Abstracts

- Do you feel that reading the learning points email has influenced your practice?
- Would you recommend reading the learning points email to a colleague?

Results There were 26 respondents out of 111 (response rate 23%). 100% found the email a useful learning resource and 100% would recommend it to a colleague. 96% felt the emails had influenced their practice. 62% ‘always’ read the emails, 38% ‘usually’ and 0% ‘never’. Themes identified amongst open question responses included: improved team spirit, practical knowledge, continued professional development, quality improvement, patient safety, applicability, and use for trouble-shooting.

Conclusion This simple initiative demonstrates success and longevity in promoting a culture of team learning, quality improvement and patient safety in our hospital. Relatively low survey response rate is acknowledged as a limitation of our evaluation method.

G148(P) SAFE AND TIMELY STEPDOWN FROM AN INTERNAL PICU: A PATIENT SAFETY PRIORITY BUT ONE FULL OF CHALLENGES

K Evans, W Stephenson, A Porter, U Senanyake, J Zoeteman, M Hodin, N Prince. PICU, St George’s Hospital, London, UK

Background Children recently discharged from Paediatric Intensive Care units (PICU) are likely to have on-going complex medical needs and are at significant risk of deterioration. Local and national standards are in place to ensure that these children are reviewed in a safe and timely manner.

Aims This Quality improvement Project (QIP) assessed the internal ‘step-down’ process of patients from the PICU to the paediatric wards with intention of improving communication and documentation between these two teams.

Methods Retrospective audit of PICU discharge communication, documentation and time to ward review for all patients discharged during October 2018. Novel ‘PICU discharge summary’ and ‘Verbal Handover’ templates were used. The local patient management system (PMS) were devised following consensus between PICU and paediatric consultants. Re-audit of PICU discharge data was performed after the new templates were in routine use.

Results Discharge data was reviewed for the 35 children discharged from PICU to the ward in October 2018. 31 cases were studied in the second audit cycle (September 2019). Table 1 compares key differences after implementation of the changes. Table 2 compares timing of PICU discharges between the two audit cycles.

Conclusions Introduction of a PICU verbal handover template for the hospital PMS significantly improved verbal handover from PICU to ward teams in our trust. However mean time to ward review following PICU handover remains sub optimal. Most patients are discharged from PICU during the afternoon or out of hours, this may explain the lengthy time to ward review as these times are likely busier and with less staff. Further QIP involving multidisciplinary teams to improve PICU discharge planning would be beneficial.

Abstract G148(P) Table 2

<table>
<thead>
<tr>
<th>Time of PICU discharge</th>
<th>% Discharges Oct 2018</th>
<th>% Discharges Sept 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning (0900–1200)</td>
<td>9 (3)</td>
<td>10 (3)</td>
</tr>
<tr>
<td>Afternoon (12:00–16:30)</td>
<td>48 (17)</td>
<td>58 (18)</td>
</tr>
<tr>
<td>Out of hours (16:30–08:30)</td>
<td>42 (15)</td>
<td>32 (10)</td>
</tr>
</tbody>
</table>

G149(P) PROVIDING INDIVIDUALISED FEEDBACK TO IMPROVE THE RATES OF PRESCRIPTION ERRORS

1A Moore, 2A Rahman, 3C Tipper. 1General Paediatrics, North Middlesex University Hospital, London, UK; 2School of Medicine, St George’s University, Grenada, West Indies

Background The incidence of medication errors is higher in the paediatric population, who require dosing based on age, weight and body surface area. These errors might cause significant harm and could be prevented through improved prescribing practices.

Aim To reduce the rates of paediatric prescription errors in one hospital by providing doctors with individualised feedback when an error is made.

Methods When a pharmacist identifies a prescription error, the prescriber is sent feedback about this error and how it should be corrected. The most common errors are recorded and emailed to the whole team. If a doctor has made one significant or three non-significant errors, they are required to complete the RCPCH prescribing e-learning. Doctors are informed of this initiative during induction.

