



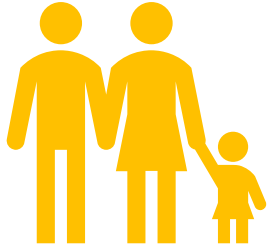
Transition to Home after Preterm Birth – a Family Centred and Interprofessional Model of Care

Natascha Schütz Hämmerli

► ANNUAL MEETING of the SSN 2024

Relevance

Significance of premature birth for the family



- ▶ Preterm birth rate CH: 7 %
 - ▶ 1 % < 32 weeks GA
- ▶ Parental emotional impact
- ▶ Parent-child interaction
- ▶ Possible negative influence on child's development
- ▶ Challenging transition from Hospital to Home

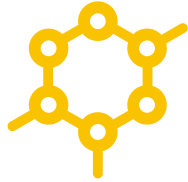
Impact on Health Care System CH



- ▶ longest average length of hospital stay in Neonatology
- ▶ Highest readmission rates of all neonates (35 % in CH)
- ▶ High use of emergency and primary care resources
- ▶ Fragmentation of health care interventions
- ▶ lack of coordination

Bundesamt für Statistik, 2022; Bucher, 2009; Cheong et al. 2020 ; Hynan et al., 2013 ; Huhtala et al. 2014 ; Kantrowitz-Gordon et al., 2016 ; Pace et al., 2016 ; Purdy et al., 2015; Roque et al., 2017 ; Schuetz Haemmerli et al., 2020 ; Treyvaud et al., 2014.

