

2026 CPQCC Annual Impact Series

Advancing Quality Improvement Through
Data, Partnership, and Innovation

“

...what helped during that NICU journey was having clear, compassionate communication from providers who were willing to slow down and explain what was happening to me and providers who treated us like partners rather than spectators of our child's development.”



Summer McBride

NICU Mom

CPQCC California NICU Family Advisory Council Member

Voices That Heal, for Communication and Connection in the NICU



Welcome & Opening Remarks

Fulani Davis



Perinatal Transport Systems: Improving Communication and Care

Welcome

October 14, 2026 | 12:00–1:30 PM

Today: Neonatal transport systems and access to appropriate levels of care.

CPQCC Annual Impact Series

Advancing quality improvement through data, partnership, and innovation

Data

A shared view of
outcomes and
opportunities

Partnership

Connections across
programs, systems, and
teams

Innovation

Learning, resources,
and improvement in
practice

The Annual Impact Series reflects CPQCC's expanded focus beyond database education — toward practical insight, current program updates, and resources that support improvement.

Today's conversation

How regionalized transport, CPeTS reports, and transport data support improvement

1

Welcome & Opening Remarks

12:00 | Fulani Davis

2

Regionalized Neonatal Transport: Past, Present and Future Trends

12:05 | Kevin Van Otterloo

3

Live Demo: Accessing CPeTS Reports

12:15 | Kevin Van Otterloo

4

Using Transport Data and Improvement Opportunities

12:35 | Lucy Van Otterloo

5

Panel Discussion & Audience Q&A

1:00 | Kevin, Lucy, Fulani, and Joanne Tillman

6

Evaluation & Contact Hours

Before you go

We'll reserve the final 30 minutes for panel discussion and audience questions.

Today's Speakers & Panelists

Perinatal Transport Systems: Improving Communication and Care



Kevin Van Otterloo

Presenter & Panelist
CPeTS



Lucy Van Otterloo

Presenter & Panelist
CPeTS



Fulani Davis

Presenter & Panelist
CPQCC



Joanne Tillman

Presenter & Panelist
CPQCC/CMQCC

Co-host / slide moderator: Marci Treadwell

Before we begin

A few quick logistics

Questions

Please use the Q&A feature.
We'll hold time for discussion at the end.

Recording & materials

Presentation materials and resources will be available through the Annual Impact Series webpage.

Contact hours

Attend the full live session and complete the evaluation to receive continuing education (CE) credit

Thank you for being here — and for the work you do every day to support mothers, babies, families, and communities.

Continuing Education Information

MCCPOP

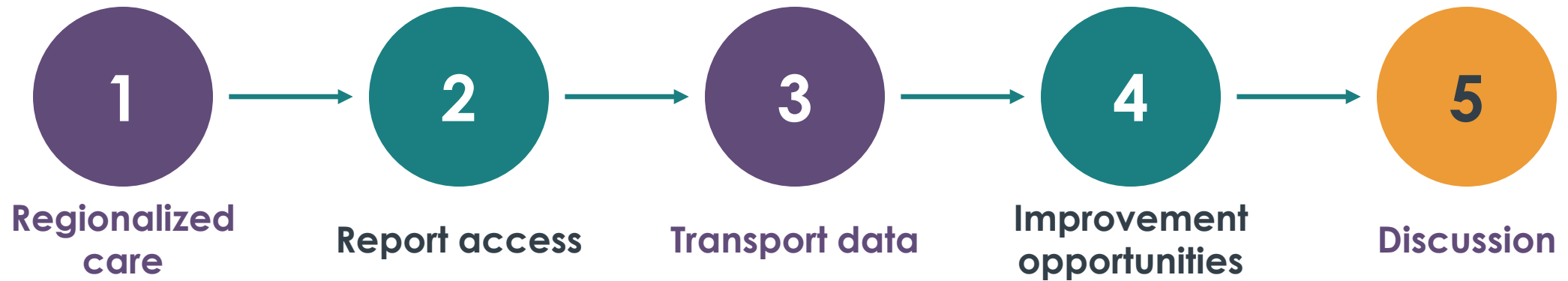
Mid-Coastal California
Perinatal Outreach Program

- If you attend as a team, please contact contactmccpop@stanford.edu to request the group sign-in form. The form must be reviewed and approved by a supervisor or nurse educator.
- Attendees are eligible for contact hours through the Mid-Coastal California Perinatal Outreach Program (MCCPOP). MCCPOP is approved as a provider of continuing education by the California Board of Registered Nurses, Provider #3104. This 90-minute webinar has been approved for up to 1.5 contact hours.
- To receive contact hours, attendees must remain on the webinar for the full live session and complete the post-session evaluation. The evaluation will be available within 2-4 days following the session.



Our starting point

From regionalized transport to data-informed improvement



We'll begin with the regionalized transport system and how transport supports access to the appropriate level of care.

Then we'll look at how CPeTS reports and transport data can help teams identify patterns, ask better questions, and strengthen improvement efforts.

Regionalized Neonatal Transport: Past, Present and Future Trends

Kevin VanOtterloo, MPA

California Perinatal Transport System (CPeTS)

Past.....

Legislatively mandated by AB 4439 in 1976, required by California Perinatal Quality Care Collaborative (CPQCC), California Children's Services (CCS) and California Department of Public Health (CDPH), managed by Regional Perinatal Programs of California (RPPC).

