Abstracts

British Association for Community Child Health

179 THE USE OF TRANSITION TRANSFER DOCUMENTS TO FACILITATE TRANSITION FOR YOUNG PEOPLE WITH NEURODEVELOPMENTAL HEALTH NEEDS TO ADULT SERVICES

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Background The importance of a holistic transfer document highlighting a young person’s (YP) needs to enable a smooth transition from paediatric to adult services has been well recognised. This has become especially apparent for young people living with neurodevelopmental health needs in recent years. To facilitate this process, a ‘Transition transfer document’ (TTD) exemplar for YP with complex neuro-disability was co-produced with families and professionals.

Objectives

- To determine if transition transfer documents were routinely developed for YP with complex health needs by the age of 17.
- To determine if clinicians found the transition transfer documents or exemplar document useful.

Methods A search of electronic patient records was undertaken to identify young people aged 17 to 18 as of 01/07/2019 with a complex neurodisability and an educational health care plan. 60 were identified and their records were reviewed. A SurveyMonkey questionnaire was sent to 11 paediatricians and 64 General Practitioners (GPs) alongside a TTD exemplar document. Data was entered and analysed using the Microsoft Excel formulaic analysis.

Results Complete documentation was available on 43 young people. One person had a TTD; the most appropriate clinic letter, containing the most relevant details to the transition process, was used as a proxy transfer document in the remaining 42. In 25.6% of the young people, a formal transition process had been initiated. The result of the analysis of 43 clinic letters or transition transfer documents can be seen in table 1.

The questionnaire response rate was 14.1% (9/64) for GPs and 81.8% (9/11) for paediatricians. 66.6% of paediatricians and 77.8% of GPs rated the TTD exemplar ³ 3 out of 5 for helpfulness in practice. Qualitative data collected showed that lack of time and lack of joint services were common issues identified by both groups.

Conclusions Transition transfer documents are neither routinely nor consistently created for young people with complex neurodevelopmental needs. There is inconsistency identified in the details provided by clinic letters or TTDs in young people of transitioning age and only one 17-year-old in the population had a completed TTD. The transition transfer documents were deemed useful in theory by the majority of clinicians, however the lack of routine use of TTDs limits their impact. The use of a TTD exemplar can be improved and thus facilitate a smooth transition to adult services for young people with complex neuro-disabilities.

British Paediatric Allergy Immunity and Infection Group

208 HOW EFFECTIVE IS THE BIOFIRE FILM-ARRAY MENINGITIS/ENCEPHALITIS (FA-M/E) PANEL IN DETERMINING THE PRESENCE OF BACTERIAL MENINGITIS IN CHILDREN?

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Background Bacterial meningitis (BM) is rarer in developed countries due to effective immunisation strategies. Distinguishing viral from BM is also challenging. Culture of cerebrospinal fluid (CSF) is the current gold standard for diagnosis, but delays in reporting results remain a problem. The BioFire Film-Array Meningitis/Encephalitis panel is a laboratory based multiple analyser which offers rapid, simultaneous PCR-based detection of 14 pathogens responsible for CNS infections. The panel includes 6 bacterial targets, HiB, N.Meningitidis, S.Pneumoniae, S.Agalactiae, L.Monocytogenes, and E.Coli K1, as well as 7 viral targets and 1 fungal analyte. This study aims to review the potential utility of this array panel as a rapid diagnostic tool for early detection of bacterial infection of CSF in the Paediatric Emergency Setting.

Objectives Our outcome measure was to determine the diagnostic accuracy of the FA-M/E panel in detecting bacterial isolates in children suspected of having Central Nervous System (CNS) infections, compared to standard reference testing (ie specific laboratory PCR testing or bacterial culture) as reported in the literature.

Methods A literature review was performed to identify papers which identified true positive (TP) bacterial isolates (as confirmed by reference testing) detected by the FA-M/E panel in children with suspected BM. Studies published in English between January 2013 and December 2020 were included.

Results Of 1995 abstract titles screened for suitability, 8 papers met inclusion criteria. In the 8 studies identified, 256
positive results from 1249 CSF samples tested using FA-M/E technology. Of the positive analyses, 50 (19.5%) were bacterial and 206 (80.5%) were viral/fungal pathogens. 41/50 (82%) bacterial isolates were TP and 6/50 (12%) False Positives (FP) and 3 unconfirmed by reference tests. The bacterial analytes detected include S.Pneumonia 19 (15 TP; 2 FP; 2 unconfirmed) S.Agalactiae 13 (11 TP; 2 FP), E.Coli K1 13 (11TP; 1 FP; 1 unconfirmed), Hib 3 (2 TP; 1 FP), N. meningitidis 1 (1 TP), L. Monocytogenes 1 (1 TP). 41/50 (82%) bacterial isolates were TP’s confirmed by reference testing, 6/50 (12%) were FP and 3/50 (6%) were unconfirmed by reference testing.

