2024 VON Grand Rounds Date: 11/13/2024

Planners: Roger Soll MD; Denise Zayack RN, MPH, Danielle Ehret MD, Jonathan S Litt, MD MPH ScD

Speaker(s): Roger Soll MD, Danielle Ehret MD, Jonathan S Litt, MD MPH ScD, Diana Montoya-Williams MD MSHP, Sunah Hwang, MD, PhD, MPH/MSPH

Purpose Statement/Goal of this Activity: The 2024 VON Grand Rounds webinar series will provide evidence reviews, a summary of the current practice guidelines, a synthesis of the application of evidence in real work practice settings and will be supported by discussion and question and answer opportunities with expert faculty

The following have relevant financial relationships with ineligible companies (all have been mitigated):
All other speakers/planners/CMIE reviewers do not have ay relevant financial relationships.

This activity did not receive any support for ineligible companies (grants or in-kind).

All recommendations involving clinical medicine made during this talk were based on evidence that is accepted within the profession of medicine as adequate justification for their indication and contradictions in the care of patients.

In support of improving patient care, this activity ahs been planned and implemented by The Robert Larner College of Medicine at the University of Vermont and Vermont Oxford Network. The University of Vermont is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialling Center (ANCC), to provide continuing education for the healthcare team.

The University of Vermont designates this live activity for a maximum of 1.0 *AMA PRA Category 1 Credit*™. Physicians should claim only the credit commensurate with the extend of their participation in the activity.

This program has been reviewed and is acceptable for up to 1.0 Nursing Contact Hours.

This activity was planned by and for the healthcare team, and learners will receive 1 Interprofessional Continuing Education (IPCE) credit for learning and change.

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VON Grand Rounds

Following Through After the NICU: The Role of Early Intervention in Optimizing Outcomes After Preterm Birth

November 13th 2024

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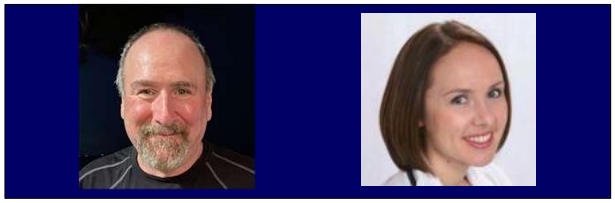
Moderators



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Speaker

Jonathan S Litt, MD MPH ScD
Associate Professor of Pediatrics | Stanford University School of Medicine
Tashia and John Morgridge Endowed Faculty Scholar in Pediatric Translational Medicine | Stanford Maternal & Child Health Research Institute

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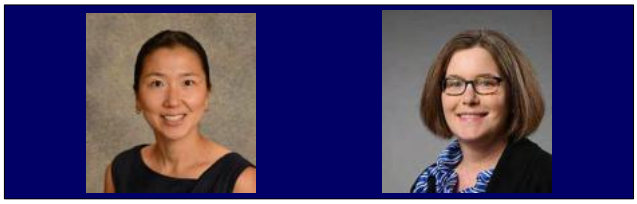
Guest discussants



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Vermont Oxford Network

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**Following Through After the NICU:
The Role of Early Intervention in Optimizing Outcomes
After Preterm Birth**

Disclosures

Danielle Ehret MD, MPH is the Director of Global Health and Chief Medical Officer at Vermont Oxford Network (VON) and receives salary support to UVM for non-clinical time dedicated to her leadership roles.

Jonathan S Litt, MD MPH ScD has no relevant financial relationships or conflicts of interest to disclose.

Erika Edwards, PhD is the Chief Scientific Officer at VON.

Sunah Hwang, MD PhD MPH/MSPH has no relevant financial relationships or conflicts of interest to disclose.

Roger F. Soll, MD is the H. Wallace Professor of Neonatology at the Larner College of Medicine at the University of Vermont, Vice President of the Vermont Oxford Network, Director of the VON Institute for Evidence Based Practice, and Coordinating Editor of Cochrane Neonatal. He is a consultant with the International Liaison Committee on Resuscitation (ILCOR).

No other relevant financial issues to disclose

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How to Participate in Today's Webinar

- Chat questions and comments to "Everyone" during the presentations and discussion.
- Respond to Zoom poll questions posed during the session. Select your answer(s) and click "Submit".
- Please do not respond to polls via Chat.

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American Academy of Pediatrics

Our Responsibility to Follow Through for NICU Infants and Their Families.

Horbar JD, Edwards EM, Ogbolu Y.

Pediatrics. 2020 Dec;146(6):e20200360. doi: 10.1542/peds.2020-0360. Epub 2020 Jun 16. PMID: 32546582.

