SP8 PHARMACIST-LED CENTRALISED PRESCRIBING SERVICE FOR PAEDIATRIC GROWTH HORMONE IN SOUTH WALES

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Aim To standardise the supply and monitoring of growth hormone to children across the tertiary paediatric endocrine service and ensure cost-effective prescribing of growth hormone in children.

Method Patients identified by recorded data on the Growth Analyser® database used by the paediatric endocrine team. A pharmacist reviewed the current process and using process mapping identified ways of simplifying the registration process for new starters in different health boards. Patients and families offered to register with new service during the annual tertiary endocrine review clinic, or more urgently if issues identified and raised by the patients/family to the pharmacist. The pharmacist completed registration paperwork and prescribed growth hormone 6 monthly, ensuring appropriate monitoring is conducted before prescribing. All patients transitioned to new service recorded on Excel spreadsheet comparing monthly cost on the previous service, to monthly cost on the current service.

Results 150 patients identified on growth hormone across 6 health boards prescribed majority via GP with few via homecare at an approximate cost of £800,000 a year. Over 1 year now 90 patients prescribed by the pharmacist based in the paediatric endocrine team and supplied by homecare. Resulting in cost savings of £100,000 a year, an average of £1,700 per patient, with the most significant cost saving of £4,400 a year for one patient. The time taken to start a new patient on growth hormone has reduced from an average of 6 weeks to 2 weeks, due to less burden on GP and shared care agreements. Reduced burden on specialist nurses to complete paperwork, deal with queries and chase prescriptions as managed by the pharmacist. Support to consultants to ensure patients are monitored at least every 6 months as per BSPED recommendations[1] and NICE guidance.[2]

Conclusion Pharmacist-led prescribing of growth hormone can reduce the burden on consultants, specialist nurses, and GP's, and standardise the supply and support that patients and their families receive when starting growth hormone. Ensuring patients receive treatment in a timely manner and receive appropriate monitoring regardless of where they live. Supplying growth hormone via homecare is more cost-effective than supplying via primary care. Utilising a pharmacist to oversee this service, identify and approach patients and their families to transition over to the new service can achieve significant cost savings to the NHS, without adding pressure to the specialist team.

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SP9 PARENT CO-DESIGNED DRUG INFORMATION FOR PARENTS AND GUARDIANS TAKING NEONATES HOME – SURVEY OF HEALTHCARE PROFESSIONALS AND PARENTS/CARERS – AN INTERIM ANALYSIS

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Aim The aim of this project is to work with healthcare professionals (HCPs) and parents/carers to co-design resources aimed at improving medication safety and reducing parental anxiety for those giving medications to neonates at home.

Method Healthcare Professionals (HCPs) in national and international sites and parent/caregiver networks were identified using a stakeholder map. An electronic-survey (e-survey) was developed by a multi-disciplinary study management group including HCPs and expert parents. This was circulated to HCPs involved in the care of neonates and parents/carers whose babies had recently been discharged from hospital. A small number of participants from five hospital sites will be invited to take part in focus groups. Current medication issues will be identified, and resources will be co-designed with parents/carers to support caregivers with medicines administration.

Results To date 27 parents/carers have responded to the e-survey. 70% of the parent/carer group reported having 'very little' or 'no experience' giving medicines prior to their hospital stay. 48% reported administering between four and six medicines at home. Parents/carers were asked a question about how confident they felt administering medicines at home; on a scale of 1 to 5 with 5 being 'very confident' and 1 being not 'confident at all'. The average level of confidence reported was 3.6; with 20% selecting 'not confident at all'. 44% received information about their baby's medicines from the hospital prior to discharge. This information was most frequently given face to face individually with written information being the second most common method. 48% or parents/carers reported finding some resources themselves. Parents/carers were asked about challenges they experienced, and responses included: supply issues, running out of medication or syringes, difficult to find the time to administer, forgetting to take medicines out, storage issues and reluctance to leave house. They were also asked about the timing of the information given and when was most appropriate with 'throughout the hospital stay' being the most popular (49%).

To date 38 HCPs have responded to the e-survey, 81% were from Pharmacists. Nurses and Advanced Neonatal Nurse Practitioners accounting for the remainder, there were no responses from doctors at present. 58% of HCPs stated that resources or information to support parents/carers were used at their hospital. The most popular method being face to face information given individually and written information. 66% reported using the resources prior to discharge and 24% throughout the inpatient stay. 86% thought the resources were helpful. 64% felt they could be improved. When HCPs were

asked about the problems the most common response being supply of medicines or administration difficulties. 79% reported that parents/carers at their hospital were given the opportunity to administer medicines whilst their baby was an inpatient.