Aims of Transition to Home



Structured and individual support



Improve parents' mental health and competence

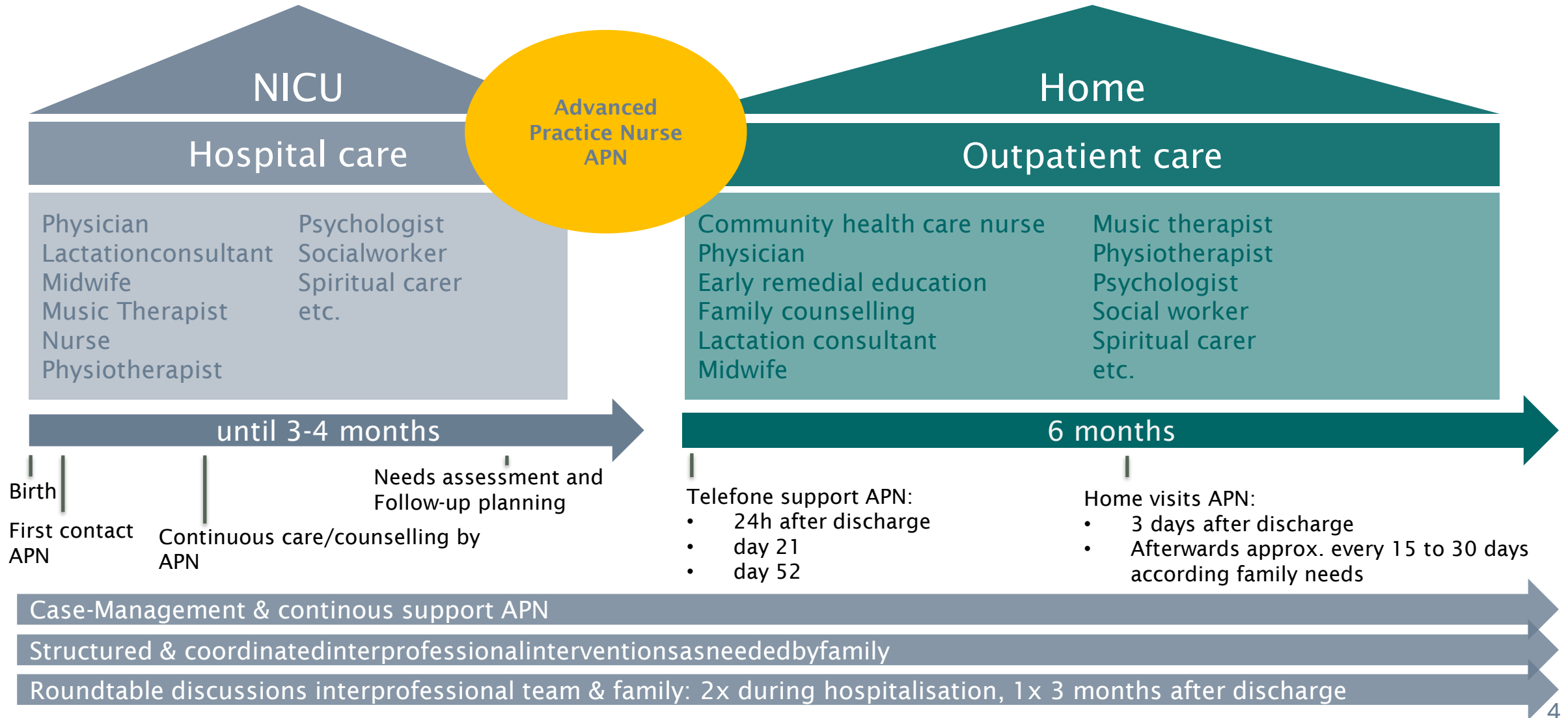


Promote child's development

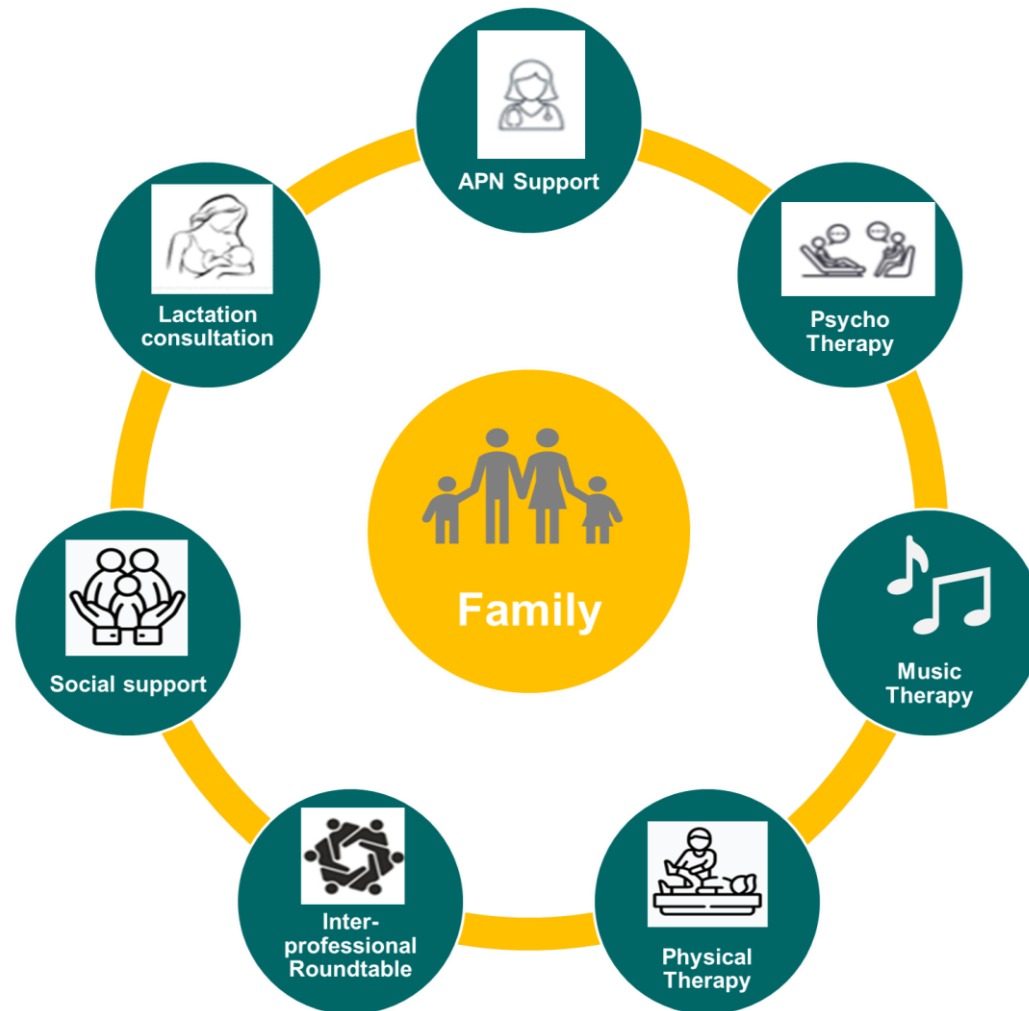


Optimize interprofessional collaboration

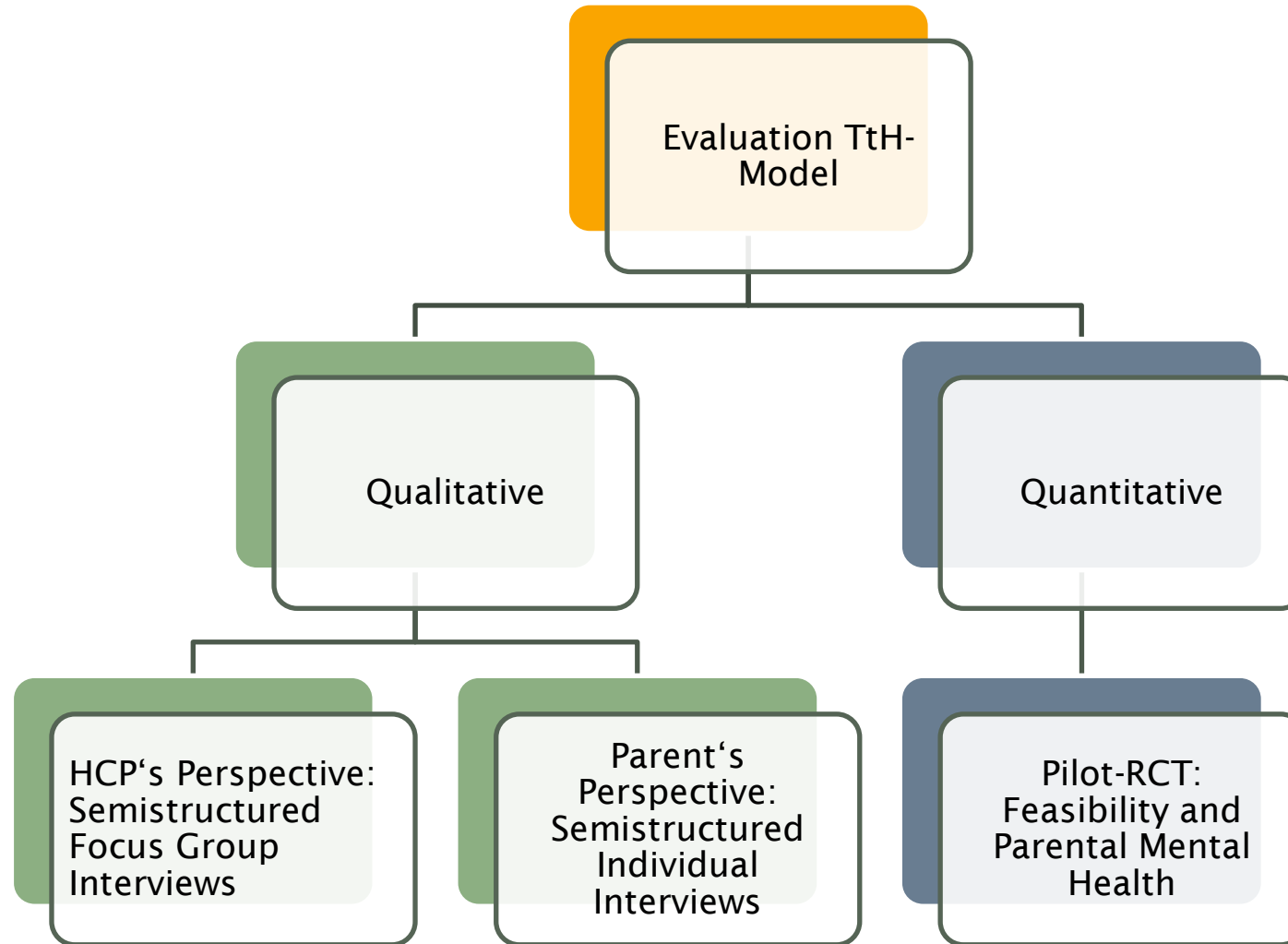
Structure of Transition to Home Model of Care



Main Components Transition to Home



Evaluation of Transition to Home 2018 - 2021



Pilot-RCT

Aims

- ▶ To test the acceptability and feasibility of the model
- ▶ To test whether all the planned measurements (5 measurement points) can be carried out
- ▶ To generate a basis for the calculation of power and effect size for a large scale intervention study
- ▶ Determine effects of the intervention on parental mental health
- ▶ To determine parents' study burden.

