G132(P) IMPLEMENTING TRANSCUTANEOUS BILIRUBIN MEASUREMENT TO REDUCE EMERGENCY DEPARTMENT ATTENDANCES WITH NEONATAL JAUNDICE

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Objectives and Background Jaundice is a common neonatal presentation which in some cases can lead to bilirubin encephalopathy and permanent neurological disability. NICE guidelines recommend transcutaneous bilirubin measurement in well babies >35 weeks gestation and >24 hrs old, or serum bilirubin measurement where this is unavailable. This study evaluated if using a TCB in MAU was more cost-effective than having well jaundiced babies attend A&E or SCBU.

Methods

- Manual and electronic searches of A&E attendances for jaundice from 1/9/18–22/9/19 and 5/10/18 – 1/11/18. Data was collected on the levels of jaundice and the number requiring admission.
- Manual collection of data of attendances to MAU from 1/5/19–31/5/19 regarding number of attendances, waiting times and number requiring paediatric review.

Results 131 babies presented to the DGB in September and October 2018. Of the 53 babies presenting with jaundice in September, 12 (23%) had blood gas measurements low enough that a serum bilirubin was either not taken, or not sent off to the lab. 19 (36%) babies had a bilirubin greater than 200. 6 (11%) babies were admitted for either phototherapy or feeding support. Of the 78 babies presenting to ED with jaundice in October, 50 (64%) fulfilled NICE criteria for TCB measurement. 12 (15%) were well babies with serum bilirubin >250 and the remaining 16 (21%) had other clinical concerns such as weight loss. 5 babies (6%) were admitted for phototherapy and/or feeding support.

Following introduction of TCB measurement, we found 78 attendances (including 12 reattendances). 49 (74%) were discharged, 13 (20%) had to return for follow up and 8 (12%) babies required paediatric input.

Conclusions The number of referrals into the new and old pathways were not vastly different justifying the need for a robust pathway. The TCB is cost effective, has reduced waiting times and the number of blood tests. The reduction in ED attendances with neonatal jaundice requiring investigations reduces pressure on medical staff and the cost per patient for the hospital.

REFERENCES

1. 'Jaundice in newborn babies under 28 days', NICE CG98, Published May 2018, Last updated October 2016

G133(P) SOLVING WORKFORCE CHALLENGES AND PROMOTING FLEXIBLE WORKING THROUGH INNOVATIVE ROSTERING TECHNOLOGY USE AT BIRMINGHAM CHILDREN'S HOSPITAL EMERGENCY DEPARTMENT

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Aim/Background Workforce management is one of the biggest NHS challenges and the largest expenditure. Workforce recruitment/retention is a growing concern; there is need to better support workforce and flexible working preferences. Better use of technology is seen by many as a route to addressing this. The NHS have mandated electronic rostering by 2021. Birmingham Children's Hospital Emergency Department (BCH ED) depends on a 24 hour multi-disciplinary team with differing work contracts/patterns. Historically they depended on rudimentary paper/spreadsheet systems that were error prone, with potential impact on staff experience, service cover and patient care; managed by clinicians, taking approximately 20 hours/week. BCH ED partnered with Lantum, an app and cloud based workforce management platform, aiming to:

- Develop a robust, automated, transparent rota system
- Improve efficiency
- Reduce expenditure
- Increase staff satisfaction

Methods Following clear definition of challenges and goals, a pilot bespoke digital rota system was launched in April 2019. A partnership approach with regular communication, user testing and feedback sessions ensured assessment of impact and iterative product development to meet the ED's needs.

Results

- Transparent, simple digital rota system accessible for staff anywhere, in real time
- All staff onboarded, including bank workers, within 4 weeks
- Complete replacement of the old system within 2 months
- Earlier detection of and response to rota gaps
- Improved shift fill rate (total 20,350 hours filled; average shift fill rate >92% over 6 months) increasing over time to 97%)
- Better engagement with workforce through:
 - Improved communication via the platform
 - Better user experience
 - Real-time remote access
- Cost savings via optimising workforce utilisation and shift fill rates (reduced agency fees) and streamlined administration – > one consultant PA freed up (>£8500pa saving)
- Increased staff satisfaction

Conclusion Development of diagnostic technology is often prioritised above overcoming organisational problems, but the latter can help improve clinician productivity to allow more time for patient care and improve staff satisfaction. Innovative, technological partnerships can facilitate workforce management to the benefit of both staff and organisations. Involving clinicians to co-develop these helps ensure effective solutions, particularly in workforces such as paediatrics with high demand for flexible working.

G134(P) AN AUDIT OF HIGH-RISK MRSA SCREENING ON THE ACUTE PAEDIATRIC AND NEONATAL INPATIENT WARDS

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Aims The Paediatric Infection Prevention and Control (IPC) Multi-disciplinary Team is the first Divisional IPC Team at our Trust and conducts regular audits to assess compliance to the