



Levels of Care for Maternal and Newborn Services in Ontario

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Outline

- Context
- Level of Care Definitions
 - Maternal
 - Newborn
- Human Resources for LOC
- Services for LOC
- Implementation



Overview

- Ontario has never had definitions for levels of care for maternal and newborn
 - Level 3 defined and allocated
 - Modified Level 3 – 1991
 - Allocated by centre
 - Volume not defined
 - Loose definition
 - GTA – Child Health Network
 - Some definition
 - Some allocation



Benefits of Levels of Care

- Criteria for LOC based on newborn and maternal needs; risk and illness
 - Universal, province-wide
 - Established standards
 - Established human resource expectations
 - Established services
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- Assists CritiCall, and individual centers, in bed allocation and transfers



Caveats

All sites are expected to have:

- Competent maternal and newborn care providers, including resuscitation and stabilization
- Clearly established referral path
- Clearly established transfer protocol
- Interprofessional staff education to develop and maintain skills



Caveats

- The definitions define minimum expectations
- All of the criteria for a level need to be met 24/7/365
- This is very important if the levels are to be useful in bed allocation
 - CritiCall

LOC Criteria

- Gestational Age
 - Birth Weight
- } Risk
- Interventions – newborn acuity
 - Retro-transfer
 - Maternal
 - Ability to support newborn
 - Childbirth – monitoring, epidural, anaesthesia
 - Complications – C/S, maternal risk



LOC Criteria

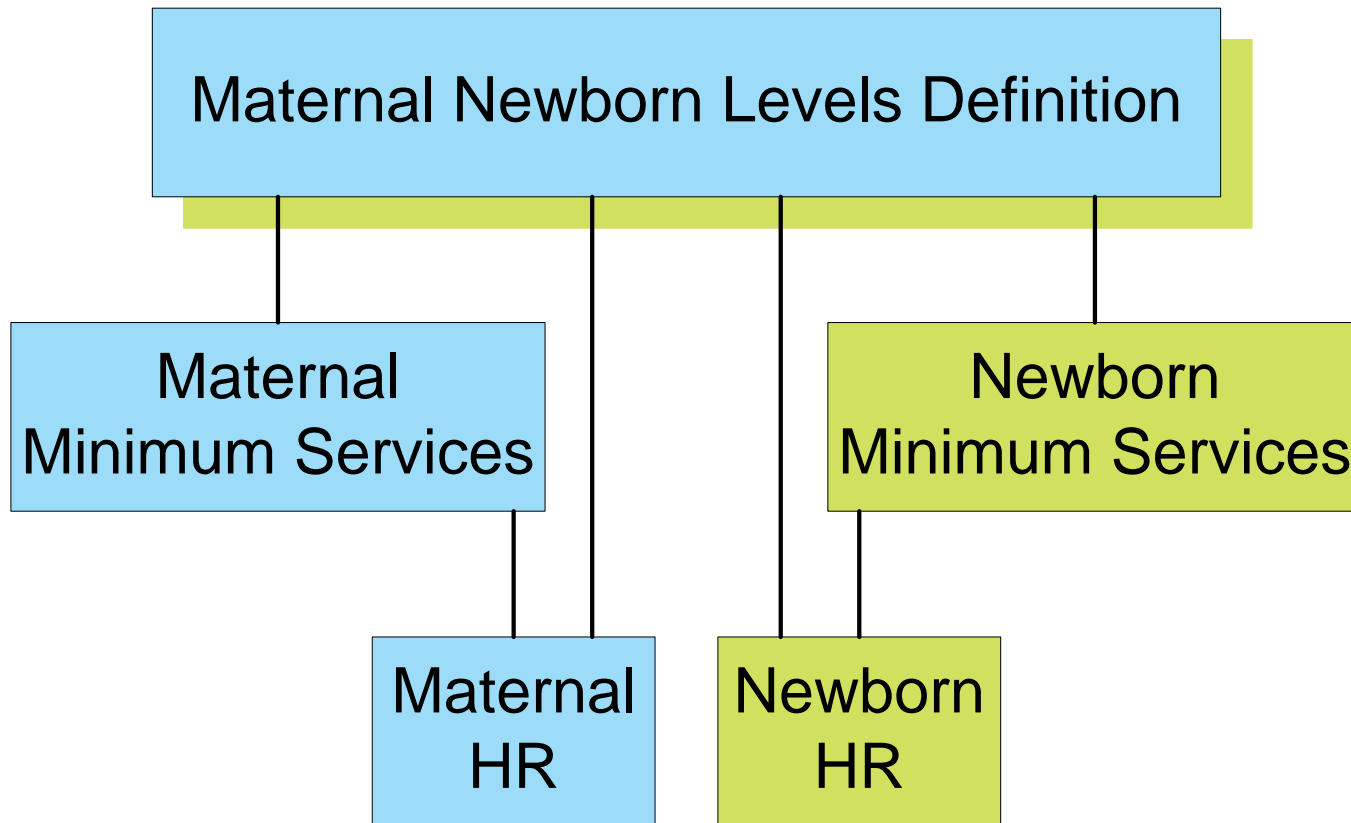
- Very close to CPS Guidelines
 - Level 1 different

