal patients. The 5 acuity levels include:



Obstetric Triage Acuity Scales

The OTAS bundle is made up of three acuity scales that are based on stages of pregnancy:

1) Early Pregnancy (0-20 weeks gestation)
2) Pregnancy (greater than 20 weeks gestation)
3) Postpartum

Early Pregnancy (0-20 weeks gestation)

Obstetrical Triage Acuity Scale (OTAS)©

		OTAS-Early Pregnancy (<20 wks)	Level 1 (Resuscitative)	Level 2 (Emergent)	Level 3 (Urgent)	Level 4 (Less Urgent)	Level 5 (Non-Urgent)
		Time to Initial Assessment	Immediate	Immediate	5-10 minutes	5-10 minutes	5-10 minutes
		Time to Health Care Practitioner	Immediate	< 15 minutes	< 30 minutes	< 60 minutes	< 120 minutes
		Re-assessment	Continuous Nursing Care	Every 15 minutes	Every 15 minutes	Every 30 minutes	Every 60 minutes
Complaint Oriented Triage (COT)	OB	Signs/symptoms of Labour/Fluid Loss		- Pelvic pressure with abdominal cramping, back pain - Expulsion is imminent	- Cramping - Possible leaking fluid	- Mild cramps and back pain	
	Medical Complications	Antenatal Bleeding		- Heavy vaginal bleeding	- Mild – moderate vaginal bleeding	- Vaginal bleeding: spotting	- Pink mucousy discharge
		Pain		- Acute severe abdominal/pelvic pain	- Mild/mod abdominal pain, flank pain		- Discomforts of pregnancy
		Abdominal Trauma	- Major trauma-penetrating	- Major trauma-blunt	- Minor trauma	- Fall, no direct trauma	
		Signs of Infection				- UTI complaints, hematuria	- Rashes - vaginal discharge
		Gastro/Intestinal		- Nausea and vomiting with severe dehydration	- Nausea and vomiting with mild dehydration	- Nausea and vomiting with potential for dehydration	- Occasional heartburn/nausea
		Neurological/ Resiratory	- Loss of consciousness	- Sudden, worst headache - Moderate respiratory distress	- Mild/mod headache - Mild respiratory distress		
		Substance Use/Mental Health		- s/s depression and planned/attempted suicide	- High emotional stress/situational crisis - s/s depression/suicidal thoughts - Syncope with position changes	- Unable to cope - s/s depression/no suicidal ideation	

NOTE: Modifiers (Hemodynamic Stability, Respiratory Distress) may increase acuity

Amended April 2015

Pregnancy (greater than 20 weeks gestation)

Obstetrical Triage Acuity Scale (OTAS)©

		OTAS	Level 1 (Resuscitative)	Level 2 (Emergent)	Level 3 (Urgent)	Level 4 (Less Urgent)	Level 5 (Non-Urgent)
		Time to Initial Assessment	Immediate	Immediate	5-10 minutes	5-10 minutes	5-10 minutes
		Time to Health Care Practitioner	Immediate	< 15 minutes	< 30 minutes	< 60 minutes	< 120 minutes
		Re-assessment	Continuous Nursing Care	Every 15 minutes	Every 15 minutes	Every 30 minutes	Every 60 minutes
Complaint Oriented Triage (COT)	OB	Signs/symptoms of Labour/Fluid Loss	-Suspected imminent birth -Cord prolapse	-<37 weeks, uterine contractions <5 minutes apart -<37 weeks vaginal fluid loss -Unplanned/unattended birth	-≥37 weeks, contractions 2-4 minutes apart	-Contractions >5 minutes apart -Vaginal fluid loss ≥37wks	-Cervical ripening -Pre-booked maternal visits (eg., Rh Immune Globulin)
		Antenatal Bleeding		-Active vaginal bleeding	-History of bleeding prior to presentation	-Spotting	
		Fetal Assessment	-No fetal movement	-Decreased fetal movement -FH concerns, abnormal BPP/dopplers (clinic)			-NST (booked) -ECV assessment
		Hypertensive Neurological Signs/symptoms	-Actively seizing, postictal -Loss/altered consciousness	-Sudden severe headache -Visual disturbance, epigastric pain -CVA like symptoms	-Mild/Mod/Subacute headache -Edema (non-dependent)	-Follow up to Hypertension (OB clinic) e.g. blood work	-Chronic recurring headache
		Pain		-Acute severe abdominal/pelvic pain -Chest pain	-Mild/Mod abdominal pain -Back pain -Flank pain		-Pregnancy discomforts
	Medical Complications	Abdominal Trauma	-Major trauma-penetrating	-Major trauma-blunt	-Minor trauma (e.g., minor MVC/fall)	-Fall, no direct abdominal trauma	
		Signs of Infection		-Fever, chills, uterine tenderness (not r/t contractions)		-UTI complaints, hematuria -Fever, cough, congestion	-Rashes
				-Nausea/vomiting/diarrhea s/s moderate dehydration	-Nausea/vomiting/diarrhea, s/s mild dehydration	-Nausea/vomiting/diarrhea	
		Respiratory	-Severe respiratory distress	-Moderate respiratory distress	-Mild respiratory distress		
		Substance Use/Mental Health		-High risk/unknown substance use/uncertain flight or safety risk -s/s depression and planned/attempted suicide	-Situational crisis (physical, emotional) -s/s substance withdrawal (e.g. anxiety/agitation, nausea, vomiting) -s/s depression/suicidal thoughts	-s/s depression/no suicidal ideation	