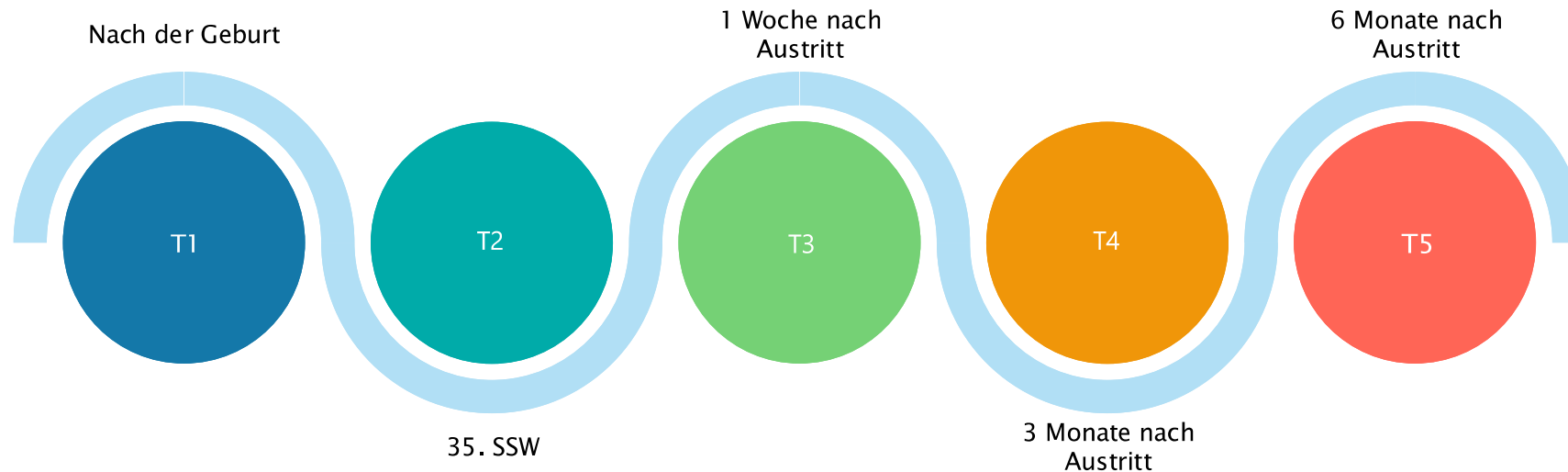
Inclusion criteria

- ▶ Preterm infants born between 24 0/7 and 34 6/7 weeks of GA
- ▶ hospitalized at the University Hospital
- ▶ residing in the canton of Bern
- ▶ fluent in spoken and written German, French or English
- ▶ We excluded preterm infants with congenital problems evident at birth

