and whether medication prescription chart was reviewed in 23.9% case notes.

**Intervention** We reflected on the results of our audit and discussed the core activities that must be documented, creating standards for our ward. A helpful suggestion from discussion between trainees and nurses led to creation of a ‘Ward Round Stamp’ that is a simple tick list of 5 issues (see Figure 1) that is used as part of documenting activities on WR.

**Strategy for change** The results of our observation were discussed in the monthly departmental governance meeting. There were concerns raised about variable standards of ward rounds and their documentation. Few clinicians expressed a view that documenting key aspects of ward rounds are medico-legally important and a thorough documentation supports investigations when case notes are retrospectively scrutinised. Brainstorming further in a focused team of trainees, consultants and nurses led to the practical decision to use the WR stamp identifying 5 activities that can be ticked. The use of stamp was easy to implement as it was an idea from trainees that their colleagues readily accepted. The use of WR stamp is now routinely discussed at induction whenever the trainees changeover. We are re-auditing the documentation during ward rounds. Interim results show that trainees remember to use the WR stamp on >80% occasions. At other times, the general improvement in documentation is noticeable.

**Effects of changes** There has been changeover of trainees and written feedback suggests that all trainees find paediatric ward rounds to be more structured than other departments they had rotated in. There has been no resistance from trainees or nurses in adapting the WR stamp. We still find occasions when trainees don’t use the WR stamp, but these are busier times or locum doctors. Trainees find structured ward rounds are helpful for training future doctors by providing a good example of safe service provision and good documentation.

**Lessons learnt** I have rotated to another unit and have continued a thorough documentation of all activities during ward rounds.

**Message for others** I found that lack of structure that can be responsible for poor quality within healthcare and solutions can be simple to devise and implement.

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**G561(P) SAFE USE OF INSULIN**

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10.1136/archdischild-2015-308599.510

**Context** The project involves all paediatric inpatients with type 1 diabetes on a general paediatric ward in a district general hospital. The staff involved include paediatric specialist nurses, ward nurses, ward-based doctors, the ward pharmacist and the clinical lead for diabetes.

**Problem** Errors were occurring with prescribing and administration of insulin, including dosing errors, type of insulin, missed doses and untimely doses. This was leading to poor blood sugar management significant risk to patient safety. Parents were reporting to the diabetes specialist nurses that they lacked confidence in the ward staff’s abilities to understand glycaemic control and one teenage patient self-discharged as he felt unsafe.

**Assessment of problem and analysis of its causes** Construct a process map from a multidisciplinary discussion to diagnose the variations in care during the patient journey. The discussion helped determine:

1. Problems with the prescription chart, e.g. insulin prescribed on different pages; text boxes too small with inappropriate subheadings; not suitable for variable doses.
2. Lack of staff understanding, compounded by high turnover of medical staff sometimes with no paediatric experience and lack of exposure due to low admission rates of diabetics.
3. The lack of clarity of the prescription was leading to an unnecessary step of the nurse calling the doctor to check the quantity of insulin required based on each blood sugar result.

**Patient engagement**: contact with recent inpatients/their carers to discuss perception of care.

**Intervention** A search was conducted to see how other departments are approaching this problem and then critically appraise whether these methods would be suitable in our setting. As a starting point we introduced a separate specific insulin prescription chart securely attached to ward drug chart. The chart allowed sufficient space for each type of insulin prescribed, with prompts to guide staff in decision-making regarding dose and to encourage appropriate timing of administration of doses.

**Study design** Due to the low admission rate of diabetic patients and high risk of harm from drug errors, analysis using real patients would delay the implementation of the safer prescription chart. Therefore initial tests of the chart’s suitability were carried out with simulation exercises and repeatedly tested on groups of doctors and nurses, who provided feedback on the charts. The feedback and charts were then analysed by the author along with the ward pharmacist.

**Strategy for change** The new drug chart will be kept in the same place as the standard drug charts. Use of the chart will be incorporated into the diabetes study day for the nursing staff and the doctors’ departmental induction.

**Measurement of improvement** Run charts of the number of errors found on charts tested out on doctors and nurses with the dummy patients.

Simultaneous analysis of confidence of prescribing and interpretation of prescriptions by nurses.