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Poll Questions

1. Does your center have a formal follow-up program?
   a. Yes – 81%
   b. No – 19%
2. Do you provide care in that follow-up program?
   a. Yes – 36%
   b. No – 64%
3. Does your center contribute data to the VON ELBW Follow-up Database?
   a. Yes – 48%
   b. No – 52%

Select your answer(s) and click "Submit"

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Following Through After the NICU: The Role of Early Intervention in Optimizing Outcomes After Preterm Birth

Jonathan S Litt, MD MPH ScD

Associate Professor of Pediatrics | Stanford University School of Medicine

Tashia and John Morgridge Endowed Faculty Scholar in Pediatric Translational Medicine | Stanford Maternal & Child Health Research Institute

Senior Advisor for Follow-up Programming | Vermont Oxford Network

**VON Grand Rounds
November 13, 2024**

Stanford MEDICINE Department of Pediatrics
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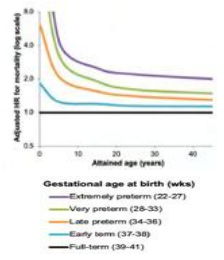

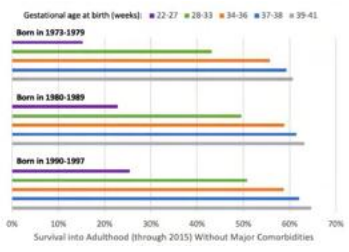

Crump. Early Human Development, 2020

Stanford MEDICINE Department of Pediatrics
School of Medicine

Confidential 12

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Table 1
Summary of meta-analyses of neurodevelopmental outcomes after preterm birth

Neurodevelopmental Domains	Effect Size (SD Units) and 95% CI
Language[17,61]	Expressive language: −0.71 (−0.86, −0.55) Receptive language: −0.83 (−0.97, −0.69) Simple language function: −0.45 (−0.59, −0.30) Complex language function: −0.62 (−0.82, −0.43)
Motor[62]	Balance, manual dexterity, ball skills: −0.65 (−0.70, −0.60) Fine motor skills: −0.57 (−0.99, −0.73) Gross motor skills: −0.53 (−0.60, −0.46)
Visual motor integration[63]	−0.69 (−0.80, −0.58)
Attention[64,65]	Selective attention: −0.58 (−0.74, −0.43) Sustained attention: −0.67 (−1.03, −0.31)
Executive function[64,65]	Verbal fluency: −0.57 (−0.82, −0.32) Working memory: −0.36 (−0.47, −0.20) Cognitive flexibility: −0.49 (−0.66, −0.33) Inhibition: −0.50 (−0.89, −0.10) Planning: −0.69 (−0.88, −0.50)
Academic achievement[64]	Reading: −0.48 (−0.60, −0.34) Spelling: −0.76 (−1.13, −0.40) Mathematics: −0.60 (−0.74, −0.46)

Luu, et al. Clinics in Perinatology, 2017

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- Parents of preterm infants have more tension, anger, and fatigue
- Mothers have more intrusive feelings and hyperarousal, fathers more anger

Ionio, et al. Europe's Journal of Psychology, 2016

Poverty
DeFranco, et al. BMC Public Health, 2008

Food insecurity
Paul, et al. J of Perinatol, 2024

Homelessness
Yamamoto, et al. JAMA Network Open, 2021

~11% of all live births paid for by Medicaid were <37 weeks, 9.8% <2,500 grams

CMS. Medicaid and CHIP Beneficiary Profile: Maternal and Infant Health, 2020

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Preterm birth associated with increased multimorbidity risk at 10-18 years:
- HR 2.29 (95% CI 2.19-2.39) for 2 health outcomes
- HR 4.22 (95% CI 3.66-4.87) for 4 health outcomes

Heikkila, et al. Lancet Public Health, 2023

- Cognitive, behavioral, school problems in adolescence

Pascoe, et al. Seminars, 2021

- Rates of motor problems vary from 8-37% among adolescents without CP

Evensen, et al. Seminars, 2020

- Poor functioning and participation into adulthood

Msall, et al. Seminars, 2020

- Lower annual income
- Lower upward mobility and higher downward mobility

Ahmed, et al. JAMA Network Open, 2024

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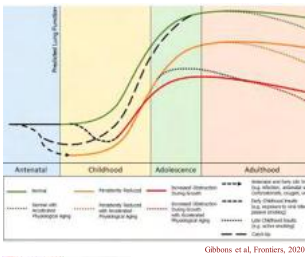
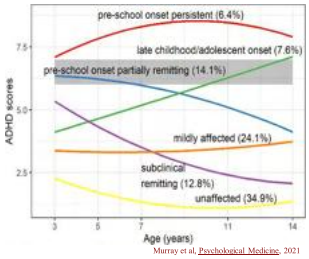
Life Course Health Development, Preterm Birth, and the Role of Early Detection