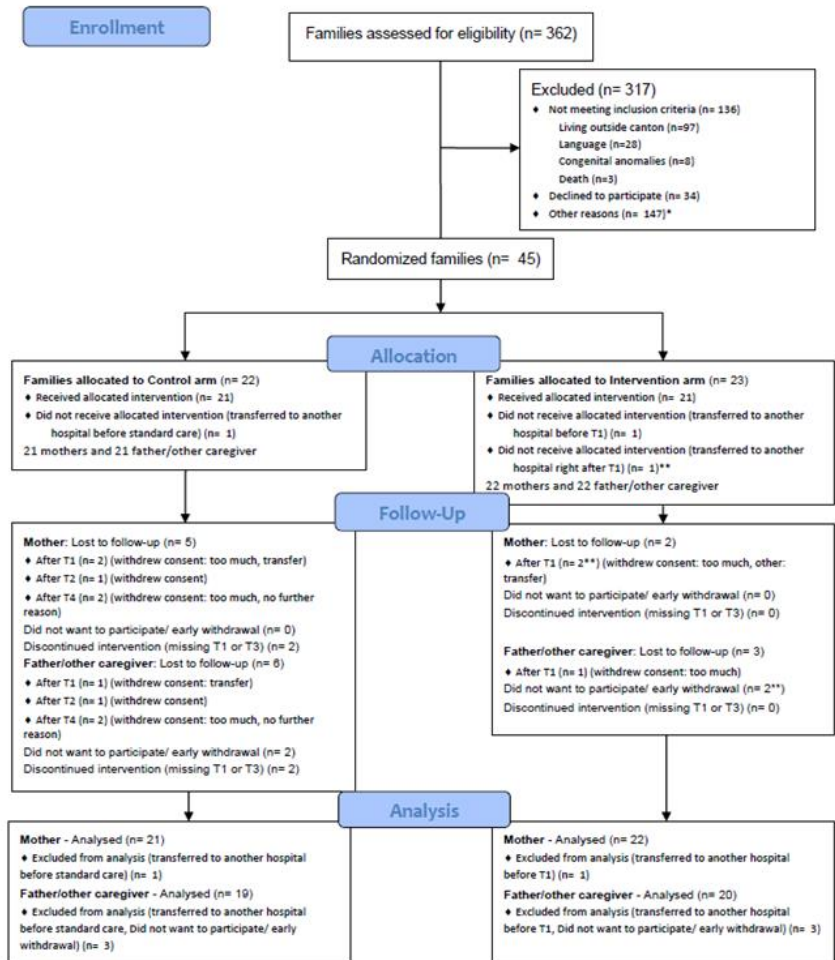
RCT: Parental Mental Health

Outcomes measured:

Depression (CES-D); Anxiety (STAI); Posttraumatic Stress Disorders (PCL-5); Parenting Stress (PSI-SF); Parental Self-efficacy (TOPSE)



Summary of Results RCT



- ▶ Similar sociodemographic characteristics of parents and infants.
- ▶ No difference in study burden.
- ▶ Mental health scores decreased between T1 and T4 in both groups.
- ▶ No differences between control and intervention group except for
 - ▶ Mothers depression T2 and T5
 - ▶ Fathers state anxiety at T2

Parent's Perspective

Aims



Individual Interviews

Sample

- N = 39 Parents (20 Mothers; 19 Fathers)

Analysis

- Transcription
- Thematic Analysis (Braun & Clarke)

Braun & Clarke, 2006; Schuetz Haemmerli et al. 2022

Article

Enhancing Parents' Well-Being after Preterm Birth—A Qualitative Evaluation of the “Transition to Home” Model of Care

Natascha Schuetz Haemmerli ^{1,2,*}, Liliane Stoffel ², Kai-Uwe Schmitt ^{1,3}, Jeannine Khan ⁴, Tilman Humpl ⁵, Mathias Nelle ⁶ and Eva Cignacco ¹

¹ Department of Health Professions, Bern University of Applied Sciences, 3008 Bern, Switzerland; kai-uwe.schmitt@bfh.ch (K.-U.S.); eva.cignacco@bfh.ch (E.C.)

² Department of Paediatrics, Inselspital, Bern University Hospital, University of Bern, 3010 Bern, Switzerland; liliane.stoffelzuercher@insel.ch

³ Insel Gruppe, Bern University Hospital, 3010 Bern, Switzerland

⁴ Kantonale Schule für Berufsbildung, 5001 Aarau, Switzerland; jeannine.khan@berufsbildung.ag

⁵ Tilman Humpl, Department of Paediatrics, St. Elisabethen-Krankenhaus, Kliniken des Landeskreises Lörrach, 79539 Lörrach, Germany; humpl@icloud.com

⁶ Mathias Nelle, Children's Hospital, Kreiskliniken Böblingen, 71302 Böblingen, Germany; m.nelle@bluewin.ch