- Beginnings of Perinatal Regionalization
- Dispatch service to address the need for facilitating the transport of critically ill infants and mothers with high-risk conditions to regional Neonatal Intensive Care Units (NICUs) and Perinatal High-Risk Units (PHRUs).
- Bed Availability and Direct Referral Information (Perinatal.org)

Perinatal.org

- Daily hospital updates of Neonatal and High Risk Maternity Beds
- Quarterly reports from Regional CPeTS on Update Compliance
- Quarterly and as needed updates of Contact Information



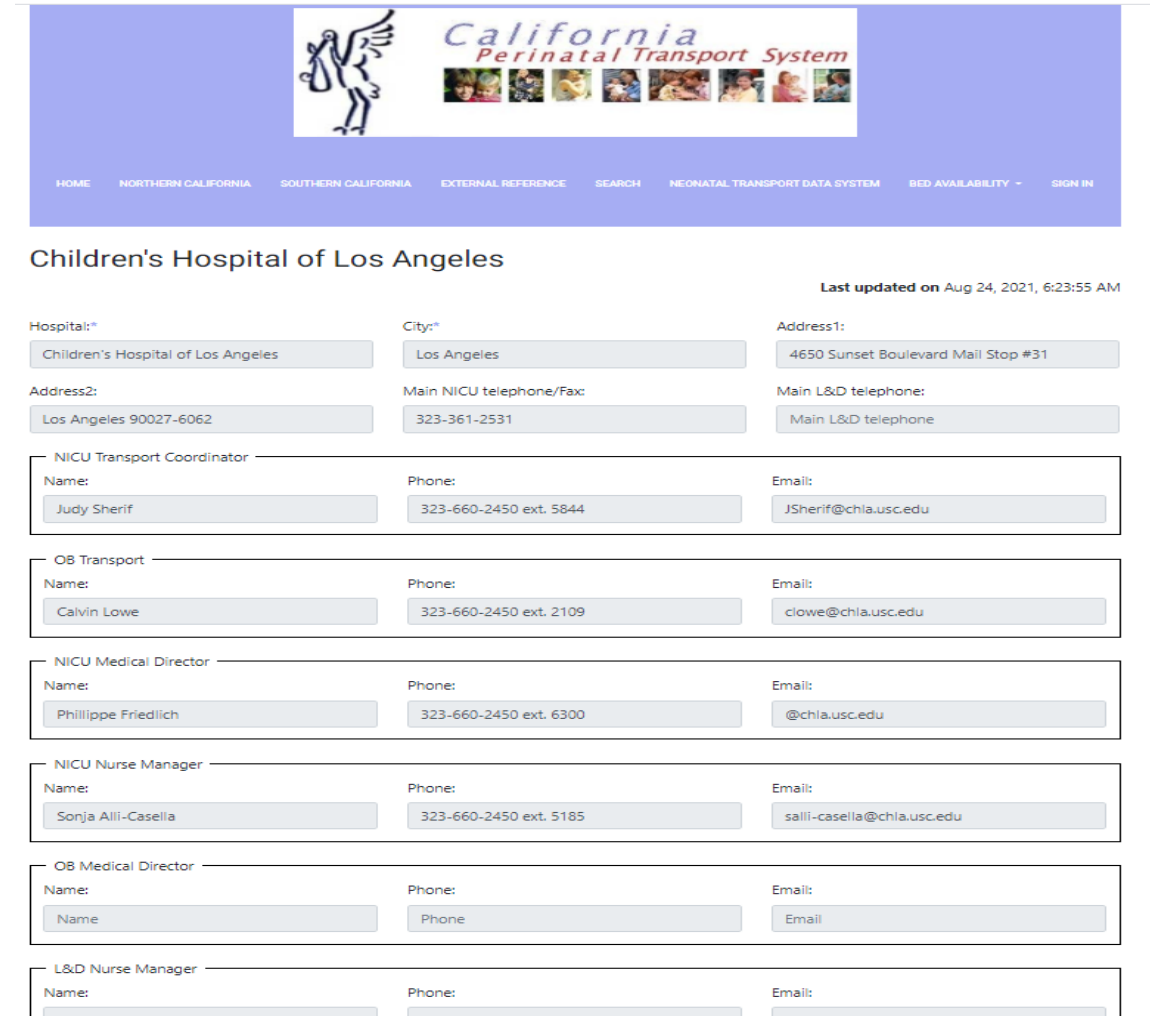
View Bed Availability - Southern California

To obtain more detailed information about each provider, including contacts and phone numbers, click on the name of that center in the first column.

REGIONAL Centers		Beds Available			
Hospital	City	Neonatal	ECMO	High Risk Maternity	Last Update
Cedars Sinai Medical Center	Los Angeles	5 or more	n/a	open	9/7/2023
Children's Hospital of Los Angeles	Los Angeles	1	open	n/a	9/7/2023
Children's Hospital of Orange County	Orange	5 or more	open	n/a	9/6/2023
Desert Regional Medical Center	Palm Springs	5 or more	n/a	n/a	9/5/2023
Huntington Memorial Hospital	Pasadena	2	closed	open	9/7/2023
Kaiser Permanente Los Angeles Medical Center (Sunset)	Los Angeles	2	n/a	n/a	9/7/2023
LAC/Harbor - UCLA Medical Center	Torrance	2	n/a	open	9/6/2023

Perinatal.org

- Direct Referral and Contact Information.
- Updated quarterly and as needed by hospitals.
- Accessed by clicking on facility name in main listing.