Gibbons et al, Frontiers, 2020



Murray et al, Psychological Medicine, 2021

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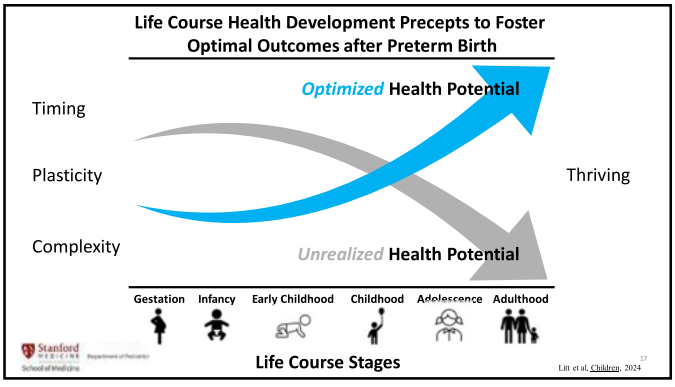

Litt et al, Children, 2024

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Specialized Follow-up Programs are Variable

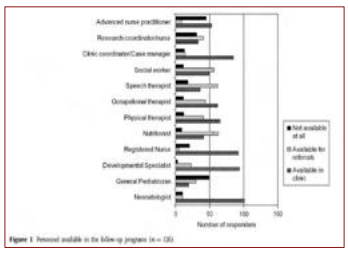

Table 2 Services available in the responding follow-up programs (n = 125)

Service type	Response count	Response frequency (%)
Growth measurements	124	99.2
Neurodevelopmental assessment	118	94.4
General neurological evaluation	116	92.8
Management of nutrition (high calorie formulas/NG tube/G tube feeds)	88	70.4
OT/PT/speech assessment	84	67.2
Feeding assessment	72	57.6
Social worker support	70	56.0
Behavioral assessment	68	54.4
Management of home oxygen and monitors	66	52.8
Other services*	20	16.0

Kuppala, et al. J Perinatol, 2012

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Nationally, only ~50% of eligible infants participate in clinical high-risk follow-up programs.

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Current approach systematically leaves behind:

Groups of infants

Moderately, late-preterm — Engle, et al, Pediatrics, 2007

Term infants with NICU admission — McCormick & Litt, Pediatrics, 2016

Surgical conditions — Gischler, et al, J Ped Surgery, 2009

Uncommon genetic diagnoses — Wojcik, et al, Pediatrics, 2019

Many families

Racially minoritized – Black compared to white

Language – Primary non-English compared to English speaking

Many communities

"Very Low" opportunity compared to "Very High" neighborhoods — Fraiman, et al, J Perinatology, 2021

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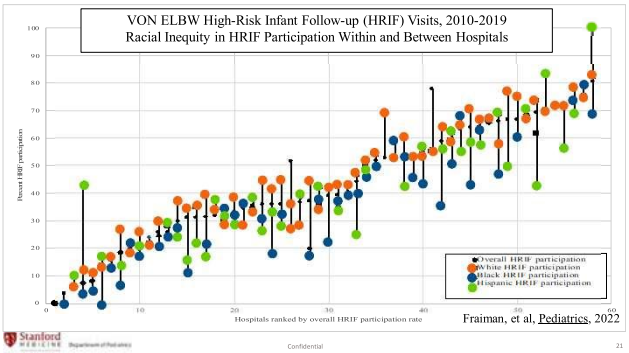

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Current approach to follow-up

Variety of settings
- Academic hospital-based clinics
- Research-based (e.g. NICHD Neonatal Network)
- Complex care clinics
- Subspecialty clinics (e.g. neurology)
- Primary Care clinic

Varied services
- Medical
- Developmental
- Psychosocial
- Care coordination

Multiple stakeholders
- Families
- Primary Care Providers
- Subspecialists
- Early Intervention Programs

→
- Complex
- Fragmented
- Variable

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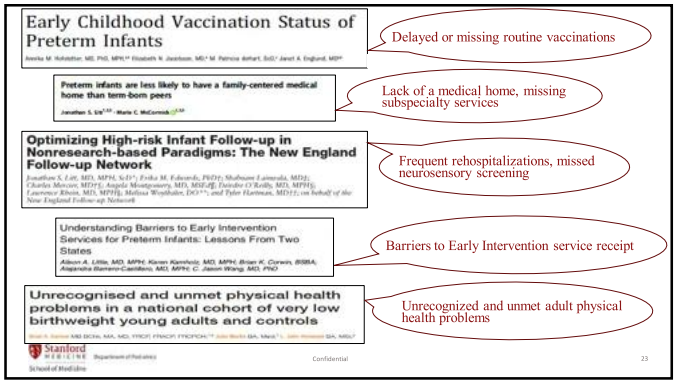