NOTE: Modifiers (Hemodynamic Stability, Respiratory Distress, Fetal Well-being, Cervical Dilatation) may increase acuity

Postpartum

Obstetrical Triage Acuity Scale (OTAS)©

		OTAS-Postpartum	Level 1 (Resuscitative)	Level 2 (Emergent)	Level 3 (Urgent)	Level 4 (Less Urgent)	Level 5 (Non-Urgent)
		Time to Initial Assessment	Immediate	Immediate	5-10 minutes	5-10 minutes	5-10 minutes
		Time to Health Care Practitioner	Immediate	< 15 minutes	< 30 minutes	< 60 minutes	< 120 minutes (2 hours)
		Re-assessment	Continuous Nursing Care	Every 15 minutes	Every 15 minutes	Every 30 minutes	Every 60 minutes
Complaint Oriented Triage (COT)	OB	Postnatal Bleeding		-Active vaginal bleeding with clots	-Bright red bleeding >spotting <5 days postpartum	-Bleeding/spotting with cramping >10 days postpartum	
		Hypertensive Neurological Signs/symptoms	-Seizure activity -Loss/altered consciousness	-Sudden severe headache -Visual disturbance, epigastric pain -CVA symptoms	-Mild/Mod/Subacute headache -Edema (non-dependent)	-Follow up to Hypertension (OB clinic) e.g. blood work	-Chronic recurring headache
	Medical Complications	Signs of Infection		-Chills, wound redness, or purulent drainage -Pelvic/abd pain with abn vaginal discharge -Unable to empty bladder/dysuria <72 hours postpartum	-Wound redness/swelling with serosanguinous drainage -Pelvic/abd pain	-Redness/swelling/pain in breast with fever -Dysuria	-Wound/incision check (scheduled) -Redness, tenderness in breast
		Respiratory	-Severe respiratory distress	-Moderate respiratory distress -Chest pain/pleuritic pain	-Mild respiratory distress -Unilateral reddened hot limb with fever/severe pain	-Unilateral reddened hot limb without fever -Constipation without fever	-Fatigue, malaise
		Substance Use/Mental Health		-High risk/unknown substance use/uncertain flight or safety risk -s/s depression and planned/attempted suicide	-Persistent headache (r/t epidural insertion with labour/birth) -Situational crisis (physical, emotional) -s/s substance withdrawal (e.g. anxiety/agitation, nausea, vomiting) -s/s depression/suicidal thoughts	-s/s depression/no suicidal ideation	

NOTE: Modifiers (Hemodynamic Stability, Respiratory Distress) may increase acuity

Amended June 2015

Modifiers

Modifiers are used to *support or increase the acuity level*, as part of secondary assessment, from that which would have be assigned based on the presenting complaint alone during primary assessment.