Conclusion Preliminary results show there is room for improvement with the information and support provided to parents/carers. The timing that the information is provided is key with 'throughout the hospital stay' being the most popular parent/carer response however, only 24% of HCPs reported information being given throughout the hospital stay. Both groups identified some of the same challenges.

P01 REDUCING INTERRUPTIONS DURING ADMINISTRATION OF MEDICINES TO CHILDREN

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Aim Many studies have identified that interruptions occur frequently during administration of medicines and may cause errors.[1–3] Bundles of interventions aimed at reducing interruptions have been investigated in adults.[4] This study aimed to determine whether a 'Do not interrupt' bundle of interventions on paediatric wards, would reduce the number of interruptions to medicines administration and whether this would reduce the number of administration errors reported.

Method Six paediatric wards in a specialist children's hospital was included in the study. Three were designated as 'control' wards and 3 as 'intervention wards'. Baseline observations were undertaken on all 6 wards prior to the introduction of a 'Do not interrupt' bundle on the intervention wards. Four weeks later observations were repeated on all 6 wards. Electronic surveys were circulated to staff before and after the introduction of the bundle.

The 'Do not interrupt' bundle consisted of staff education; information for parents/patients; red aprons; banners; posters and 'Distraction free zone' floor stickers.

Results Red aprons were worn during 82% episodes of medicines administration on the intervention wards compared with 43% on the control wards. 92% of medicines were prepared in a designated 'distraction free zone' on the intervention wards.

There was at least 1 interruption during medicines administration for 69% of patients. The number of interruptions per 100 patient episodes reduced from 157 to 135 (14%) on the intervention wards compared to an increase from 191 to 218 (14%) on the control wards. Nurses were most often observed to be responsible for causing interruptions (48%) compared with other staff, parents/patients, buzzers etc. The most common types of preventable interruptions on all wards were social conversation and missing equipment or keys. Use of 'distraction free zones' did not prevent interruptions.

Reported administration error incidents increased from 2 to 7 per month (350%) on the intervention wards and from 4 to 15 (375%) on the control wards. This increase corresponded with an increase in activity and winter pressures across the hospital.

15% of nurses responded to the electronic survey. 76% thought the bundle did not make a difference, however 85% wanted the interventions to continue. Nurses disagreed with the finding that they were the most common cause of interruptions.

Conclusion Use of red aprons increased following introduction of the bundle indicating it did have some effect. Overall, interruptions occurred more frequently than expected. Interruptions appear to have reduced on the intervention wards although this wasn't significant. Nurses were the most common cause of interruptions although they thought other staff and parents were. Many interruptions happened when medications were prepared near the nursing station, despite these being 'distraction free zones'. The bundle does not appear to have influenced the number of administration errors reported.

The 'Do not interrupt' bundle requires revision prior to trust-wide roll out. This will include provision of more education for staff, especially nurses, regarding interruptions; a focus on the awareness of preventable interruptions and strategies to avoid preparation of medicines at nursing stations.

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P02 USE OF INTRATHECAL FLUORESCEIN TO IDENTIFY CEREBROSPINAL FLUID (CSF) RHINORRHEA IN PAEDIATRICS: A CASE REPORT AND LITERATURE REVIEW

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Early identification of CSF rhinorrhoea can reduce the risk of meningitis and potentially decrease the length of hospital stay. To determine the exact site of leak, intrathecal fluorescein (IF) is frequently used as a diagnostic tool adjunct to repair surgery in rhinorrhea. Although this is generally considered safe, there is a slight risk of seizures, radicular symptoms such as numbness and transient paraparesis.[1]

Miss. AB, a 20 month old child weighing 11.6kg with history of traumatic subdural collections was admitted with episodes of absence seizures, ataxia and unresponsiveness. Initial investigations involved an electroencephalogram which reported a normal background rhythm. A follow up MRI scan reported no definite site of abnormal CSF leak to confirm the working diagnosis. Hence, IF was proposed as a diagnostic tool to identify the location of a possible leak. The pharmacist conducted a therapeutic review with the aim of appraising existing evidence for the use of IF in paediatrics.

A total of 12 articles were identified using Medline and Embase. 5 case series and 1 case report were selected for further review to determine the safety profile, optimal dose and appropriate formulation for the diagnostic procedure. Studies showed at lower concentrations, with doses ranging from 25-100mg the rate of minor complications such as