

CHI Learning & Development (CHILD) System

Project Title

An Integrated Maternal and Child Wellness Hub in a Primary Care Clinic

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Organisation(s) Involved

KK Women's and Children's Hospital, SingHealth Polyclinics

Healthcare Family Group(s) Involved in this Project

Medical, Nursing

Applicable Specialty or Discipline

Primary Care Clinic, Maternal and Child Health

Project Period

Start date: July 2019

Completed date: December 2021





Aim(s)

 Aim to improve maternal and child health during the important first 3 years of a child's life through anticipatory guidance, health and development screening, and early intervention.

Background

See poster appended/below

Methods

See poster appended/below

Results

See poster appended/ below

Conclusion

See poster appended/ below

Additional Information

Singapore Healthcare Management Congress 2022 – 3rd Prize (Operations category)

Project Category

Care Continuum, Primary Care, Training & Education

Education Platform, Virtual Learning Platform

Keywords

Integrated Maternal and Child Wellness Hub in Primary Care Clinic

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An Integrated Maternal and Child Wellness Hub in a Primary Care Clinic







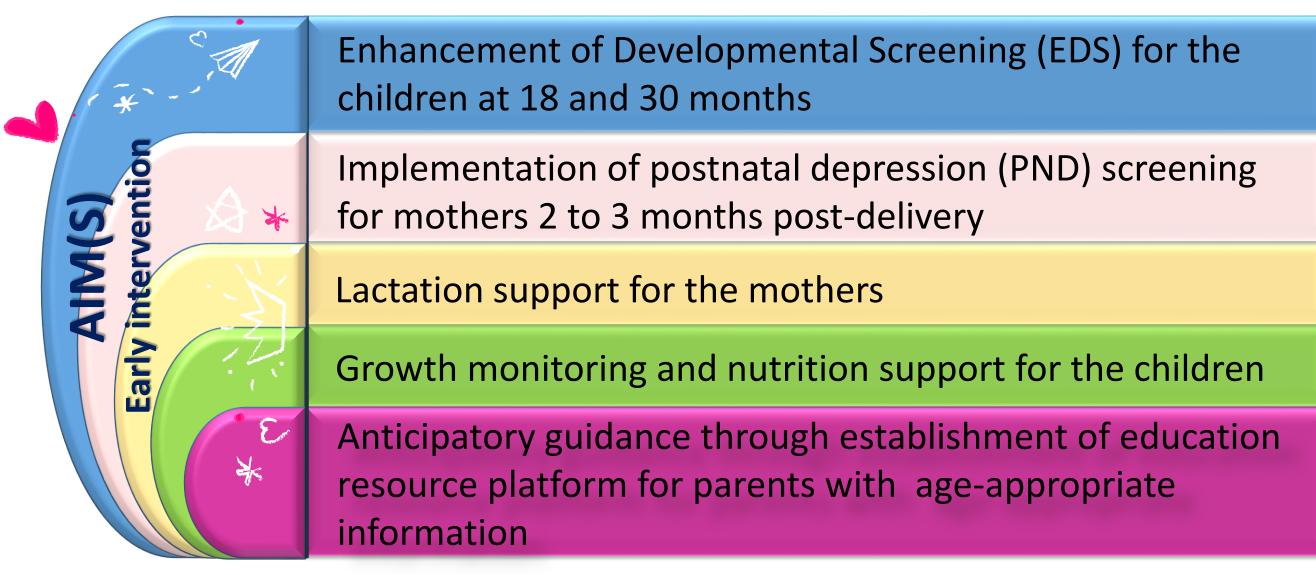


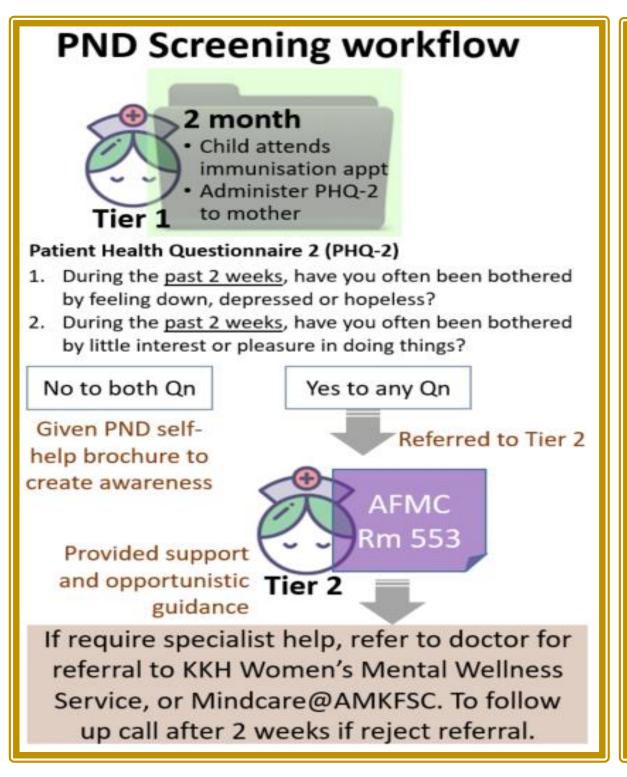
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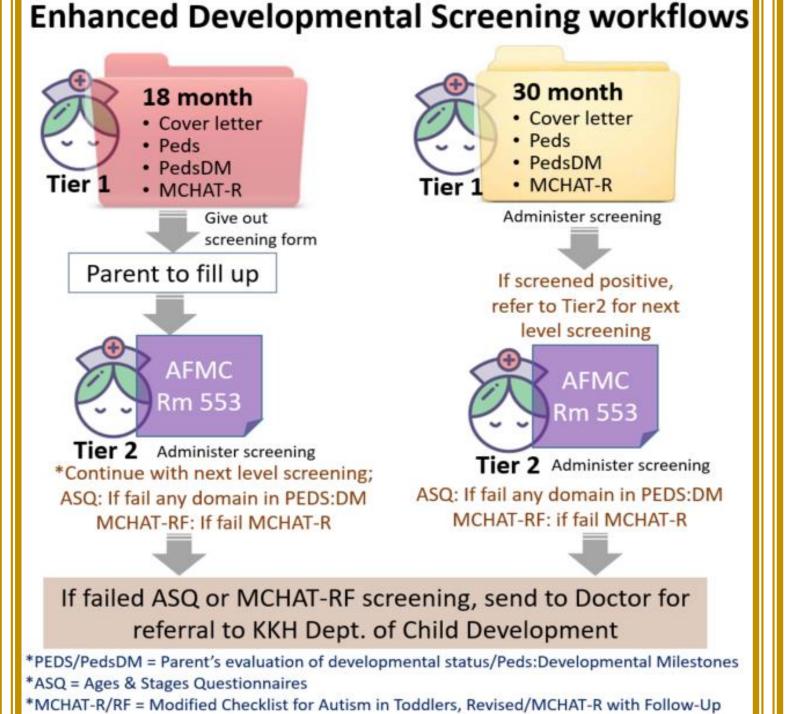
1. KK Women's and Children's Hospital 2. SingHealth Polyclinics

Introduction

The Integrated Maternal and Child Wellness Hub (IMCWH) in Punggol Polyclinic was a 3-year (2019-2021) pilot programme by KK Women's and Children's Hospital (KKH) and SingHealth Polyclinics (SHP), funded by Temasek Foundation. The hub aimed to improve maternal and child health during the important first 3 years of a child's life through anticipatory guidance, health and development screening, and early intervention. The programme targeted to benefit up to 5,000 pairs of mothers and their children (age 0-4) in the region during the period.