The screenshot displays the California Perinatal Transport System website. The header features the organization's logo and a navigation menu with links: HOME, NORTHERN CALIFORNIA, SOUTHERN CALIFORNIA, EXTERNAL REFERENCE, SEARCH, NEONATAL TRANSPORT DATA SYSTEM, BED AVAILABILITY, and SIGN IN. The main content area is titled "Children's Hospital of Los Angeles" and includes a timestamp: "Last updated on Aug 24, 2021, 6:23:55 AM". Below the title, there are input fields for Hospital, City, Address1, Address2, Main NICU telephone/Fax, and Main L&D telephone. The contact information is organized into sections for NICU Transport Coordinator, OB Transport, NICU Medical Director, NICU Nurse Manager, OB Medical Director, and L&D Nurse Manager, each with fields for Name, Phone, and Email.

Section	Name	Phone	Email
Hospital	Children's Hospital of Los Angeles	Los Angeles	4650 Sunset Boulevard Mail Stop #31
Address2	Los Angeles 90027-6062	Main NICU telephone/Fax: 323-361-2531	Main L&D telephone: Main L&D telephone
NICU Transport Coordinator	Judy Sherif	323-660-2450 ext. 5844	JSherif@chla.usc.edu
OB Transport	Calvin Lowe	323-660-2450 ext. 2109	clowe@chla.usc.edu
NICU Medical Director	Phillippe Friedlich	323-660-2450 ext. 6300	@chla.usc.edu
NICU Nurse Manager	Sonja Allii-Casella	323-660-2450 ext. 5185	sallii-casella@chla.usc.edu
OB Medical Director	Name	Phone	Email
L&D Nurse Manager	Name	Phone	Email

Perinatal.org

- All materials and support documents accessible at perinatal.org website
- Hospital and Local EMS Contact Information now available.



California Perinatal Transport System

HOME NORTHERN CALIFORNIA SOUTHERN CALIFORNIA EXTERNAL REFERENCE SEARCH NEONATAL TRANSPORT DATA SYSTEM BED AVAILABILITY SIGN IN

Neonatal Transport Data System

CPeTS Transport paper forms are no longer available from the Regional Offices. Please download and copy the forms as needed from this website

2026 Materials

- [2026 Neonatal Transport Form \(PDF\)](#)
- [2026 Neonatal Transport Form \(Word\)](#)
- [2026 Neonatal Transport Form Color Coded \(PDF\)](#)
- [2026 Neonatal Transport Form Color Coded \(Word\)](#)
- [2026 CPeTS manual \(PDF\)](#)
- [2026 CPeTS manual \(Word\)](#)
- [2024 What's New with CPeTS](#)
- [2025 CPeTS Data Request Form \(PDF\)](#)
- [2025 CPeTS Data Request Form \(Word\)](#)

Hospital/EMS Contact List

- [Hospital and Local EMS Contact Information Download \(PDF\)](#)
- [Hospital and Local EMS Contact Information Download \(Excel\)](#)

Hospital and Local EMS Contact Information

Facility Contact Information		Local EMS Contact Information	
Hospital	Community Memorial Hospital of San Buenaventura	County	VENTURA
City	Ventura	Director	Daniel Shepherd, MD
Type	COMMUNITY	Address	2220 E. Gonzalez Rd., Ste. 130
Address1	147 North Brent Street Ventura, CA	City, State, ZIP	Oxnard, CA 93036
Address2	Ventura, CA 93003-2854	Phone	(805) 981-5304
Main NICU telephone/Fax	805-652-5620	Email	daniel.shepherd@ventura.org
Main L&D telephone		Fax	
NICU Transport Coordinator			
OB Transport			
NICU Medical Director			
John Van Houten	805 652-5620	John_vanhouten@pediatrix.com	
NICU Nurse Manager			
Deborah J Hill	805 667-2821	djhill@cmhhospital.org	
OB Medical Director			

California Perinatal Transport System (CPeTS) Present.....

- **Greater emphasis on community-based care developed during the 1990s**
- **Bed Availability/Transport Facilitation continues**
- **Development of Neonatal Data System**
 - Collection and Entry
 - Standardized Reports
 - Transports In
 - Transports Out