To evaluate this project, drug charts were audited four times between 2018–2019. Data was collected on both chart and prescription errors. Univariate and bivariate analyses were conducted using chi-square, Fischer exact tests, Wilcoxon rank-sum test and two-sample tests of proportions.

Results 52 drug charts were audited in 2018 and 47 in 2019, with a mean of 3.68 prescriptions per chart. Generic drug names were used 71.43% (n=70) of the time. 100% of prescriptions were signed but 38.14% (n=37) were missing a bleep number. Illegible handwriting was not associated with any errors observed (p>0.1). There was significant improvement in use of generic drug names (p<0.05), use of correct units (p<0.005), use of correct units (p<0.005) and documenting the indication for antibiotics (p<0.05). There were no significant changes in legibility, documentation of allergies, patient details, bleep numbers, or errors in medication frequency or route. (p>0.05).

Conclusions The data show improvements in the prescribing error rates following the introduction of individualised feedback. However, as some doctors left and some joined the hospital during the time-frame audited, it is not possible to definitively show that the improvements are secondary to this initiative.

To improve the project and encourage good practice, we have begun notifying doctors following excellent prescribing.
We will then re-audit the data before and after feedback cycles to monitor for any reduction in prescribing errors.

**G150(P)** FORWARD THINKING: SEEKING ALTERNATIVES TO BLEEPs

1D Roberts, 1S Webb, 3Al Newnham, 1General Paediatrics, Leeds Children’s Hospital, Leeds, UK; 2Paediatric Surgery, Leeds Children’s Hospital, Leeds, UK; 3Paediatric Nephrology, Leeds Children’s Hospital, Leeds, UK

**Introduction** ‘Bleep’ systems are a central communication tool between medical and nursing teams in hospital. The majority of bleeps are for non-urgent tasks, this inefficient use of the bleep system leads to routine tasks take longer to complete and disrupt patient care. The Health and Social Care Secretary ordered pagers for non-emergency communications be removed from the NHS by 2021.

**Objective** Reduction in the number of bleeps for non-urgent tasks in a tertiary paediatric hospital.

**Methods** A multi-professional working group was established and developed a standard operating procedure (SOP) for bleeping including a ‘traffic light’ system with non-urgent tasks (completion within 1–4hrs) categorized as green. A job book with designated time slots for medical visits to each ward was introduced. A number of PDSAs (Plan, Do, Study, Act) cycles were completed using the job books but were ultimately unsuccessful. Therefore, a new direction using an electronic solution was explored. The FORWARD app (a secure messaging platform) was chosen to be piloted on two wards. Baton phones pre-installed with FORWARD were given to the medical and nursing teams alongside training. Communication via the platform was limited to non-urgent tasks and urgent tasks in hospital. The majority of bleeps are for non-urgent tasks, this inefficient use of the bleep system leads to routine tasks take longer to complete and disrupt patient care.

**Results** Telecommunications records from two weeks either side of implementation of FORWARD app demonstrated a significant reduction in the number of bleeps, the median decreasing from 21 to 12 (run chart available). The feedback was positive, and the nurses reported doctors responded more quickly on FORWARD. The main challenge was inconsistent wireless internet connection, affecting acknowledgment of tasks.

**Conclusion** This project has shown that a novel, secure messaging platform can effectively reduce the number of non-urgent bleeps. This requires an appropriate induction to the platform, a SOP on the use of the platform/bleeps and adequate IT infrastructure to ensure reliability and safety. This trial has also highlighted the importance of careful consideration of the governance implications when using patient identifiable data which is a clinical governance requirement for patient safety. Collaboration with the trust digital informatics and information governance team has led to the development of acceptable user policies to guide this.