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Potentially Better Practices for Follow Through

VON Vermont Oxford NETWORK

I. Promote a Culture of Equity

II. Identify Social Risks of Families and Provide Interventions to Prevent and Mitigate Those Risks

III. Take Action to Assist Families After Discharge (Transition to Home)

IV. Maintain Support for Families through Infancy

V. Develop Robust Quality Improvement Efforts to Ensure Equitable, High-Quality Hospital and Follow-through Care to All Newborns by Eliminating Modifiable Disparities

VI. Advocate for Social Justice at the Local, State, and National Levels

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Evidence Review

Vermont Oxford Network

I. Promote a Culture of Equity
II. Identify Social Risks of Families and Provide Interventions to Prevent and Mitigate Those Risks
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VI. Advocate for Social Justice at the Local, State, and National Levels

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Social Determinants Screening

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Poll Questions

Screening for Social Determinants of Health (SDoH)

1. Does your center use a standardized SDoH screening tool?
   a. Yes – 50%
   b. No – 50%

2. If so, have you noticed a positive impact for patients and families?
   a. Yes – 46%
   b. No – 54%

Select your answer(s) and click "Submit"

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Screening in the NICU

- 34% (28%–40% by region) with standardized screening

Cordova Ramos et al, Hospital Pediatrics, 2023

- Vermont Oxford Network membership survey

	N	No.	%
Screen all families using a standardized tool	700	403	57.6
Of those that did screening:			
Housing screening	392	388	99.0
Food insecurity screening	393	377	95.9
Transportation needs screening	393	392	99.7
Utility needs screening	392	352	89.8
Interpersonal safety screening	391	381	97.4
Results are recorded in medical record	395	384	97.2
Include a social worker on the team	723	709	98.1
Include a paralegal or attorney on the team	689	110	16.0

Edwards et al, Pediatrics, 2024

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Screening after NICU Discharge

- Screening For Social Determinants Of Health In A NICU Follow Up Clinic
  - 1,270 families (64%) screened, median questionnaire completion percentage shifted from 43% to 83%
  - 36% of families screened positive, 21% of those requested assistance
  - 57% of families received a list of relevant resources and 30% received tangible help (gas card, access to food pantry, or payment of utility bills)

Lee et al, PAS Abstract, 2024

- New England Follow-up Network (NEFUN)
  - 9 centers, 303 ELBW infants discharged home, 195 (74%) were evaluated at an average CA of 4 months, 20 days
  - 130 screenings were completed, of these 110 (85%) were screenings for food insecurity

Unpublished data, 2023

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Transition Home

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Poll Questions

Transition Home

1. Does your center have a transition home program?
   a. Yes – 24%
   b. No – 76%

2. If so, does your transition home program provide: (check all that apply)
   a. Medical care – 79%
   b. Psychosocial support – 51%
   c. Material resource support – 74%

Select your answer(s) and click "Submit"

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Visiting Nurse Association (VNA) Visits

- Often routine post-discharge care
- In-home visit by nurse
  - Assess infant well-being
  - Check weight, jaundice
  - Answer parent questions
- Coordinate with community-based PCP

Table 3. Predictors of caregiver perception of VNA service helpfulness

Infant and family characteristics	*VNA helpful OR (95% CI)*
Parity (P0/P1 vs ⩾ P2)	1.82 (1.35, 2.46)*
Apgar score, 1 min	0.97 (0.90, 1.04)
BW < 1200 g	1.08 (0.72, 1.64)
GA < 35 weeks	1.45 (1.15, 1.83)*
IVH, grade*	1.44 (0.87, 2.36)
Respiratory distress syndrome	0.94 (0.73, 1.22)
Parent prepared (parent self-rating)	0.89 (0.72, 1.10)
Parent prepared (nurse rating), technical score	0.83 (0.54, 1.28)
Parent prepared (nurse rating), emotional score	0.82 (0.53, 1.25)

Abbreviations: BW, bodyweight; CI, confidence interval; GA, gestational age; IVH, intraventricular hemorrhage; OR, odds ratio; VNA, Visiting Nurse Association. *P < 0.05. *IVH grade: 0 = none; 1 = I/II; 2 = III/I.