Quality California Neonatal Transport Data Base

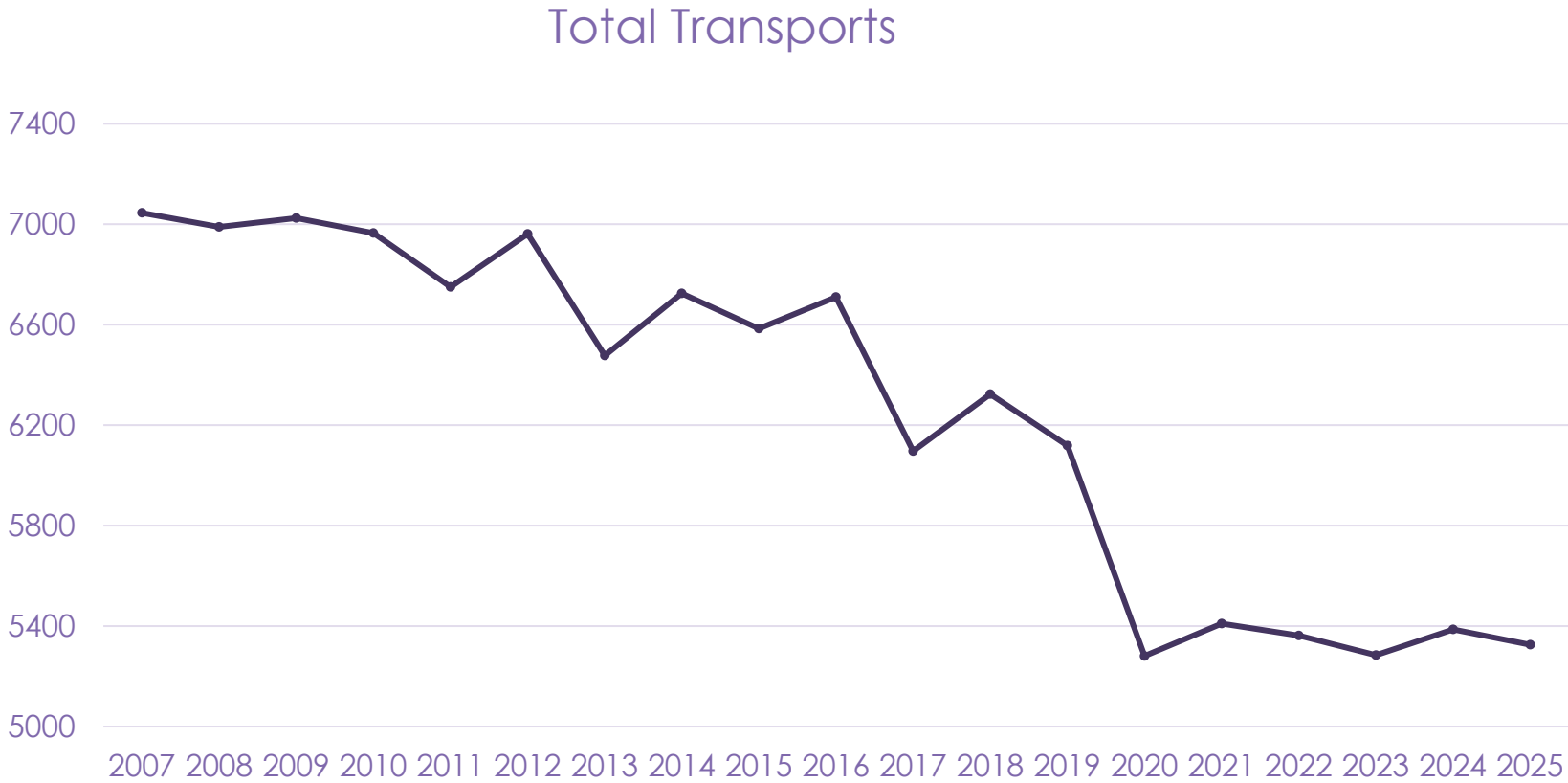
- Developed during 2005-2006
- First full year of data – 2007
- All CCS designated NICUs in California plus any facilities with licensed Intensive Care Neonatal Nursery who choose to participate.
- Over 120,000 acute neonatal transports in dataset to date
 - Within the first 28 days of life, into NICU services, transported by a team

California Acute Transport Activity by Facility, 2025

- Total Acute Transports 5,326
- 137 member facilities
- 80 facilities reporting acute transports
 - 10 facilities transport approx. 70% of all transports.
 - 27 facilities with ≤ 10 acute transports/year.

California Neonatal Transport-in Activity

Year	Total Transports
2025	5,326
2024	5,387
2023	5,284
2022	5,362
2021	5,411
2020	5,281
2019	6,119
2018	6,323
2017	6,097
2016	6,710
2015	6,584
2014	6,724
2013	6,477
2012	6,961
2011	6,750
2010	6,965
2009	7,025
2008	6,989
2007	7,045



