G310(P) AUDIT OF DISCHARGE LETTER DIAGNOSIS AND ITS EFFECT ON CLINICAL CODINGS Liew, S Bandi. *Paediatrics, Leicester Royal Infirmary, Leicester, UK*

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Introduction Discharge diagnoses can have significant implications on patient management from a clinical governance point of view. It can further impact the clinical coding with a risk of potential financial loss to the service provider. Accurate clinical coding also contributes to appropriate data collection and analysis in audit and research.

Aims To look at the accuracy of discharge letter primary diagnosis and co-morbidities

To look at the relation between clinical coding and potential financial loss

Methods We did a retrospective review of 50 discharge letters randomly selected from the paediatric wards in August 2014.

An excel spread sheet was used to collect the data which included: date of admission and discharge, discharge diagnosis and any co-morbidity. The accuracy of the diagnosis was ascertained by looking through the patient notes and cross-checking them with clinical coders and against the ICD-10 manual.

Results 13 out of 50 discharge letters (26%) had inaccurate diagnosis.

6 out of 50 case notes (12%) had co-morbidities that were not included on discharge letters.

We looked thorough seven case notes' discharge diagnosis (7/13) in detail and compared the financial tariff between the accurate diagnosis and the one written on the discharge letter. We estimated an income loss of **£1,359**.

Discussion Coding accuracy on average is high in the United Kingdom, especially for operations and procedures.¹

Inaccurate coding can have significant financial implications.² There is a need to raise the awareness of the importance of accurate clinical coding for all clinicians.

Conclusion

1. Our audit demonstrated that inaccurate diagnosis can have significant financial implications
2. A Do's and Don'ts table was designed and circulated to all the clinical staff (see Figure 1)
3. We aim to raise the awareness of clinical coding during junior doctors induction and aim to re-audit in 6 months' time.

Discharge letter – Clinical Coding**WORDS TO USE**

- ✓ **Diagnosis/ working diagnosis**
- ✓ **Clinically relevant**
- ✓ **Probable**
- ✓ **Treated As**
- ✓ **Presumed**

DO NOT USE

- * **?**
- * **Differentials**
- * **Likely/Most likely**
- * **Possible**
- * **Investigated As**
- * **Impression**
- * **Maybe/ Felt to be**
- * **Suspected**

Abstract G310(P) Figure 1

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G311(P) AUDIT OF SPINAL ULTRASOUND (SU) FOR NEONATAL SACRAL DIMPLES

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Background Isolated sacral dimples are common and it is increasingly recognised that most are not linked to spinal dysraphism. Based on their features they can be classified into low risk and high risk. The Royal college of Radiologists guidance states that the high risk dimples (large, base not visible, >25 mm from anus or >5mm from midline or associated with additional stigmata of spinal dysraphism) should be investigated with SU.

Objective To determine whether hospital guidelines specific to sacral dimples are being followed and to ascertain the yield of SU.

Method A cohort of neonates from the entire Trust who received a spinal ultrasound scan due to the presence of a sacral dimple between 2007–2011 were included. Information was gathered from clinical letters, referral forms, and the presence or absence of a spinal abnormality was assessed by evaluating the ultrasound scan reports.

Results 94 neonates underwent SU for sacral dimple.

89 (95%) infants with sacral dimple underwent SU, 4 (4%) SUS with additional MRI scanning and 1 (1%) SUS with plain radiography.

63 (66%) of sacral dimples were described in the referral as high risk, 7(7%) as low risk and 24 (25%) sacral dimples had too little detail/description in their referrals to determine the risk.

Therefore, over the 3 year duration, only 7% of sacral dimples were low risk in nature so were ultra-sounded against hospital guidelines.

'Indeterminate dimples' had limited description on the radiology request form, assuming these were also low risk in nature, 31 (33%) sacral dimples were ultra-sounded against guidelines.

13% of high risk sacral dimples in this audit revealed a spinal abnormality upon imaging. No abnormality was detected in cases not classed as high risk. This is in line with other reports and supports the current practice of selective SU in newborns with high risk dimples.