	Maternal	Newborn
Level 1	Midwife, Family Physician	Midwife, Family Physician
Level 2	Obstetrician	Paediatrician
Level 3	MFM	Neonatologist

- Levels are cascading



Structure of the Maternal-Newborn Levels Definitions and Associated Minimum Services and Human Resources Recommendations



Level 1 – Maternal

- Extremely low risk
 - $\geq 36 + 0$ weeks
 - No complications
- Low risk
 - $\geq 37 + 0$ weeks
 - Suspected SGA only with consultation

Level 1 – Maternal

- Level 1A and 1B based on C/S capability

Level 1A	Level 1B
No C/S	C/S 24/7
No twins	Uncomplicated dichorionic twins
No VBAC	Electronic monitoring
Informed consent	

Level 1 – Newborn

- Not all centres currently meet minimum requirements
- Some very small volume centres will never be able to achieve minimum requirements
- In order to support Mother–Baby couplet care, ideally all centres should manage common newborn transitional problems
 - Thermoregulation
 - Hypoglycaemia
 - Jaundice
 - TTNB
 - Feeding difficulties
 - Antibiotic prophylaxis



Level 1 – Newborn

- Centres need to be aware of local limitations and transfer out when appropriate
- Generally IV → transfer
- Mother–baby couplet care
 - Larger Level 2 or 3 centres should also strive to take care of Level 1 problems in Mother–Baby couplet care
 - Limits separation of mom and newborn
 - Reserves Level 2 and 3 capacity



Level 2

- Three levels – A, B, C
 - 2A approximates level 1B in CPS Guidelines
 - In Ontario IV generally denotes Level 2

Level	GA at birth	Twins	Retro-Transfer
A	$\geq 34+0, >1800 \text{ g}$	$\geq 36+0, \text{ di}$	$\geq 32+0, > 1500 \text{ g}$
B	$\geq 32+0, >1500 \text{ g}$	$\geq 34+0, \text{ di}$	$\geq 30+0, > 1200 \text{ g}$
C	$\geq 30+0, >1200 \text{ g}^*$	$\geq 32=0,$ uncomp. mono	Individualized

***Level 2C requires assessment trial**
 In the absence of evidence should remain
 $32+0, 1500\text{g}$



Level 2 – Maternal

	A	B	C
Risk	Low-Mod	Moderate	Moderate (On site ICU for high)
Anomalies	No anticipated intervention		Non life threatening
Services	24/7 Induction 24/7 EFM Anaesthesia Epidural		
Emergency	30 minute emergency access for OB, Anaesthesia, Paediatrics and C/S		

Level 2 – Newborn

	A	B	C
Intravenous	Peripheral IV	UVC, UAC insertion and maintenance PICC maintenance	PICC maintenance PICC insertion (at least access)
TPN		Yes	Yes
Respiratory	Low flow O ₂	CPAP, 24 hour vent.	CPAP, 1 week vent.
Scope			May need to extend scope for weather or capacity

Level 3 – Maternal

- Any Gestational age, any weight
- High risk maternal or newborn
- Maternal Fetal Medicine specialists
- Sub-specialty adult and paediatric consultation services
- On site adult ICU capability



Level 3 – Newborn

- Any Gestational age, any weight
- High risk and acuity
 - Congenital malformations
 - Long term mechanical ventilation
 - High frequency ventilation
 - Inhaled Nitric Oxide
- On site NNP or physician 24/7/365
- Timely access to subspecialty consultants
- Timely access to surgical intervention



Level 3 – Newborn

- Two levels – Level 3A and 3B
 - 3A – no on-site surgery
 - Timely access
 - 3B – on-site surgical services 24/7/365



Supporting Services

- Human resources, diagnostic tests and treatments are further outlined in the guidelines
- Many alluded to here
- Pre-circulated
- Useful as a reference for expectations
- Will not be outlined in detail here



Purpose of the Guidelines

- Guidelines will not be used to allocate or reallocate resources
 - No money attached to implementation
 - Money for current work already flows through global operating budgets
- The guidelines will help to establish a standard across Ontario
 - Categorizes current work
 - What should a Level 2B do? Now you know.
 - Will streamline referrals – Critical



How will the Guidelines be Implemented?

- Each center will assess their current level of capability
 - What can you do 24/7/365?
 - What can CritiCall rely on us to do?
 - The results will assist in populating the LOC on the new CritiCall screens



How will the Guidelines be Implemented?

- Guidelines may need some final adjustments for clarification.
- A final version will be re-circulated following the 4 webinars
- Level is current ability 24/7/365, not carved in stone
- Given that no guidelines previously existed, some centres may be very close to the next level



How will the Guidelines be Implemented?

- Guidelines will be posted on PCMCH website
- Feedback will be summarize in FAQs

- Self assessment will be submitted to the LHINs
- The LHINs will forward self assessments to the MOHLTC, CritiCall and PCMCH



Changing Levels

- Up-skill to meet requirements
- Level 2A and 2B likely to be the biggest issue with centres striving to be Level 2B
 - CPAP
 - TPN
 - PICC maintenance



Questions?