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Newborn Resuscitation Initiative

Lessons from QI Teams



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Initiative Aim & Primary Drivers

By August 31, 2026, the initiative will reduce the rate of 5-minute Apgar scores less than 7 by 10% among newborns ***≥ 35weeks*** *and mortality during the delivery stay among newborns ≥* ***35weeks who received resuscitation*** *by 5% among participating hospitals and community birth sites.*

- Unit/ Team Readiness
- Timely Intervention, using NRP algorithm
- Post Resuscitation Care
- Open, transparent & empathetic communication during & after event
- Systems Learning

OPC Newborn Resuscitation Initiative

Learning from newborn death reviews

>25,000 newborns (≥35wks) in data set

- Opportunities in intrapartum care:
  - Shared mental model of team related to urgency of cesarean
  - Education on EFM, including maternal vs newborn heart rate
  - Education and tools on supporting opioid withdrawal (maternal & newborn)
- Opportunities in newborn resuscitation
  - Optimize processes for calling codes and engaging with available telemedicine support
  - Increase role clarity/ have a clear leader
  - Use of gatekeeper role to reduce noise/ confusion in the room
  - Confirming education & access to equipment/ processes,
  - Trauma informed and supportive communication with families

Site Highlights

- Legacy Health System
- Oregon Midwifery Council

Legacy Health Medical Centers

- Community Hospitals
  - Good Samaritan: 693
  - Mount Hood: 798
  - Meridian Park: 848
  - Silverton: 1340

- Portland metro and Silverton
- Level I LDRP
- Telebaby



Legacy Health Medical Centers

OUR DATA

Baseline (March–Aug 2025) vs September 2025–May 2026 Births

Alternative airway used
among resuscitations ≥35wks

27% → 39%

+12 pts

Pre-brief documented
among resuscitations ≥35wks

0% → 77%

+77 pts

Mortality
among resuscitations ≥35wks

2% → 0%

−2 pts

5-minute Apgar < 7
all newborns ≥35wks

2.6% → 3.8%

+1.2 pts

Process Measures

Measure	Baseline (Mar–Aug 2025)		Post (Sep 2025–May 2026)	
Alternative airway used among resuscitations ≥35wks	**Total (13/49)**	**27%**	**Total (41/104)**	**39%**
	LGS (5/9)	56%	LGS (14/25)	56%
	LMH (4/15)	26%	LMH (11/22)	50%
	LMP (0/5)	0%	LMP (10/20)	50%
	LSH (4/20)	20%	LSH (6/37)	16%
Pre-brief documented among resuscitations ≥35wks	**Total (0/49)**	**0%**	**Total (80/104)**	**77%**
	LGS (0/9)	0%	LGS (16/25)	64%
	LMH (0/15)	0%	LMH (16/12)	73%
	LMP (0/5)	0%	LMP (15/20)	75%
	LSH (0/20)	0%	LSH (33/37)	89%

Outcome & Balancing Measures

Measure	Baseline (Mar–Aug 2025)		Post (Sep 2025–May 2026)	
Mortality among resuscitations ≥35wks	**Total (1/49)**	**2%**	**Total (0/104)**	**0%**
	LGS (0/9)	0%	LGS (0/25)	0%
	LMH (0/15)	0%	LMH (0/22)	0%
	LMP (0/5)	0%	LMP (0/20)	0%
	LSH (1/20)	5%	LSH (0/37)	0%
5-minute Apgar <7 all newborns ≥35wks	**Total (49/1861)**	**2.6%**	**Total (104/2751)**	**3.8%**
	LGS (12/353)	3.4%	LGS (25/478)	5.2%
	LMH (21/413)	5.0%	LMH (22/513)	4%
	LMP (5/436)	1.2%	LMP (20/717)	2.8%
	LSH (20/659)	3.0%	LSH (37/1043)	3.5%

opc

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Debrief

- Neonatal and Maternal
- Brief
  - Required 2-3 minutes
  - Additional: 3-5 minutes
- Can be done from anywhere
- Results
  - Email notification to system quality & local leaders
  - Excel Spreadsheet

Form→Collaborate→Duplicate

DEBRIEF SUBMISSION SNAPSHOT

Single response summary • submitted 10/5/2026, 10:02

Event Details

NEONATAL

DATE OF EVENT
10/5/2026

PATIENT
Scheans, Baby Pat

MRN
ABCD1234

Submission

ID	START	COMPLETE
1	10/5/2026 10:00	10/5/2026 10:02

EMAIL
anonymous

DEBRIEF STAFF
OPC Team

Criteria for Debriefing

pH < 7 or BE < −16

Related to an obstetric or neonatal event?

Per request of team member

Neonatal

Successes

“Prioritizing Debriefs!”

What went well

Opportunities

“Doing it every time”

What to improve

Follow-up Status

✓ Team members / TeleBaby	Yes
✓ Equipment	Yes — thanks to our prebrief
✓ Family debriefed	Of course!
✓ ICARE filed	Not yet, but I will
✓ Clinical course review	Yes
✓ Further staff debrief	Yes

Full Form Row — Compact View

NAME	DEBRIEF STAFF	EMAIL
Scheans, Baby Pat	OPC Team	anonymous

EVENT TYPE	MRN	DATE
Neonatal	ABCD1234	10/5/2026

As a follow up, would your team like a review of the clinical course? Yes

Formatted from a single debrief response so all fields remain represented without using an unreadable 18-column table.