* Correspondence: natascha.schuetzhaemmerli@bfh.ch



Citation: Schuetz Haemmerli, N.; Stoffel, L.; Schmitt, K.-U.; Khan, J.; Humpl, T.; Nelle, M.; Cignacco, E. Enhancing Parents' Well-Being after Preterm Birth—A Qualitative Evaluation of the “Transition to Home” Model of Care. *Int. J. Environ. Res. Public Health* **2022**, *19*, 4309. <https://doi.org/10.3390/ijerph19074309>

Academic Editor: Paul B. Tchounwou

Received: 4 March 2022

Accepted: 1 April 2022

Published: 4 April 2022

Abstract: There are few programs available aimed at preventing short- and long-term negative consequences after preterm birth and covering the entire care continuum. The “Transition to Home (TtH)” model is such a program, offering structured, individual support for families with preterm infants before and after hospital discharge. This study gathers and examines the parents' views of receiving support from an interprofessional team under the TtH model of care during hospitalization and after discharge. Using a qualitative explorative design, 39 semi-structured interviews with parents were analyzed thematically. From this analysis, three main themes were identified: (1) TtH and the relevance of continuity of care; (2) Enhancement of parents' autonomy and self-confidence; (3) Perception of interprofessional collaboration. Within these themes, the most relevant aspects identified were continuity of care and the appointment of a designated health care professional to anchor the entire care continuum. Emotional support complemented by non-medical approaches, along with strength-based and family resource-oriented communication, also emerged as key aspects. Continuous, family-centered care and well-organized interprofessional collaboration promote the well-being of the family after a premature birth. If the aspects identified in this study are applied, the transition from hospital to home will be smoothened for the benefit of affected families.

Keywords: preterm infant; parents; transitional care; early intervention; home visiting; qualitative research

Parent's Perspective: Main Results



- ▶ Essential support in complex situations
- ▶ Continuity of care through TtH approach
- ▶ First telephone consultation (24 h after discharge)
- ▶ First home visit (3 days after discharge)



- ▶ Follow-up period of 6 months should be adapted to individual needs
- ▶ Disruptive situations in care or changes of HCP
- ▶ Fathers did not feel sufficiently supported

HCP's Perspective

Aims



4 Focus Group Interviews

Sample

- N = 36 HCP (including 8 Pediatricians)

Analysis

- Transcription of the Interviews
- Thematic Analysis (Braun und Clarke)

Interprofessional Collaboration in a New Model of Transitional Care for Families with Preterm Infants – The Health Care Professional's Perspective

Natascha Schuetz Haemmerli^{1,2}
Geraldine von Gunten^{1,2}
Jeannine Khan¹
Liliane Stoffel²
Tilman Humpl²
Eva Cignacco¹

¹Department of Health Professions, Bern University of Applied Sciences, Bern, Switzerland; ²Inselspital, University Children's Hospital, Neonatology, Bern, Switzerland

Background: Families with preterm infants find life after hospital discharge challenging and need tailored support to thrive. The "Transition to Home (TtH)"-model offers structured, individual support for families with preterm infants before and after hospital discharge. TtH improves parental mental health and competence, promotes child development and fosters interprofessional collaboration (IPC).

Aim: Evaluate the TtH-models' structure and implementation process and its associated interprofessional collaboration from the healthcare professional's (HCP) perspective.

Methods: This qualitative explorative study thematically analyzed four focus group interviews (n=28 HCP) and an open-ended questionnaire with general pediatricians (n=8).

Results: The main themes of the thematic analysis were the benefits of the TtH-model, tailored parental support, the challenges of changing interprofessional collaboration, facilitators and barriers to successfully implementing the model, and feasibility and health economic limits. HCP acknowledge that continuous family-centered care led by an advanced

HCP's Perspective: Main Results



- ▶ TtH beneficial in complex situations
- ▶ TtH provides a continuum of care between in- and outpatient setting
- ▶ Positive developments in parents



- ▶ Risk of oversupply
- ▶ Interventions need to be tailored to the needs of the individual family.
- ▶ Controversy over the role of the APN

Importance for Practice

- ▶ TtH offers added value, especially for families in complex situations
 - ▶ However, support must be accessible to all families, regardless of socio-economic status
- ▶ Continuity of care is key, but the services offered need to be reduced
 - ▶ The care of the family should be modular, based on regular needs assessments by the APN
- ▶ APNs can facilitate the work of other healthcare professionals since they share professional responsibilities.
 - ▶ Role needs to be clearly defined
 - ▶ Institutions should ensure that an APN is easily accessible
- ▶ The results of the RCT show that the structure of the model works. To increase and diversify the number of participants, the services within TtH need to be adapted.
- ▶ The interventions could be supplemented with online consultations or e-health services.