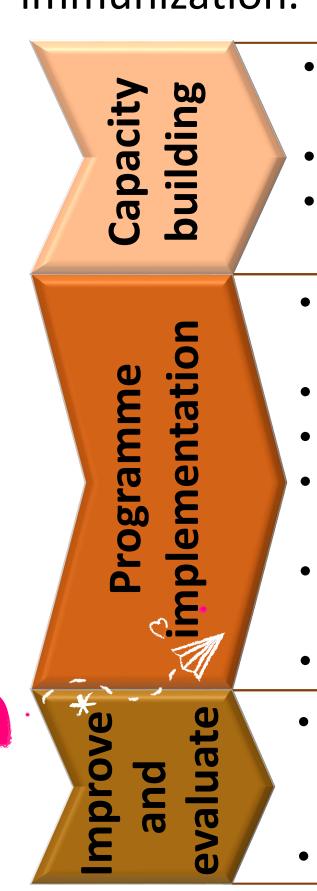




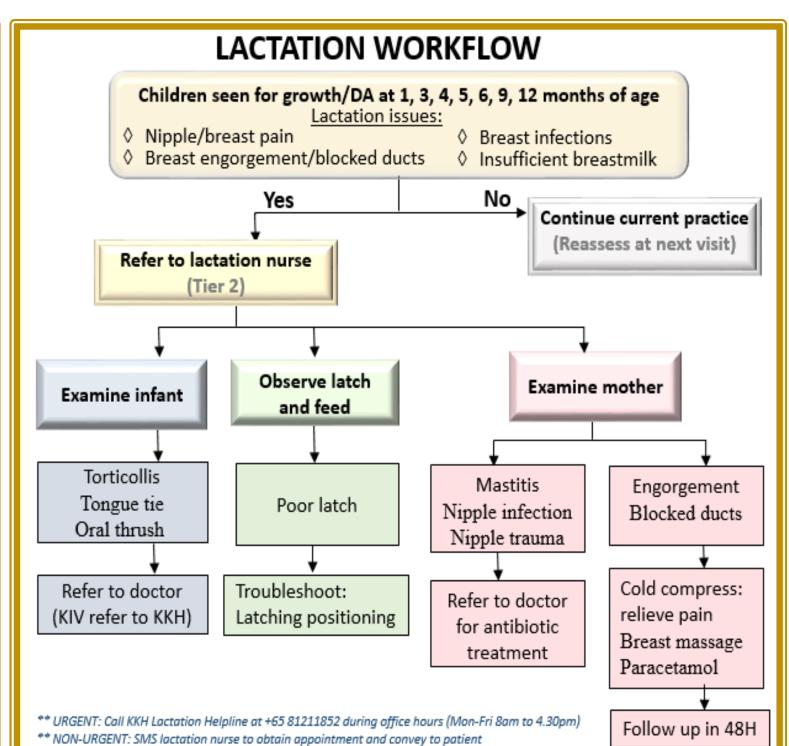


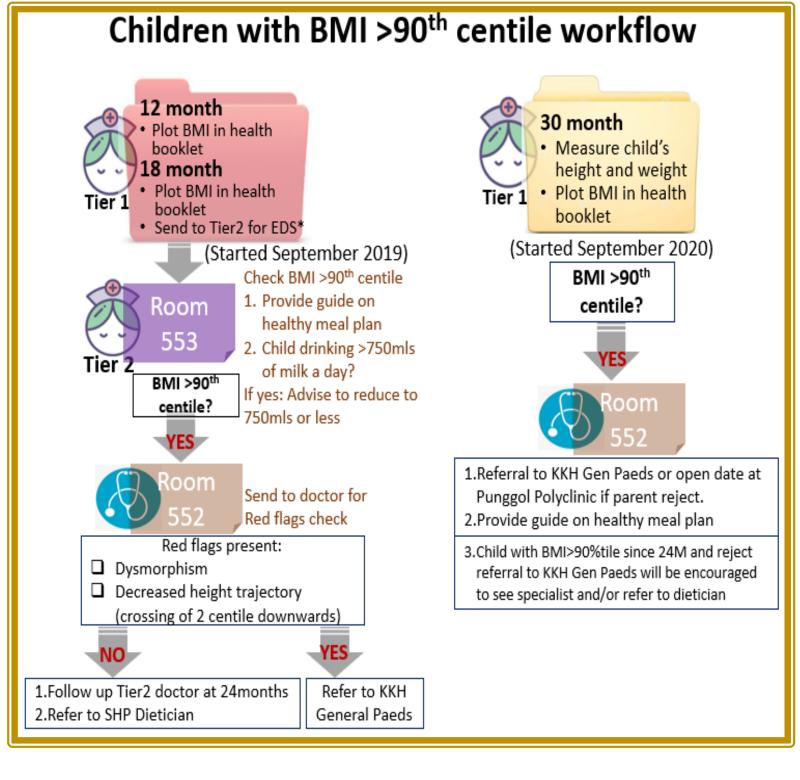
Methodology

The EDS and PND screening processes were integrated into the workflow of existing well-child visits for developmental assessment and immunization.