**G151(P)** IMPROVING NUTRITIONAL INTAKE IN EXTREMELY PRETERM INFANTS IN WEEK ONE

1HM Cobb, 1C Turner, 2S Bates, 1TA Warlow, 1PA Mannix. 1Southmead Neonatal Intensive Care Unit, North Bristol NHS Trust, Bristol, UK; 1Women’s and Children’s, Great Western Hospitals NHS FT, Swindon, UK; 2All Wales Paediatric Palliative Care Network, Ty Hafan Children’s Hospital, Cardiff, UK

**Aim** Optimised early nutrition in extremely preterm infants is associated with improved developmental outcome, but the delivery of parenteral nutrition (PN) must often be balanced against the need for multiple drug infusions.

A 2012 audit demonstrated that our unit was not reaching targets for energy and protein intake in the first week of life in infants <28 weeks gestation. We aimed to improve in line with national guidelines by making changes to PN.

**Methods** New PN was formulated by a multi-disciplinary team including specialist dieticians and pharmacists. This was concentrated to run at maximum 100 ml/kg/d, with lipid at 20 ml/kg/d, allowing drug infusions to take a larger proportion of the fluid requirement without titrating from PN volume. Additionally, a higher threshold for stopping lipids was agreed (serum triglyceride levels ≥4 mmol/L).

25 inborn babies born at <28 weeks from May 2018 to May 2019 were included (6 were excluded due to death or incomplete notes). Notes were reviewed retrospectively, and delivery of PN, lipid, feeds and dextrose infusions were recorded for the first 7 days. Total calorie and protein intake were then calculated.

**Results** Energy intake increased compared to 2012, with a mean additional 10.2 kcal/kg/d on day 1, and 23.36 kcal/kg/d on day 7, which is closer to recommendations (table 1).

**Conclusion** Use of a more concentrated PN solution alongside higher thresholds for stopping lipid infusions has resulted in greater early energy and protein intakes in infants <28 weeks in our unit.

**G152(P)** A QUALITY IMPROVEMENT PROJECT FOR MANAGEMENT OF WELL BABIES WITH JAUNDICE IN A DISTRICT GENERAL HOSPITAL

1J Coburn, 1J Martin, 2A Chavan, 3English, 4A Hickey, 5R Gandhi. 1Midwifery Department, Princess Royal University Hospital, King’s College Hospital NHS FT, London, UK; 2Neonatal Unit, Princess Royal University Hospital, King’s College Hospital NHS FT, London, UK

**Abstract** G151(P) Table 1 Calorie intake (kcal/kg/d)

<table>
<thead>
<tr>
<th>Day</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>46.73</td>
<td>64.09</td>
<td>77.32</td>
<td>86.06</td>
<td>90.68</td>
<td>93</td>
<td>97.48</td>
</tr>
<tr>
<td>2012</td>
<td>36.51</td>
<td>52</td>
<td>61.79</td>
<td>66.08</td>
<td>70.72</td>
<td>74.48</td>
<td>74.12</td>
</tr>
<tr>
<td>Recommended</td>
<td>60–80</td>
<td>80–100</td>
<td>100–120</td>
<td>120–140</td>
<td>140–160</td>
<td>160–180</td>
<td>(BAPM 2016)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Day</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>1.81</td>
<td>2.48</td>
<td>2.9</td>
<td>3.25</td>
<td>3.43</td>
<td>3.46</td>
<td>3.5</td>
</tr>
<tr>
<td>2012</td>
<td>1.48</td>
<td>2.03</td>
<td>2.42</td>
<td>2.56</td>
<td>2.84</td>
<td>2.92</td>
<td>2.84</td>
</tr>
<tr>
<td>Recommended</td>
<td>2–2.5</td>
<td>2.7–3.2</td>
<td>3.5–4.0</td>
<td>4.0–4.5</td>
<td>4.5–5.0</td>
<td>5.0–5.5</td>
<td>(BAPM 2016)</td>
</tr>
</tbody>
</table>

Protein intake was also higher, and was within the recommended range from day 3 (table 2).

**Conclusion** Use of a more concentrated PN solution alongside higher thresholds for stopping lipid infusions has resulted in greater early energy and protein intakes in infants <28 weeks in our unit.