6483: Collaborative working to establish a pathway for home phototherapy with Paediatric Virtual Ward

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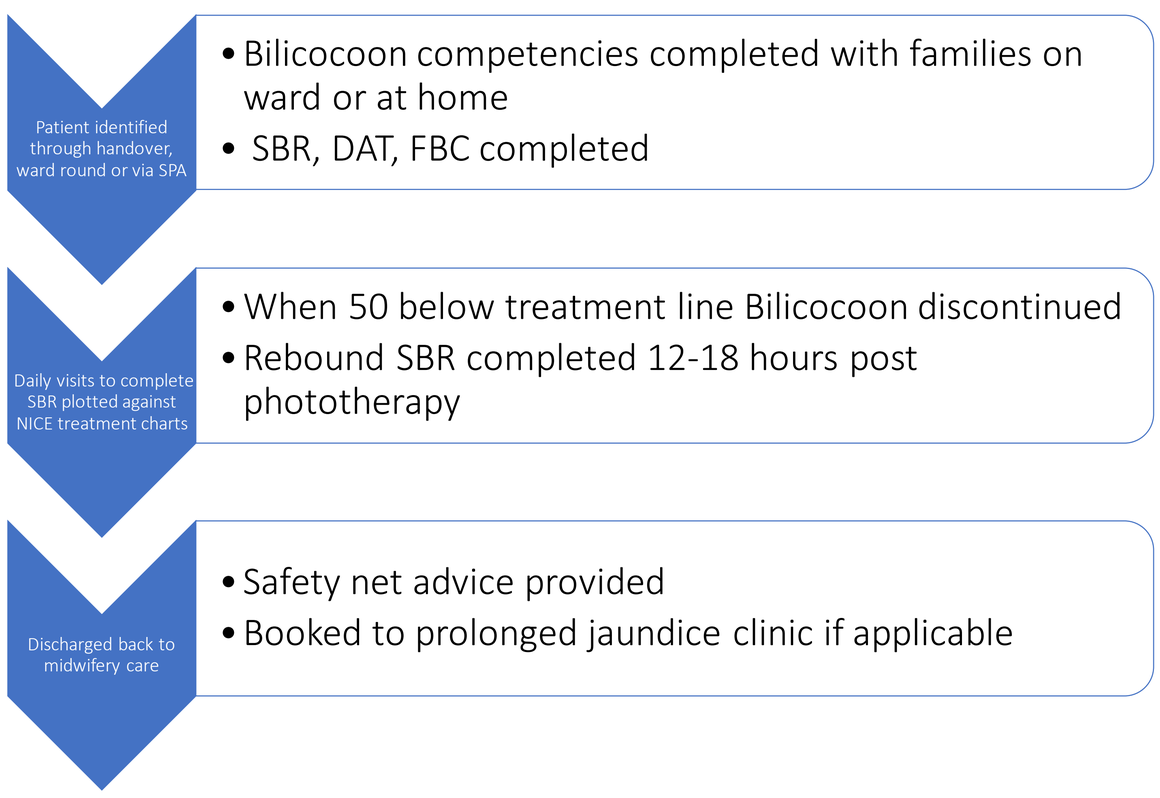
Objectives

Jaundice affects 60% of term neonates [1] and untreated hyperbilirubinaemia can cause kernicterus with subsequent brain damage. Current inpatient treatment of jaundice has multiple drawbacks for families and NHS hospitals.

The aim was to establish safe home phototherapy, facilitate patient flow and reduce hospital inpatient bed days through creation of a clear pathway for the management of jaundiced neonates within the local region.

Methods

- Well neonates with physiological jaundice between 2 and 14 days of life were included, and their parents educated about home phototherapy using BiliCocoon® (NeoMedLight, France).
- Families were provided with red flag advice and contact information for Neonatal Community Outreach (NCOT) and Paediatric Virtual Ward (PVW) teams as appropriate.
- Babies with suspected sepsis, or bilirubin above exchange level were excluded.
- Daily home visits were arranged to assess baby and check serum bilirubin (SBR) levels, with decision by NCOT/PVW on further management.
- Qualitative feedback was obtained from families to ensure positive experiences and allow the teams to reflect on care provision. The data and pathway information were disseminated at Trust and departmental level, through teaching, safety and governance meetings.



Results

- Between June 2023 and February 2024 51 babies were cared for at home, (supported by paediatric virtual ward) saving 109 hospital bed days and over £49,050.
- No babies were re-admitted with jaundice-related problems.

Themes that emerged from the questionnaires include:

- improved parental mental health,
- access to family network
- quieter home environment leading to more effective sleep
-partners having the opportunity to bond with baby
-the BiliCocoon® was felt to provide more consistent treatmentas babies could be fed and comforted within the light-emitting diode blanket
-breast feeding is supported better than traditional overhead light phototherapy
- Usual maternal postnatal care was maintained as midwives could visit the family home
-cost savings included car parking, care of other children, and food for parents.

"My midwife was able to visit me at home to help with my c-section wound whilst the baby had his treatment"

"This treatment allowed us to be at home with our baby and not have to take a newborn on public transport to get to the hospital"

"My husband was able to help me overnight so I could sleep"

Conclusion

Our innovative, multi-professional pathway has provided safe and effective phototherapy at home, with prompt recognition and intervention for babies with additional diagnoses.

At a time when NHS resources and ward capacities are stretched, we are working and communicating in a multi-disciplinary fashion to provide excellent holistic care to these babies and their families.

Our pathway has helped to release inpatient beds for acutely unwell patients, supporting the NHS England Long-Term plan [2] to reduce demand on NHS secondary services.

Since initiation we are now taking babies directly from midwives via the hospital's Single Point of Access service with a criteria to ensure safety is maintained thus facilitating total hospital avoidance.