Conclusion Trust guidelines are being followed, to some degree. 25% of ultra-sounded sacral dimples were not adequately described on referral. A significant number of SU are still done for low risk dimples and these can be safely avoided reducing cost and parental anxiety.

G312(P) SINGLE CENTRE, MULTI-LOCATION, INTERPROFESSIONAL REAL TIME OUTREACH SIMULATION

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Seriously ill children presenting to small district general hospitals face increased risk unless cared for by a team trained to recognise, stabilise and manage them prior to retrieval by a specialist transport team.¹ Simulation is a teaching technique that enhances the clinical skills of inter-professional teams, identifying learning needs whilst not exposing patients to harm.² A real time simulation was instigated as part of a quality improvement program. This unannounced single site, multi departmental, inter-professional simulation was designed and implemented to offer staff training opportunities to enhance their skills when faced with acute life threatening illness in the paediatric patient. Support was received from stakeholders and the regional simulation team.

Method The simulation followed the real life patient journey of a child with serious illness; from arrival in the resuscitation room of the Emergency Department, transfer to the acute paediatric ward for further stabilisation before being moved to the operating department recovery area, for intubation and ventilation. Staff from all areas participated in this simulated real life event caring for the high fidelity wireless simulated patient, who was accompanied by actor parents to add authenticity to the situation. Contingency plans were established to manage any emergency during simulation.

Results The simulation exercise was fully observed by stakeholders from all departments. Immediate verbal feedback was provided to departments after transition of the patient to the next care team. This process identified latent risks and raised human factors awareness and an action plan was produced. Many of the recommendations were implemented the same day to address key areas of patient safety and clinical care.

Conclusion This simulated patient journey demonstrated the feasibility and value of real time outreach training in small district general hospitals helping to improve availability of safe healthcare irrespective of location. It helped strengthen multidisciplinary working relationships and improve patient safety.

Stakeholder feedback was positive and has identified a strong desire for further simulated training opportunities.

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G313(P) IMPACT OF MATERNAL AND FETAL INFLAMMATORY MARKERS ON NEONATAL AND INFANT ADIPOSITY

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Aims To determine the association of maternal and fetal inflammatory factors with neonatal and infant adiposity

Methods Data from 265 mother-child pairs at birth and 280 pairs at 6 months postnatal from a randomised control trial assessing the effect of a low glycaemic index diet on birth weight were analysed. Maternal TNF-alpha (TNFα) and Interleukin 6 (IL-6) were measured in early and late pregnancy and fetal levels from cord blood. Anthropometric measurements were recorded at birth and at 6 months. The sum of all skinfolds and the sum of Subscapular plus Triceps skinfolds [SS+TR] were used as markers of general adiposity and the ratio of SS/TR skinfolds as a marker of central adiposity.

Results Maternal TNFα in early pregnancy was associated with neonatal anthropometry including biceps [p = 0.048], triceps [p = 0.027] and subscapular [p = 0.002] skinfold thicknesses. TNFα in early and late pregnancy correlated with general

Variable			Early Pregnancy TNFα	Late Pregnancy TNFα	Fetal TNFα
Neonatal Anthropometry					
Subscapular Skinfolds		Coefficient of Determination(R ² adj)	0.051	0.053	0.004
		p-Value	0.002**	0.002**	0.229
Triceps Skinfolds		Coefficient of Determination(R ² adj)	0.024	0.011	-0.005
		p-Value	0.027*	0.103	0.517
Biceps Skinfolds		Coefficient of Determination(R ² adj)	0.018	0.017	-0.001
		p-Value	0.048*	0.055	0.360
Sum of Skinfolds		Coefficient of Determination(R ² adj)	0.034	0.028	-0.001
		p-Value	0.011*	0.020*	0.336
SS+TR		Coefficient of Determination(R ² adj)	0.049	0.038	0.001
		p-Value	0.003**	0.008**	0.291

Abstract G313(P) Figure 1 Association of maternal and fetal TNF-α with infant adiposity at birth Simple linear regression