Once the chart has been through the trust’s clinical governance systems and is implemented for real patient use, the incidence of drug errors will be monitored using the incident reporting system and feedback from the ward pharmacist.

**Effects of changes** It is hoped that there will be a reduction in drug errors and an improvement in the timely, accurate administration of the correct insulin type. It is expected that as a result of improved confidence of the staff and consistency of prescribing that patient confidence will improve.

**Lessons learnt** By standardising part of the pathway we predict a reduction in treatment variation.

**Message for others** Safe insulin prescribing is now mandatory training throughout the NHS. This chart allows this training to be incorporated into best practice.

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**G562(P) MEDICAL PRODUCTIVITY: QUALITY CARE AND QUALITY TRAINING**

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10.1136/archdischild-2015-308599.511

**Context** Inpatient general paediatrics is provided by a variety of medical staff, including Paediatric trainees, General Practice
trainees and Foundation doctors. This project considered how to provide safe patient care and a supported training experience through optimising medical productivity.

**Problem** In light of reconfiguration of paediatric services, there is a need to make efficient use of medical staff as a resource, at the same time as providing quality training. Junior staff noted that time was spent on activities other than patient contact. End of placement and GMC surveys identified that trainees failed to attend the recommended number of study days and clinics due to service demands. This project was undertaken to identify inefficiencies in the working patterns of general paediatric juniors, measure the impact on patient care and training, and highlight opportunities for quality improvement.

**Assessment of problem and analysis of its causes** In an 8 h shift, trainees spent 48 min on average directly interacting with patients and 25 min in teaching. This lack of patient contact time could not only result in poor patient care but could also impact on the skills and knowledge of trainees. This may affect quality of care in the future. A multidisciplinary focus group and anonymous interviews were held to establish staff views about the causes of these problems. These issues could be resolved by implementing non-urgent jobs books on wards and redesigning rotas.

**Intervention** New rotas were designed aiming to prioritise patient contact time, protect training opportunities and match staffing patterns to the clinical needs of the children. Full entitlement of study leave was also allocated. Attention was brought to the topic of interruptions with ward staff, and non-urgent jobs books introduced to maximise medical productivity.

**Study design** Ethnographic data was collected by shadowing 10 trainees over 5 weeks, verbal consent was obtained. Their intended and actual tasks were recorded each minute, as well as the number of times they were interrupted. Over 5000 min of data was collected.

**Strategy for change** Results of the shadowing data were presented at a clinical governance meeting (those who could not attend were provided information by email). New rotas underwent a formal consultation process with trainees, as well as Wales Deanery and the Welsh Assembly Government. The jobs book will be introduced at the same time as new rotas are implemented in March 2015.

**Measurement of improvement** The same method of data collection will be used to collect ethnographics following implementation of changes. Mean time spent on each activity will be compared. Number of interruptions and the extent to which actual versus intended task is affected will be analysed. Time spent training will also be recorded. The improvement cycle can then be repeated.

**Effects of changes** The new rota has been designed but not yet implemented, therefore the effects at the point of abstract submission are not yet known. However it is anticipated that the effects will be more patient contact, less frequent interruptions and greater opportunities for training. These results will be available by April 2015.

**Lessons learnt** Large scale service improvements require careful consideration of human factors and engagement from all stakeholders involved to successfully overcome barriers to change.

**Message for others** Rotas not designed around patients or trainees lead to low levels of patient contact, an inefficient service, and fewer opportunities for training. Consult staff widely and early in a quality improvement process.

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**Table 1: Effects of changes**

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<th>% of Times info included in:</th>
<th>1st audit</th>
<th>Repeat audit</th>
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<tbody>
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<td>100</td>
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<tr>
<td>Procedure</td>
<td>27.5</td>
<td>33</td>
</tr>
<tr>
<td>Weight</td>
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<td>38</td>
</tr>
<tr>
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</tr>
<tr>
<td>Drugs stopped/ altered</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Allergies</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>History</td>
<td>67.5</td>
<td>100</td>
</tr>
<tr>
<td>Results</td>
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<td>45</td>
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<tr>
<td>Allied health care info</td>
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<td>33</td>
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<tr>
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<tr>
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