Awindaogo et al, J Perinatology, 2016

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Transition Home Plus Program

Transition Home Plus Program Reduces Medicaid Spending and Health Care Use for High-Risk Infants Admitted to the Neonatal Intensive Care Unit for 5 or More Days

Yiyan Liu, PhD[1], Elisabeth McGowan, MD[2,3], Richard Tucker, BA[1], LaShawn Glasgow, DrPH[1], Marianne Kluckman, MPH[1], and Betty Vohr, MD[2,3]

Table I. THP program interventions

Predischarges	Provider	Postdischarge	Provider
Identify eligible infants, inform family of program, and obtain consent for THP and CurrentCare*	Social worker or family resource specialist	Call within 48 hours	Social worker or family resource specialist
Communicate enrollment to PCP	Social worker or family resource specialist	Findings of all visits communicated with PCP	MD, NNP, social worker, family resource specialist
Weekly rounds with families	THP team	24/7 on call	MD or NNP
Regular meetings with family, identify challenges, partner to address needs, review education binder	Social worker or family resource specialist	Home visit for infant/family assessment	NNP
Identify family challenges (ie, food insecurity, housing); home visit to assess needs if concerned	Social worker or family resource specialist	Calls to and from family and PCP as needed	MD, NNP, social worker, family resource specialist
Family discharge readiness assessment and facilitate referrals as needed	Social worker or family resource specialist	Edinburgh at 30 days; facilitate referrals as needed	Social worker or family resource specialist
Review all meds, formula mixing, safe sleep, positioning, etc, before discharge	Social worker or family resource specialist	1- and 3-month clinic assessment	MD, NNP, social worker, family resource specialist
Inform PCP of all infants eligible for Synagis	Letter from MD/THP team	Respond to all CurrentCare* real time alerts of ED visit or hospitalization	Social worker or family resource specialist with MD and NNP

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Table IV. Regression estimates of outcomes between the intervention and comparison groups for January 2011-December 2014

	Medicaid spending ($)		ED visits		Readmissions rate	
	Per patient		Per 1000 patients		Per 1000 discharges	
Quarter	Coefficient*	SE	Coefficient*	SE	Coefficient	SE
1	−944	10 543	−360†	64	NA	NA
2	−6324†	2922	−260†	83	NA	NA
3	−3237	2275	−414†	92	NA	NA
4	−4141	2561	−404†	95	NA	NA
5	−6762‡	3071	−300†	93	NA	NA
6	−8415‡	3230	−325†	96	NA	NA
7	−6319§	3467	−191§	105	NA	NA
8	−18 369‖	6727	−239‖	77	NA	NA
Average impact per quarter¶	−4591‡	2311	−334†	33	−76†	29

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Following Baby Back Home

Goal: maximize the health and development of LBWPT (<2500 g and <37 weeks' gestation) infants.

Eligibility: LBWPT infants with chronic medical conditions at the time of discharge as identified by a neonatologist.

Population: Referrals to FBBH are solicited from all NICUs in Arkansas.

Program: 2 home visits per month for the first 2 months, 1 home visit per month until age 1, and alternating home and phone and/or virtual visits every month until age 3.

Services: in-home treatments, track adherence to medical appointments and immunizations, and facilitate medical appointments as needed

McKelvey et al, Pediatrics, 2021

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Following Baby Back Home

TABLE 3 FBBH Matched Treatment and Control Groups Health Care Use, Immunization, and Mortality Differences in the First Year of Life

Health Care Use Outcome	Treatment	Control	ATE (95% CI)[a]	aOR/IRR (95% CI)[b]	*P*
Hospitalizations, mean (SE)	0.59 (0.08)	0.25 (0.04)	0.30 (0.20–0.41)	2.68 (1.82–3.95)	<.001
ED visits, mean (SE)	1.65 (0.12)	0.96 (0.08)	0.67 (0.51–0.81)	1.81 (1.46–2.25)	<.001
Nonurgent ED visits, mean (SE)	0.92 (0.07)	0.49 (0.05)	0.42 (0.24–0.55)	1.92 (1.51–2.43)	<.001
Wellness visits, mean (SE)	13.46 (0.53)	8.78 (0.65)	4.07 (3.26–4.88)	1.59 (1.37–1.85)	<.001
Outpatient non-wellness visits, mean (SE)	1.86 (0.40)	1.01 (0.23)	0.76 (0.34–1.14)	1.81 (1.23–2.65)	.003
Prescription medications, filled, mean (SE)	10.64 (0.53)	8.60 (0.42)	1.98 (1.27–2.65)	1.24 (1.0–1.43)	.002
Health care use binary outcome					
At least one hospitalization, *n* (%)	110 (26.3)	56 (13.4)	0.12 (0.08–0.17)	2.31 (1.62–3.30)	<.001
At least one ED visits, *n* (%)	248 (59.8)	167 (40.2)	0.19 (0.14–0.24)	2.19 (1.66–2.89)	<.001
At least one nonurgent ED visits, *n* (%)	193 (46.2)	117 (37.7)	0.18 (0.12–0.25)	2.21 (1.66–2.94)	<.001
Immunizations					
Immunization visits, mean (SE)	3.74 (0.09)	2.53 (0.11)	1.18 (0.94–1.34)	1.49 (1.35–1.65)	<.001
≥4 immunization visits, proportion (SE)	0.61 (0.02)	0.39 (0.02)	0.22 (0.18–0.26)	2.37 (1.80–3.14)	<.001
Mortality					
Death <1 y, *n* (%)	1 (0.21)	7 (1.44)	8.86 (7.10–10.88)	4.44 (1.22–20.67)	<.001