Legacy Heath Medical Centers

Opportunity	F/U
Telebaby outside of room for shoulders	What do others do?
LMA size and weight	*see LMA Section*
FiO2 increase with LMA placement	Not required, but consider aggressive FiO2 titration
UVC with no flash back	Alternate route options
Deep suction before LMA	MRSOPA Assessment
Cord Management	Deferred OR Milking—not both

Legacy Heath Medical Centers



Oregon Midwifery Council

The Oregon Midwifery Council (OMC) is the professional organization for Community Midwives across the state, focused on advocacy, professional education and quality improvement. Community midwives attend planned births at home and free-standing birth centers.



In 2025, 5.22% (2,041) of Oregon births were planned community births.

NBR Initiative Participation

Participating practices:
24 participating practices from across the state

- 18 home birth practices
- 6 birth centers

Number of births attended:
There was large variation in practice volume between participating practices. This ranged from 5 to 168 (busy birth center) births in 2024.

Geographic area:
Participants included midwives attending births in the Portland-Metro Area, Salem, Eugene, Corvallis, Canby, Southern Oregon, Eastern Oregon, the North Coast, the Columbia Gorge and Bend.



Highlights

- Engagement in a PDSA cycle in the development and implementation of a community birth specific pre-brief tool.
- Development of community birth specific NBR scenarios packet for practice-based and regional skills drilling.
- Test of an online statewide NBR skills drilling format.
- Scripting for report to EMS when transfer with a resuscitation is needed (created in collaboration with EMS leadership in Southern Oregon).
- Simulation training to increase comfort with alternate airway use & gain deeper understanding of scope of use in the community setting
- Community birth post-resuscitation tool (in process)

Newborn Resuscitation Pre-Brief Tool
Community Birth

RISK ASSESSMENT: For every birth, consider risk factors that may impact increased need for a resuscitation.

Gestational age	History	GBS status	SSRI use
Presence of meconium	VBAC	FHT	Grava/Para
Length of rupture	GDM	Distance from higher level of care	Presentation
SGA/LGA suspected	Hypertension	Infection risk	Multiples

ROLE ASSIGNMENTS: Identify roles and responsibilities and who on the care team will fill what role. These may change if the birthing person needs simultaneous attention or the number of skilled providers changes. Initial who will be responsible for each thing.

Responsibility prompts: (add initials of person responsible for each task)

____ Drying/stimulation	____ Suctioning	____ Establish & secure airway	____ Maintain airway & PPV
____ Attach supplemental oxygen	____ Placement of pulse ox	____ Insert LMA	____ Monitor breath sounds & chest rise
____Charting	____ Chest compressions	____ Call 911	____ Cutting cord
____ Timekeeping & announce time	____ Communication with client/family	____ Management of birthing person/placenta	

EQUIPMENT CHECK: Upon arrival at client home or birth center - assess presence of all necessary resuscitation equipment, set-up for easy access, check functionality (i.e. batteries in pulse ox, pop-off on BVM, O_2 tank full and functional, etc.) and assure all providers identify location of equipment.

BVM with neonatal mask	T-piece	O_2 tank with tubing	Infant stethoscope
Watch or other timing device	Warm blankets	Cord clamp	LMA
Suction device (bulb syringe, delee)	Firm surface	Heat source	Phone nearby

WHEN TO DO A PRE-BRIEF & WHEN TO REPEAT A PRE-BRIEF

1. Initial full newborn resuscitation pre-brief upon arrival at home or birth center with onset of active labor.
2. Repeat risk assessment at onset of second stage, and/or if risk factors change.
3. Repeat full newborn resuscitation pre-brief if birth team changes.
4. Consider completing prenatally when preparing for a higher risk birth (i.e. breech, twins, VBAC).

CHARTING TEMPLATE UPON COMPLETION OF PRE-BRIEF

Date/Time: Newborn resuscitation pre-brief complete including risk assessment, role assignments and equipment check. Risk factors increasing need for resuscitation include _____. Roles and responsibilities assigned. All equipment available, set-up and checked for functionality. Will repeat risk assessment at onset of second stage and/or if risk factors change. Will repeat full pre-brief if birth team changes.

RISK ASSESSMENT: For every birth, consider risk factors that may impact increased need for a resuscitation.

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“As always seems to happen when you’re focusing on something, we’ve had a few recent resuscitations. And after implementing the pre-brief tool into our workflow we had the BEST resuscitations of my career.”

- Hearth & Home Midwifery

Looking ahead



- Quarterly regional NBR skills drills
- Statewide online NBR skills drills offerings
- Continued expansion of NBR scenarios packet for practice-based skills drills
- Completion, testing, and implementation of community birth post-resuscitation tool
- 100% enthusiasm and interest in participation in future statewide, system-wide quality improvement initiatives

THANK YOU

Come find us during break if you want to talk more!