2025 Acute Neonatal Transports in by birth weight and level of care

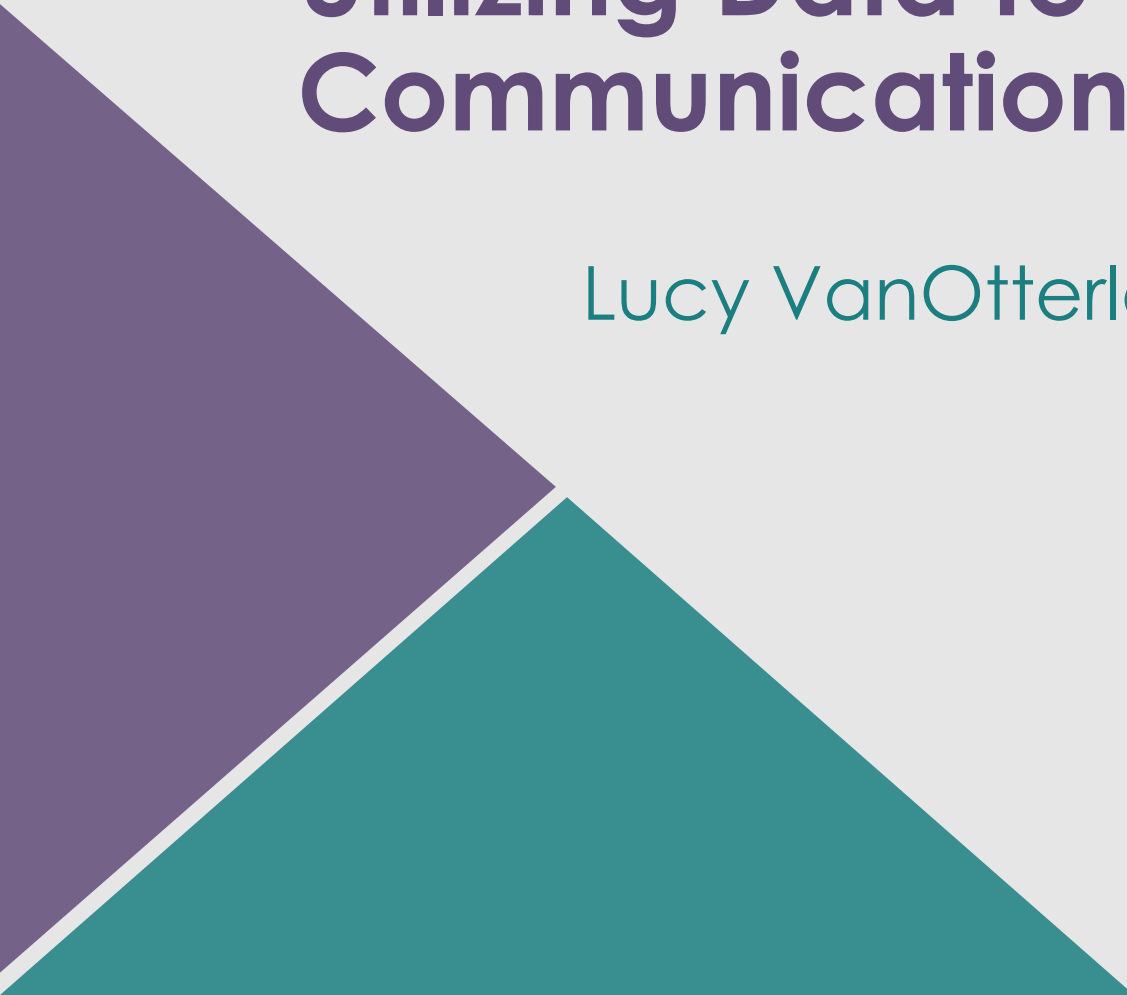
	CPQCC Network Total	CPQCC Regional NICUs	CPQCC Community NICUs	CPQCC Intermediate / Others
All Birth Weights	5,326	4,179	1,142	4
≤ 500 grams	10 / 0.2%	9 / 0.2%	1 / 0.1%	0
501-750 grams	144 / 2.7%	115 / 2.8%	29 / 2.5%	0
751 – 1,000 grams	166 / 3.1%	135 / 3.2%	31 / 2.7%	0
1,001-1,500 grams	312 / 5.9%	239 / 5.7%	73 / 6.4%	0
1,501-2,500 grams	1,069 / 20.1%	811 / 19.4%	257 / 22.5%	1
> 2,500 grams	3,625 / 68.1%	2,870 / 68.7%	751 / 65.8%	3

California Perinatal Transport System (CPeTS) Future.....

- Continue to support, assess and improve perinatal transports
- Address changes in hospital availability
- Understand and utilize maternal risk appropriate levels of care
- Continued access to timely and effective perinatal transport when needed
- Utilization of data to inform quality improvement efforts

Accessing Data Reports

<https://www.cpqccreport.org/>



Utilizing Data to Improve Communication and Care

Lucy VanOtterloo, PhD, RN-C, CNS



California Perinatal
Quality Care Collaborative

PURPOSE OF COLLECTING DATA

1

Discernable underutilization of maternal transport

2

Discernable delays in the decision to transport infant

3

Difficulty in obtaining transport placement/acceptance

4

Delays in effecting transport following the decision to transport the infant

5

Referring facility competency regarding infant stabilization

6

Transport team proficiency

CPeTS/CPQCC Dataset Features

- Characteristics of neonates transported: birth weight, gestational age, existence of prenatally diagnosed congenital anomalies, maternal history, clinical stability and history of transports for each infant
- Missed opportunities for maternal transport rather than neonatal transport
- Timeliness of neonatal transports in California
- Effectiveness of care
- Outcome Data matching from CPQCC and High-Risk Infant Follow-up

Underutilization of Maternal Transport

Transport Activity by Birth Weight, 2025

	Transports In All CPQCC		Transports Out Primary Care (n=66,525)	
Birth Weight (gms)	n	%	n	%
All Birth Weights	5,326	100	2,231	100
500 or less	10	0.2	2	0.1
501 to 750	144	2.7	26	1.2
751 to 1,000	166	3.1	48	2.2
1,001 to 1,500	312	5.9	90	4.0
1,501 to 2,500	1,069	20.1	501	22.5
Over 2,500	3,625	68.1	1,564	70.1

Underutilization of Maternal Transport

Time of Maternal Admission to Infant Birth, 2025

	Non-NICU Facilities (n=2,231)	All California Birthing Facilities (n=5,326)
Post Birth Admission	1.6	1.6
0 to 2 hours	18.3	16.9
>2 to 4 hours	16.2	14.5
>4 to 6 hours	8.6	7.8
>6 to 12 hours	13.9	14.2
>12 to 36 hours	28.1	28.8
>36 hours	13.3	16.3
Mean	1 d, 4 hrs, 58 mins	1 d, 10 hrs, 36 mins
Median	7 hrs, 58 mins	9 hrs, 49 mins