[a] ATE is calculated by using double propensity-score adjustment method and CIs are calculated by bootstrap.
[b] IRR for counting variables and aOR for binary variables are calculated by generalized linear model with the matched ID as a random effect.

McKelvey et al, Pediatrics, 2021

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Virtual Home Visiting

- Pilot intervention in HRIF program at Boston Children's Hospital
- Offer virtual home visit 2-4 weeks after NICU discharge – MD, NP, SW

Table. Sample Characteristics and Visit Outcomes	Eligible	Completed Virtual Home Visit
	N (%)	N (%)
Total	109 (100)	76 (70)
Patient Portal Access Assistance		8 (11)
Medical Referral		9 (12)
Early Intervention Referral		9 (12)
Parent Support/Mental Health Referral		26 (34)
Financial/Material Resource Referral		14 (18)
Completed First In-person Clinic Appointment		67 (88)

Litt et al, J Perinatology, in press

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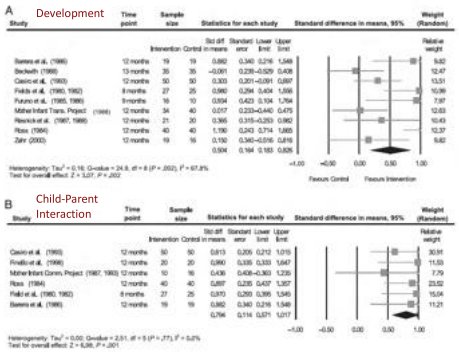
Systematic Review



Goyal et al, Pediatrics, 2013

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Maintain Support for Families through Infancy

Early Intervention

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Early Intervention

IDEA Part C – Early Education for Children with Disabilities

- Funds model-demonstration projects, research institutes, outreach activities, data systems, technical assistance
- Comprehensive, community-based program of integrated developmental services which uses a family centered approach to facilitate the developmental progress of children whose developmental patterns are atypical or are at serious risk to become atypical through the influence of certain biological or environmental factors
- Eligibility: specified conditions, "at risk"-defined by states
- Therapeutic program: interventions tailored to child's needs-difficult to evaluate
  - PT, OT, SLT
  - Developmental Specialist
  - Hippo, aqua

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Early Intervention

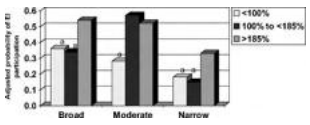
- 93% VLBW infants enrolled in EI in Massachusetts, though considerably fewer among non-Hispanic black, poor, and less educated families

  Barfield, et al, 2008
- 54% eligible children in South Carolina enrolled, with neurologic risk, black race, and Medicaid associated with higher enrollment rates

  Wang, et al, 2009
- Living in neighborhoods with high proportion poverty and Spanish speakers associated with delays in provider assignment

  Kim, et al, 2009

Probability of EI participation according to FPL and state EI eligibility category for a cohort of children (N = 900) at risk for adverse neurodevelopment.



McManus, et al. Pediatrics, 2009

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Early Intervention

- No large-scale effectiveness study for preterm infants
- Participation is associated with improved functional skills in childhood

Table 4. Early Intervention Service Dimensions and Skills at School Age

	Academic Skills Rating		Physical Skills Rating	
	Unadjusted Model, OR (95% CI)	Weighted IPTW Model, OR (95% CI)	Unadjusted Model, OR (95% CI)	Weighted IPTW Model, OR (95% CI)
Timing, months*	0.99 (0.96–1.03)	0.65 (0.43–0.99)	0.99 (0.95–1.02)	0.61 (0.40–0.93)
Duration, months	0.99 (0.96–1.00)	1.47 (0.98–2.22)	0.98 (0.96–1.00)	1.41 (0.96–2.09)
Intensity, min/mo	0.62 (0.49–0.78)	1.05 (0.99–1.12)	0.70 (0.55–0.90)	1.06 (1.00–1.13)
Breadth, number of service types	0.87 (0.80–0.94)	1.74 (0.95–3.20)	0.93 (0.86–1.01)	1.86 (1.03–3.35)