- Training by specialist and on-site support by paediatricians and paediatric nurses
- Design screening using age-appropriate and validated screening tools
- Create webpage and design age-appropriate education resources for parents
- PND screening using PHQ-2 questionnaire to mothers at the child's 2 months' immunization visit
- EDS at 18 and 30 months
- Detection of overweight children (BMI > 90th centile) at 18 months' visit
- Lactation support and nutrition advice to mothers and/or caregivers at child's 0 to 6 months' visits
- Anticipatory guidance through bite-sized age-appropriate education materials
- Public education through annual virtual webinars
- Monthly programme review on process indicators with the implementation of quality improvement measures using plan-doact-study cycles
- Yearly review of outcome indicators





Results

The integrated workflow enabled over 85% of attendances to be screened. 2.4% of mothers and 8% of children were screened positive for PND and developmental delays, respectively, and were offered intervention. 12% of children screened at 18 months were found to be overweight and given appropriate counselling and follow-up. Over 17000 families accessed education materials through brochures, programme website or webinars.

Postnatal Depression Screening (July 2019 to December 2021)

5561 (88%) mothers were screened for PND. 136 (2.3%) mothers screened positive for PND. 56% of them received self-help resource or referral for counselling.

| | Total number screened | | Women screened positive | | positive wl | screened ho accepted ention | Women who accepted and received intervention | | |
|---------------|-----------------------|-----|-------------------------------|------|-------------|-----------------------------------|--|-----|--|
| PND Screening | 5561 | 88% | 136 | 2.4% | 79 | 58% | 76 | 96% | |

Development Screening (July 2019 to December 2021)

8625 (89%) children received EDS. 709 (8%) were screened positive for developmental issues and offered referrals to child development units for further assessment. Enhanced screening at 9 month ended in March 2020 since only 0.5% were screened positive.

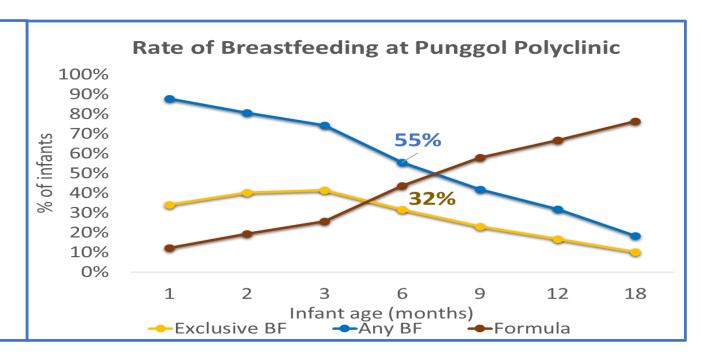
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|-----------------------------|----------------------|-----|----------------------------------|------|---|-----|-----|-----|--|------|
| Developmental Assessment | Children screened | | Children screened positive | | Children screened positive who accepted referral to DCD | | | | Children assessed to have developmental issues at DCD | |
| 9 month (Jul19-Mar20) | 1479 | 89% | 7 | 0.5% | 4 | 57% | 2 | 50% | 2 | 100% |
| 18 month | 4212 | 86% | 587 | 14% | 343 | 58% | 218 | 64% | 213 | 98% |
| 30 month | 2933 | 93% | 115 | 4% | 88 | 77% | 73 | 83% | 73 | 100% |
| Overall | 8624 | 89% | 709 | 8% | 435 | 61% | 293 | 67% | 288 | 98% |

Growth Screening (July 2019 to December 2021)

4016 children were screened for growth at 18 months. 471 children (12%) were detected to be overweight (BMI>90th centile for age and gender) and provided with intervention with dietary advice and reviews.

Lactation Support

32% of the mothers continued exclusive breastfeeding and 55% of the mothers on partial breastfeeding at 6 months. 64 mothers sought lactation support and 55% them continued to breastfeed for >2



Anticipatory Guidance and Education

Up to April 2022, over 17000 families had accessed the self-help brochures, educational materials including short videos on PND, breast massage, child's safety, eye health, dental care, etc. pushed to parents through printed materials or QR codes to programme webpage. A series of 5 webinars had been organized.





Conclusion

The pilot programme had successfully demonstrated the feasibility of a mother-child dyad care model in the primary care setting leveraging on existing well child visits to enhance developmental screening, PND screening, growth monitoring, nutrition support and anticipatory guidance. The programme will be scaled to 3 other SHP polyclinics in phases from 2022. Importantly, it has contributed to the national interest in maternal and child health, in particular dyad-centred care.

months.