Strategies for Improvement

- Why wasn't the maternal/fetal dyad transferred?
 - Maternal levels of care, antepartum transfers, coordination of care
- Consultation or transfer?
 - Management of high-risk pregnancies (maternal, fetal or both)

Discernable Delays in the Decision to Transport Infant

Time from Birth to Referral, 2025

	Non-NICU Facilities (n=2,231)	All California Birthing Facilities (n=5,326)
Referral < Birth	21.2	11.9
0-2 hours	23.4	23.6
>2-4 hours	9.4	9.8
>4-6 hours	4.6	4.3
>6-12 hours	7.7	6.2
>12-36 hours	16.6	15.0
>36 hours	17.0	29.3
Mean	1 d, 0 hrs, 55 mins	2 d, 12 hrs, 35 mins
Median	2 hrs, 52 mins	6 hrs, 22 mins

Discernable Delays in the Decision to Transport Infant

Transports by Transport Type and Birth Weight, 2025

	DR	Emergent	Urgent	Scheduled
All Weights	17.8/8.3	44.5/49.8	34.1/34.1	3.4/7.6
500 or less	50.0/10.0	0.0/70.0	50.0/10.0	0.0/10.0
501 to 750	46.2/15.3	50.0/48.6	3.8/28.5	0.0/7.6
751 to 1,000	47.9/12.7	43.8/46.4	8.3/27.1	0.0/10.8
1,001 to 1,500	37.8/12.5	36.7/50.6	24.4/9.8	1.1/7.1
1,501 to 2,500	38.3/18.4	29.3/40.8	29.1/31.6	3.0/9.0
Over 2,500	8.7/4.4	49.8/52.6	37.6/35.9	3.8/7.1

Strategies for Improvement

- Common conditions/diagnoses
 - Standardized procedures/care guidelines
- Evaluate time between mother admission to birth of baby
 - Can the mother/infant dyad be transferred?
- What resources/skills needed regarding maternal assessment and risk-appropriate care/transport?
 - Stabilization of mother/infant dyad for transfer

Difficulty in Obtaining Transport Placement/Acceptance

Time from Referral to Acceptance, 2025

	Non-NICU Facilities	All CPQCC
0 – 30 minutes	93.2	88.1
31 – 60 minutes	3.7	6.3
61 – 90 minutes	0.9	1.7
91 – 120 minutes	0.7	1.0
>2 hours	1.5	2.8
Mean	14 minutes	33 minutes
Median	1 minute	1 minute

Difficulty in Obtaining Transport Placement/Acceptance

Transfer Provider by Birth Weight, 2025

	Receiving Hospital	Contract Service	Referring Hospital
All Birth Weights	86.6	9.9	3.5
500 or less	70.0	20.0	10.0
501 to 750	82.6	14.6	2.8
751 to 1,000	86.1	10.8	3.0
1,001 to 1,500	83.3	14.4	2.2
1,501 to 2,500	87.3	9.2	3.6
Over 2,500	86.9	9.4	3.7

Strategies for Improvement

- Do all hospitals within the region know how to reach the receiving hospital quickly to initiate transport?
 - Consider main phone number
 - Specific policy and procedures for neonatal (and maternal transport)
 - Does the receiving hospital have its own transport team? Are they included in ongoing education and training? How are competencies maintained and evaluated? What education/skill level is required to participate on the team?

Strategies for Improvement

- Does the contract service receive regular training and education?
 - Consider including in annual competencies/training.
 - Review required equipment or recommendations for transporting infant safely.
 - Communication regarding type of equipment needed?
 - How is this done during disasters? Are they part of the disaster planning/preparedness?

Delays in Transport Following the Decision to Transport

Time from Acceptance to Transport Team Departure, 2025	
Up to 30 minutes	51.8
31 to 60 minutes	28.0
1-2 hours	12.5
2-4 hours	5.0
4-8 hours	1.9
>8 hours	0.9
Mean	60 minutes
Median	30 minutes

Time from Referral to Initial Evaluation, 2025	
Up to 30 minutes	4.4
31 to 60 minutes	17.2
61 to 90 minutes	23.8
91 to 120 minutes	22.2
>2 to 4 hours	25.4
>4 to 8 hours	5.4
>8 hours	1.5
Mean	2 hours, 15 minutes
Median	1 hour, 37 minutes

Delays in Transport Following the Decision to Transport

Time from Departure for Referring Hospital to NICU Admission at Receiving Hospital, 2025	
Up to 30 minutes	2.2
31 to 60 minutes	8.3
1 to 2 hours	25.5
2 to 4 hours	48.9
4 to 8 hours	14.0
>8 hours	1.1

Strategies for Improvement

- Evaluate the efficiency of the transport process including team member readiness, equipment readily available, transport vehicle storage, communication between providers-nursing unit management-transport team, referring hospital distance, pregnant woman/family
- Consider if any specialized equipment is needed.
 - Is it readily available?
- Depending on distance to the referring hospital, continuous communication with transport team and referring hospital is recommended.
 - Instruction on treatment/interventions/management of newborn until team's arrival
 - Checking vital signs, including BP
 - Maintaining body temperature

Modified Transport Risk Index of Physiologic Stability

TRIPS Score

- Assessment of the infant's condition at referral, initial evaluation and NICU admission - calculates the **risk of death** of the infant within **seven days** of transport.
 - It is used to:
 - assess the infant's condition;
 - assess the quality of care at the referral center (by evaluating changes in the infant condition between Referral and Initial Evaluation);
 - judge the quality of the neonatal transport (by evaluating changes between Initial Evaluation and NICU admission).
- An online TRIPS score/risk of mortality calculator suitable for smart phones is available at: <http://www.health-info-solutions.com/CPQCC-CPeTS/tripsmobile/tripsmobile.html> (Google TRIPS SCORE CALCULATOR).