Litt, at al, J Pediatrics, 2017

- Parents satisfied with services and feel that program participation improved their lives
- Improved parent self-efficacy

Litt, et al, PAS Abstract, 2014

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Preterm Birth and Early Developmental Intervention

- Cognitive Outcomes
  - Infancy: SMD 0.27 SD, 95% CI 0.15 to 0.40
  - Preschool age: SMD 0.39 SD, 95% CI 0.29 to 0.50
  - School age: SMD 0.16 SD, 95% CI -0.06 to 0.38
- Motor Outcomes
  - Infancy: SMD 0.12 SD, 95% CI 0.04 to 0.19
  - Preschool age: SMD 0.08 SD, 95% CI -0.16 to 0.32
  - School age: SMD -0.06 SD, 95% CI -0.31 to 0.18

Cochrane

Orton et al, Cochrane Reviews, 2024

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Maintain Support for Families through Infancy

Parental Mental Health

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Poll Questions

Support Through Infancy

1. Parents of infants in my unit receive the mental health support they need.
   a. True – 37%
   b. False – 63%

Select your answer(s) and click "Submit"

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Parent-Child Interaction

Victorian Infant Brain Studies (VIBeS) Plus
- Parent education intervention from NICU discharge from the NICU to 1 year
- Topics included: infant self-regulation and strategies to promote physical development.
- In an RCT, primary caregivers in the intervention group reported less anxiety and depression when compared with the control group.

Mother Infant Transaction Program (MITP)
- Multicomponent intervention focused on educating and empowering parents to recognize their child's behavior, temperament, cues, and developmental stage.
- Nurses to the parents of infants in the NICU beginning one week prior to discharge and continuing through the first three months at home.
- RCT with the intervention group showing higher observed maternal sensitivity/responsiveness at 12 months corrected age, with greater effects seen in first-time mothers.

Givrad et al, Early Human Development, 2021

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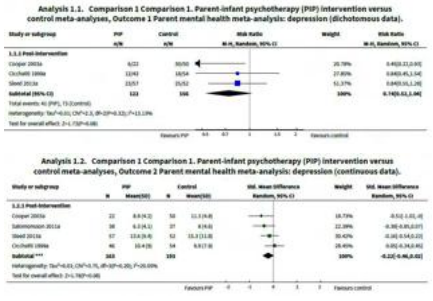
Parent-infant Psychotherapy



Barlow et al, Cochrane Library, 2015

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Empowerment

Empowerment is defined as a process that strengthens one's capacity to think critically, make informed decisions, and exert control over one's own life

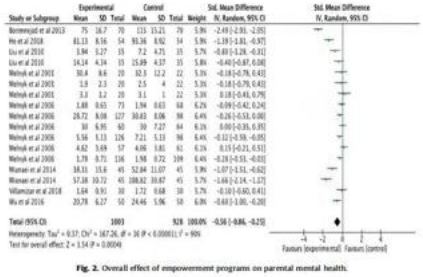

Fig. 2. Overall effect of empowerment programs on parental mental health.

Zhang et al, Patient Education and Counseling, 2021

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Mothers

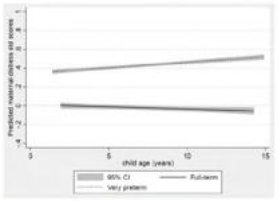

Figure 1. Estimated level of maternal distress in very pre-term and full-term groups with child's age.

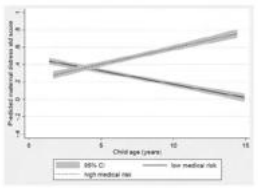

Figure 2. Estimated level of maternal distress in the very preterm group with child's age according to child neonatal medical risk.

Yaari et al, J Pediatric Psychology, 2019

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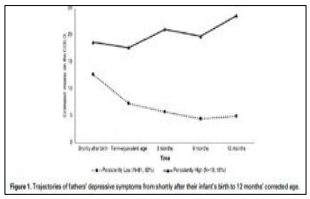
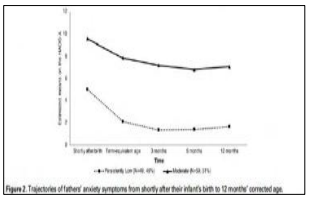
Fathers



Depressive Symptoms



Anxiety Symptoms

McMahon et al, J Pediatric Psychology, 2020

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Summary & Future Directions

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- No data on efficacy or effectiveness of HRIF as currently delivered for clinical care
- Early developmental interventions, transition home, and home visiting have beneficial near-term effects
- Early screening and identification of developmental challenges are time-sensitive and critical for improving outcomes
- Parents are vulnerable to mental health challenges due to NICU experiences, impact is long-lasting
- SDoH have outsized impact on child and family outcomes, now learning about screening/supports in HRIF