Pregnant woman's/individual's vital signs or fetal vital signs (i.e., heart rate) are an important parameter in determining acuity. Either a descriptive modifier (e.g., shock) or specific vital signs (e.g., systolic BP <90, heart rate >120 beats/minute) may be used to increase the acuity.

The four acuity modifiers in OTAS are:

- Hemodynamic stability
- Respiratory distress
- Fetal well-being (Fetal Heart Rate)
- Cervical dilatation

The RN should use the applicable OTAS scale as well as the secondary screening to more accurately triage the perinatal woman using the MEOWS modifier table.

NOTE: *In some cases, additional client data and clinical judgment may also be available and incorporated in determining the acuity level of care (for example, blood glucose levels).*

Obstetrical Triage Acuity Scale (OTAS)

The following table is used to confirm or increase the acuity assigned based on the presenting complaint. The vital sign parameters are taken from CTAS[11] the Maternal Early Warning Criteria,[12] MEOWS.[13] Any one of the modifiers can increase the acuity.

Modifiers		Level 1 (Resuscitative)	Level 2 (Emergent)	Level 3 (Urgent)	Level 4 (Less Urgent)	Level 5 (Non-Urgent)
Hemodynamic Stability	General	Signs of shock	Signs of hemodynamic compromise	Vitals signs lower range of normal	Vital signs within normal range for patient	
	Pregnancy Specific	Systolic BP <90 mmHg AND HR >120	Systolic BP <90 mmHg AND HR -100-120			
			Systolic BP >160 Diastolic >100 mmHg	Systolic BP >140 Diastolic >90 mmHg		
Respiratory Distress	General	Severe distress	Moderate distress	Mild distress		
	Pregnancy Specific	O_2 sat <95% AND RR <10 or >30	O_2 sat <95% AND RR 21-30	O_2 sat <95% AND Normal RR		
Fetal Well-being (Fetal Heart Rate (FHR)			FHR <110 or >160 bpm Abnormal/Atypical EFM Meconium stained fluid			
Cervical Dilatation		Fully and pushing	≥6 cm dilatation			

London Health Sciences Centre 2012©

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Time to Initial Assessment and Reassessment Timing

The time period to initial assessment and when to conduct a reassessment is identified under each level of acuity in the Obstetric Triage Acuity Scale tables.

The OTAS timing recommendations provide the Triage RN with guidance around when initial assessment needs to take place for each level of acuity and how frequently reassessment should take place for patients waiting for care/treatment.

RN performing obstetric triage needs to keep in mind that triage is an active process during which the patient's condition may improve or deteriorate between assessments and/or treatment. Reassessment timing assist to ensure patient status is monitored on a regular basis and changes in patient condition are identified in a timely manner.

Time to Most Responsible Provider (MRP)

The time to healthcare practitioner/most responsible provider is identified under each level of acuity in the Obstetric Triage Acuity Scale tables.

The time to healthcare practitioner/MRP indicates the maximum time it should take for the Triaging RN (or appropriate delegate) to notify the healthcare practitioner of presenting patient's status, including OTAS score.

OTAS Score	Time to Initial assessment (RN)	Time to Healthcare Practitioner Contact	Reassessment by RN
Level 1: Resuscitative	Immediate	Immediate	Continuous
Level 2: Emergent	Immediate	< 15 min	Every 15 minutes
Level 3: Urgent	5-10 minutes	< 30 min	Every 15 minutes
Level 4: Less Urgent	5-10 minutes	< 60 min	Every 30 minutes
Level 5: Non-Urgent	5-10 minutes	< 120 min	Every 60 minutes

(BC Women's OTAS Policy – http://policyandorders.cw.bc.ca/resource-gallery/Documents/BC%20Women's%20Hospital%20-%20Fetal%20Maternal%20Newborn/WW.05.02%20Obstetrical%20Triage%20and%20Assessment.pdf)

Please refer to your regional or site policies for additional information regarding the triage process specific to your site or region.

RESOURCES

For more information, go to the LearningHub "Obstetrical Triage Acuity Scale (OTAS) course":
https://learninghub.phsa.ca/Courses/7438/obstetrical-triage-acuity-scale-otas

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