TRIPS Score on Transport Form

INFANT CONDITION			
Modified TRIPS Score: to be recorded on referral, within 15 minutes of arrival at sending hospital and admit to NICU.			
	Referral	Initial Transport	NICU Admit
C.20 Responsiveness			
C.21 Temperature C°			
C. 21.a. Too low to register	☐ Yes	☐ Yes	☐ Yes
C.21.b. Was the infant cooled?	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N
C.21.c. Method of cooling +			
C.22 Heart Rate			
C.23 Respiratory Rate			
C.24 Oxygen Saturation			
C.25 Respiratory Status *			
C.26 Inspired Oxygen Concentration			
C.27 Respiratory Support			
C.28 Blood Pressure Systolic / Diastolic Mean			
N=Not Done, T=Too low to register	☐ N ☐ T	☐ N ☐ T	☐ N ☐ T
C.29 Pressors	☐ Y ☐ N	☐ Y ☐ N	☐ Y ☐ N

- *Temperature, blood pressure, response to noxious stimuli, respiratory status, use of pressors to support blood pressure and use of a ventilator.*

Referring Facility Competency in Infant Stabilization

TRIPS Score at Referral

- High TRIPS Score
 - Support for maternal transport
 - Earlier transport decision
 - Ability to resuscitate and support prior to the transport team's arrival

All Scores	100
14 or less / Probability <1%	72.3
15 to 31 / Probability <5%	19.9
32 to 38 / Probability <10%	4.9
39 to 49 / Probability <25%	2.3
>50 / Probability >25%	0.5
Mean Score	8.5
Median Score	3.0

Mean Scores at Referral	
All Birth Weights	8.5
500 or less	33.2
501 to 750	25.6
751 to 1,000	20.1
1,001 to 1,500	14.4
1,501 to 2,500	7.8
Over 2,500	6.6

Referring Facility Competency in Infant Stabilization

TRIPS Score at Initial Evaluation

- High TRIPS Score
 - Ability to resuscitate and support prior to the transport team's arrival
 - Outreach education on stabilization
 - Effectiveness of clinical advice given
 - Impact of time it takes to arrive

TRIPS at Initial Evaluation	
All Scores	100
14 or less / Probability <1%	74.1
15 to 31 / Probability <5%	18.0
32 to 38 / Probability <10%	4.6
39 to 49 / Probability <25%	2.6
>50 / Probability >25%	0.7
Mean Score	8.2
Median Score	3.0

Mean Scores at Initial Evaluation	
All Birth Weights	8.2
500 or less	31.8
501 to 750	29.4
751 to 1,000	21.1
1,001 to 1,500	15.5
1,501 to 2,500	8.0
Over 2,500	5.9

Strategies for Improvement

- Identify challenges (Assaad & Khouzam, 2025)
 - Lack of trained personnel, limited exposure to resuscitation in community settings; 39%
 - Airway and ventilation procedures; 12%
 - VLBW resuscitation in the delivery room; 9%
 - Cognitive load; Communication during high-stress, critical events; 8%
 - IV access; 6%

Strategies for Improvement

- Referring hospital education/skills/competency in caring for neonate during transition.
 - Most common diagnoses (respiratory, cardiac, infectious, HIE)
 - Standardized care pathways
 - Resuscitation and stabilization
 - Hypothermia – prewarmed incubators, plastic wrap, hat, continuous temp monitoring
 - Basic vital signs and intervention strategies
 - Advocate for basic equipment (minimal monitoring standards)
 - Transport stabilization guidelines and bundles that address temperature, glucose, vascular access, and initial respiratory support
 - Standardized transport pathways

Strategies for Improvement

- Simulation and in-person trainings
 - Identify priorities (resuscitation, procedural training – ventilation, intubation, and IV access, pathologies requiring specialized care – extreme prematurity, pneumothorax, HIE/seizures, and surgical cases; *Assad & Khouzam, 2025*).
 - Workshops
 - Feedback
 - Case reviews

Transport Team Proficiency

TRIPS Score at NICU Admission

- High TRIPS Score
 - Quality of care provided by the team
 - Destabilized on the trip back to the NICU
 - Evaluates care during transport

TRIPS at NICU Admission	
All Scores	100
14 or less / Probability <1%	73.5
15 to 31 / Probability <5%	17.7
32 to 38 / Probability <10%	5.1
39 to 49 / Probability <25%	3.1
>50 / Probability >25%	0.6
Mean Score	8.4
Median Score	3.0

Mean Scores at NICU Admission	
All Birth Weights	8.4
500 or less	39.0
501 to 750	30.9
751 to 1,000	23.4
1,001 to 1,500	15.7
1,501 to 2,500	7.4
Over 2,500	6.1