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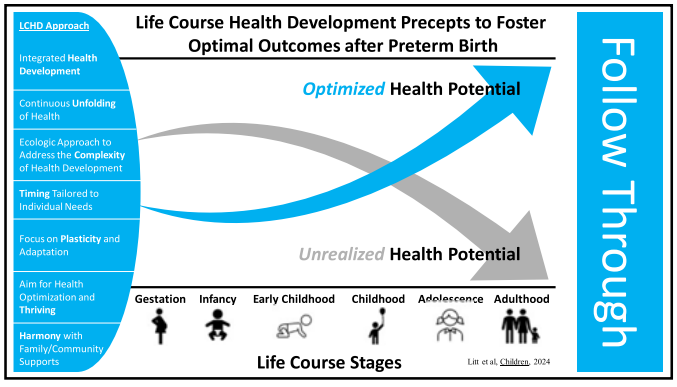

Litt et al, Children, 2024

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Potentially Better Practices for Follow Through

VON Vermont Oxford NETWORK

I. Promote a Culture of Equity
II. Identify Social Risks of Families and Provide Interventions to Prevent and Mitigate Those Risks
III. Take Action to Assist Families After Discharge (Transition to Home)
IV. Maintain Support for Families through Infancy
V. Develop Robust Quality Improvement Efforts to Ensure Equitable, High-Quality Hospital and Follow-through Care to All Newborns by Eliminating Modifiable Disparities
VI. Advocate for Social Justice at the Local, State, and National Levels

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Coming Soon….
Potentially Better Practices for Follow-through Toolkit

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Vermont Oxford NETWORK

Confidential 55

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Thank You!

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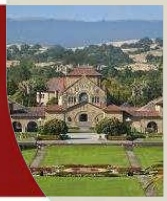

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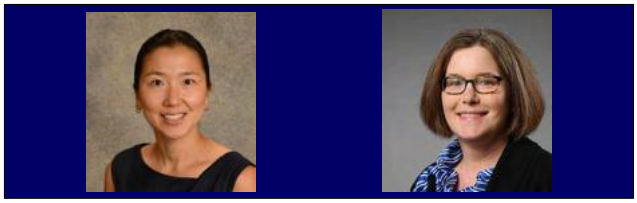
Guest discussants



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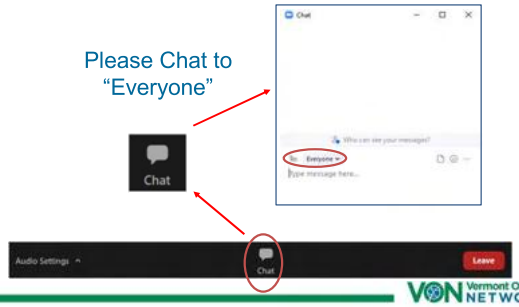
Questions? Comments? Ideas to Share?

Please Chat to "Everyone"



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Extremely Low Birth Weight Follow-Up Database

Benefits of ELBW Follow-Up Benchmarking and Measurement
- Improve counseling of parents
- Plan and advocate for resources to help families transition beyond the NICU
- Understand health care disparities
- Identify areas for additional research and quality improvement
- Optional reporting groups of similar centers for targeted benchmarking

Features:
- Data collection on ELBW infants at 3-6 months and 18-24 months corrected age
- Annual reporting with key Follow-Up performance metrics
- Regularly scheduled webinars
- Follow Through quality improvement toolkit

https://public.vtoxford.org/elbw-follow-up

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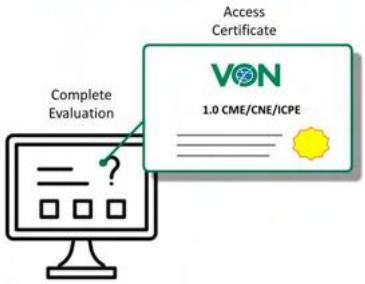
Continuing Education Credit



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Future sessions

VON Grand Rounds 2025

1. February 2025: Evidence to Practice: Therapeutic Cooling
2. May 2025: Evidence to Practice: Eat - Sleep - Console
3. August 2025: Evidence to Practice: Oxygen in the NICU
4. November 2025: Evidence to Practice: The NICU Environment

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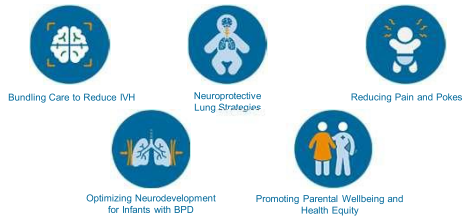
All Care is Brain Care in 2025-2026



QI Collaborative Info: https://public.vtoxford.org/quality-education/brain-care

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