Fragen?

Weitere Informationen unter:

www.transitiontohome.ch

Das Projekt wurde unterstützt durch:

Zwillenberg Stiftung

Stiftung Binelli & Ehrsam

Stiftung Christian Bachschuster

Gottfried und Julia Bangerter-Rhyner Stiftung



MINI CENTER BERN
— Die Lifestyle-Garage —



STIFTUNG
vinetum



**ANNA
MUELLER
GROCHOLSKI
STIFTUNG**



STIFTUNG LINDENHOF
Partnerin Schweizerisches Rotes Kreuz

References

- Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77–101. doi:10.1191/1478088706qp063oa39
- Bundesamt für Statistik (BFS). (2022). Statistik der natürlichen Bevölkerungsbewegung (BEVNAT): Gesundheit der Neugeborenen. www.bfs.admin.ch
- Bucher, H.U., Killer, C., Ochsner, Y., Vaihinger, S. & Fauchère, J.-C. (2002). Growth, developmental milestones and health problems in the first 2 years in very preterm infants compared with term infants: a population-based study. *Eur J Pediatr*, 161:151-156. DOI 10.1007/s00431-001-0898-0
- Cheong, J.L.Y.; Burnett, A.C.; Treyvaud, K.; Spittle, A.J. Early environment and long-term outcomes of preterm infants. *J. Neural Transm.* 2020, 127, 1–8.
- Huhtala, M.; Korja, R.; Lehtonen, L.; Haataja, L.; Lapinleimu, H.; Rautava, P. Associations between parental psychological well-being and socio-emotional development in 5-year-old preterm children. *Early Hum. Dev.* 2014, 90, 119–124.
- Hynan MT, Mounts KO, Vanderbilt DL. Screening parents of high- risk infants for emotional distress: rationale and recommendations. *J Perinatol.* 2013;33(10):748–753. doi:10.1038/jp.2013.72
- Kantrowitz-Gordon I, Altman MR, Vandermause R. Prolonged distress of parents after early preterm birth. *J Obstet Gynecol Neonatal Nurs.* 2016;45(2):196–209. doi:10.1016/j.jogn.2015.12.004
- Pace, C.C.; Spittle, A.J.; Molesworth, C.M.L.; Lee, K.J.; Northam, E.A.; Cheong, J.L.; Davis, P.G.; Doyle, L.W.; Treyvaud, K.; Anderson, P.J. Evolution of depression and anxiety symptoms in parents of very preterm infants during the newborn period. *JAMA Pediatr.* 2016, 170, 863–870.
- Purdy, I.B.; Craig, J.W.; Zeanah, P. Nicu discharge planning and beyond: Recommendations for parent psychosocial support. *J. Perinatol.* 2015, 35, S24–S28.
- Roque ATF, Lasiuk GC, Radünz V, Hegadoren K. Scoping review of the mental health of parents of infants in the NICU. *J Obstet Gynecol Neonatal Nurs.* 2017;46(4):576–587. doi:10.1016/j.jogn.2017.02.0056.
- Schuetz Haemmerli N, Lemola S, Holditch-Davis D, Cignacco E. Comparative evaluation of parental stress experiences up to 2 to 3 years after preterm and term birth. *Adv Neonatal Care.* 2020;20 (4):301–313. doi:10.1097/ANC.0000000000000714
- Schuetz Haemmerli, N.; von Gunten, G.; Khan, J.; Stoffel, L.; Humpl, T.; Cignacco, E. Interprofessional collaboration in a new model of transitional care for families with preterm infants—The health care professional’s perspective. *J. Multidiscip. Health* 2021, 14, 897–908.
- Treyvaud K, Lee KJ, Doyle LW, Anderson PJ. Very preterm birth influences parental mental health and family outcomes seven years after birth. *J Pediatr.* 2014;164(3):515–521. doi:10.1016/j.jpeds.2013.11.001