Quality of Care

TRIPS Score Mean Change

Mean Change in TRIPS Score from Referral to Initial Evaluation	CPQCC Network
All Birth Weights	0.3
500 or less	-3.1
501 to 750	1.5
751 to 1,000	-0.2
1,001 to 1,500	0.8
1,501 to 2,500	1.1
Over 2,500	0.0

Mean Change in TRIPS Score from Initial Evaluation to NICU Admission	CPQCC Network
All Birth Weights	0.4
500 or less	7.1
501 to 750	1.7
751 to 1,000	2.1
1,001 to 1,500	0.4
1,501 to 2,500	0.0
Over 2,500	0.4

- Positive entries indicate that the TRIPS increased from one assessment to the next.
- Negative entries indicate that the TRIPS decreased from one assessment to the next.

Strategies for Improvement

- Evaluate adverse events and complications during transport
 - Clinical complications and deterioration
 - Temperature instability, hypo- or hyperthermia, desaturation, hypo- or hyperglycemia, seizures, brady- or tachycardia, hypo- or hypertension, extubation, hypo- or hypercapnia, apnea, and pneumothorax (58.3%, Bekkevold et al., 2025; Gray et al., 2023)
 - Equipment failure
 - Ventilator complications, IV access, oxygen supply, disconnections, power loss (28.7%, Bekkevold et al., 2025; Gray et al., 2023)
 - Transport complications
 - Delays, vehicle problems, logistical and organizational problems (14.8%, Bekkevold et al., 2025; Gray et al., 2023)

Strategies for Improvement

■ COMMUNICATION

- Effective communication, family engagement, and structured handoffs are critical components of safe neonatal transport (Meyer & Totapally, 2026)
 - Modified SBAR
 - Collaborative decision making between referring and accepting physicians
 - Initial consultation should clearly outline reason for transfer, the key events leading to deterioration, current therapies and vent settings, IV access, risk for instability, and any family concerns
 - Pre-arrival briefing
 - Standardized, simple hand-off – clear, complete, and organized report

Strategies for Improvement

- Structured debrief to discuss challenges during transport
 - Great work in a tiny space
 - Fewer health care personnel present, minimum of two clinicians (Wilcox et al., 2022)
 - All transport team members should be prepared to respond to the most common and high-risk events (Gray et al., 2023)

Strategies for Improvement

- Transport team education
 - AAP encourages the development of annual transport education (Stark et al., 2023)
 - Equipment training....works differently in a moving vehicle; new equipment that minimizes the effects of motion and vibration
 - Didactic education
 - Simulation
 - Skills verification of low-volume, high-risk procedures consistent with the types of care needed during transport
 - Advanced airway management, invasive and noninvasive ventilatory support, vascular access, medication preparation and infusion management, hemodynamic assessment, and thermal control (Meyer & Totapally, 2026).

Strategies for Improvement

Parental Needs

- The need to transport a newborn adds new stressors to an already anxious parent – separation, uncertainty about the condition, and not being able to provide care
 - Both referring and receiving hospitals are responsible for patient/family information and support
 - Parents can't absorb information completely
 - Repeated shorter conversations – ongoing communication and updates
 - Meet the team, discuss the plan, what to expect at the receiving hospital
 - Psychological support offered to patient/family awaiting discharge
 - Trauma informed care

Basic Principles of Safe Transfer

Wallace & Ridley, 1999

1

A well-trained, experienced team

2

Appropriate equipment and mode of transportation

3

Full assessment and stabilization of the patient before mobilization

4

Monitoring, reassessment, and stabilization during transport

5

Structured handoff and pre-arrival briefings

6

Proper documentation

A photograph of a woman and a newborn baby sleeping together in a hospital bed. The woman is lying on her side, facing right, with her eyes closed. The newborn baby is lying on her chest, also facing right, with its eyes closed. The baby is wrapped in a white blanket with a floral pattern. The background is a blurred hospital room. A purple and teal diagonal graphic is overlaid on the left side of the image.

Panel Discussion: Q&A

Panel Discussion & Audience Q&A

What questions are coming up about transport systems, report access, or using transport data for improvement?

Please continue submitting questions through the Q&A.

LOOKING BACK

Today's Takeaways

1

Regionalized care

Transport connects patients to risk-appropriate care

2

Report access

CPeTS reports make transport activity and system performance visible

3

Transport data

Data reveals delays, missed opportunities, and stabilization needs

4

Improvement

Teams can improve readiness, communication, handoffs, and transport processes

5

Safe transfer

Prepared teams and family support promote safer transitions

Transport data becomes valuable when teams use it to improve decisions, stabilization, communication, and care.

Before You Go

Complete the evaluation

Your feedback helps us improve future sessions. Please scan the QR code below.



Contact hours

Attend the full live session and complete the evaluation to receive credit.

Please reference the continuing education information for more details.

Recording & slides

Materials will be posted on the Annual Impact Series webpage.

Thank you for taking a few minutes to share your feedback.

JOIN US NEXT WEDNESDAY

Next in the Series

OCTOBER 21, 2026

NICU:

Using Data to Improve NICU Care

12:00–1:30 PM PT

NICU data highlights, reports, dashboards, site visit findings, and emerging work

Thank you

for joining us today

We appreciate the work you do across the CPQCC community and look forward to continuing the conversation next week.