Conclusions The FA-M/E panel can detect 6 common bacterial organisms in the CSF with a TP rate of 82% and a FP rate of 12%. The PCR panels ability to rapidly identify CNS pathogens within 60 minutes makes it a useful diagnostic tool in emergency settings. However five out of eight studies included were retrospective and as a result clinical data may have been lost, some samples were retrospectively tested after 2 years, thus we cannot determine the exact impact the FA-M/E would have on clinical outcomes. Due to study design or insufficient CSF volume, many samples did not undergo adjudicatory testing to validate FA-M/E panel results.

The FA-M/E panel and rapid PCR panels are feasible adjuncts to conventional testing but larger studies in different settings are required before they can replace current practice.

Quality Improvement and Patient Safety

**PRESCRIPTION OF PARACETAMOL AS AN ANTIPYRETIC IN PAEDIATRICS: ANALYSIS OF PRACTICES IN A NATIONAL ACUTE AND TEACHING HOSPITAL**

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**Background** Prescription errors represent a pervasive problem found across many hospitals and the ubiquity by which antipyretics are prescribed in paediatrics makes them a frequent source of error. Such avoidable errors not only lead to actual physical harm for the child, but also incur financial and legal costs on the service provider, dampen public confidence in the health care system and predispose to negative psychological essential.

**Objectives** Prescriptions of Paracetamol for paediatric inpatients at Mater Dei Hospital, a national acute and teaching hospital in Malta, were analysed for sources of error. The British National Formulary for Children (BNFC) was used to establish the correct prescribing standard.

**Methods** Treatment charts of all admissions to medical paediatric inpatient wards were reviewed daily over a four-week period. Prescriptions for Paracetamol were assessed for legibility, inedibility, approved drug nomenclature, correct dose and dosing frequency, approved dosing interval abbreviations, writing of minimum dosing interval for pro re nata (PRN), appropriate dating, prescriber signature and prescriber designation. Treatment charts were also analysed to assess accurate writing of patient name, identification number, age, date of birth, height, weight, and allergies. Paracetamol prescriptions for indications other than fever were excluded.

**Results** A total of 72 treatment charts were analysed of which 44 contained Paracetamol prescriptions. Age ranged from 1 day to 13 years. 93.2% of all prescriptions were on a PRN basis. Legibility and inedibility met the BNFC standard in 100% of cases. Approved drug nomenclature was used in 97.7% of prescriptions.

With regards to dosing, 54.5% of prescriptions did not follow the standard leading to incorrect dosing. Of these cases, 50% were due to the same dose of Paracetamol being prescribed for the oral, intravenous and rectal routes used for the same child. In the other 50%, the oral dose was calculated by weight instead of using fixed dose ranges based on age. Where errors were made, patients were overdosed by an average of 20% more than the recommended maximum dose. Correct dosing frequency was present in 100% of cases. 97.7% of dosing interval abbreviations were not according to guidelines, mainly because English abbreviations were not written in full. PRN was not written in 51.2% of Paracetamol PRN prescriptions.

Dating was correct in 95.5% of cases. Prescriber signature present in 97.7% of cases and prescriber designation in 95.5% of prescriptions.

The following table illustrates data related to treatment charts:

<table>
<thead>
<tr>
<th>Patient Criteria</th>
<th>Percentage Correctly Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>94.4</td>
</tr>
<tr>
<td>Identification Number</td>
<td>94.4</td>
</tr>
<tr>
<td>Age</td>
<td>83.3</td>
</tr>
<tr>
<td>Birth date</td>
<td>22.2</td>
</tr>
<tr>
<td>Height</td>
<td>1.4</td>
</tr>
<tr>
<td>Weight</td>
<td>76.4</td>
</tr>
<tr>
<td>Allergies</td>
<td>54.2</td>
</tr>
</tbody>
</table>

Conclusions Adherence to proper prescription practices has been repeatedly emphasised by regulatory bodies and safe prescription is considered an integral part of sound medical practice. Greater attention needs to be paid to appropriate dosing according to indication and route to prevent overdosing. Correct writing of dosing interval abbreviations, as well as recording of weight and allergies in treatment charts is also essential.

Quality Improvement and Patient Safety

**WHISPER DOWN THE LANE: OVERCOMING COMMUNICATION CHALLENGES WEARING REUSABLE FFP3 MASKS**

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**Background** APLS teaches us the importance of clear and accurate communication. Anecdotally our team noted that communication wearing re-useable masks was challenging.