Clinical Engagement in Clinical Coding: Connecting Worlds

Alison Unsworth  Divisional Clinical Coding Lead (Medicine)/Deputy Clinical Coding Manager

Dr Martin Farrier  Associate Medical Director/Consultant Paediatrician
Hospital Standardised Mortality Rate

Blame the Data?
Blame the Coders?

Audit Results:
‘The Coding is Commendable’
Understanding Mortality Measures

- HSMR – Dr Foster intelligence
- SHMI - HSCIC
- RAMI – CHKS
- Crude Mortality
### HSMR v SHMI Main Differences

<table>
<thead>
<tr>
<th>Risk Adjustment</th>
<th>HSMR</th>
<th>SHMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis Groups</td>
<td>56 Diagnosis Groups</td>
<td>All Diagnosis Groups</td>
</tr>
<tr>
<td>Risk Adjustment Factors</td>
<td>12</td>
<td>6</td>
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<tr>
<td>Sub Diagnosis Group</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Palliative Care</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Socio Economic Deprivation</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>30 day post discharge deaths</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Death attribution</td>
<td>Across Superspell</td>
<td>Place of last Spell</td>
</tr>
<tr>
<td>Publications</td>
<td>Monthly</td>
<td>Quarterly</td>
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</tbody>
</table>
National Clinical Coding Audit – Audit Commission

Diagnosis Error Rate

- 2007/08
- 2008/09
- 2009/10
- 2010/11*
- 2011/12

* No audit

Trust Diagnosis Error Rate
National Average

your hospitals, your health, our priority
Coding isn’t an island

Troponin +ve ACS

Myocardial Infarction

Acute Ischaemic Heart Disease

your hospitals, your health, our priority
How we changed the way we worked

- No awareness sessions
- Very little contact with divisional staff
- Minimal contact with wards
- Minimal clinical engagement
- Minimal contact with other departments
- Working alone

- Divisional Clinical Coding Leads
- Junior Doctors induction
- Regular meetings with multiple teams
- Attending Audits – involvement in audits
- Established routines
- Extensive clinical engagement
- Working together
- Comm Cell Visitors
Lost in Translation?

Can Code
- Treat As
- Probable
- Δ
- Definitive Diagnosis
- Presumed

Can’t code
- Possible
- Query
- ?
- Impression
- Likely
- ΔΔ
highly **Likely** patient has had a stroke, relatives informed, patient put on care of dying pathway
highly **Probable**
patient has had a stroke, relatives informed, patient put on care of dying pathway
Uses of Clinical Coded Data

- Clinical Governance
- Cost analysis
- Commissioning
- Epidemiological studies
- Aetiology studies
- Clinical Indicators
- Treatment effectiveness
- Outcome measurement
- Clinical audit
- Health trends
- Financial flows
- Casemix planning
It's a Fan!

It's a Wall!

It's a Spear!

It's a Tree!

It's a Rope!
Getting it Right!

- Planning
- HSMR
- PbR
- Clinical Audit
- CQUIN
- Freedom of Information
- CCG reporting
- AquA Advancing Quality
Probable Stroke
AA22B
£2886

Likely stroke
WA18Y
£685

Probable Stroke with Dementia
AA22A
£3875

Likely stroke with Dementia
WA18V
£2994

Payment By Results
£2201
£881
2015/2016 Tariffs

Probable Stroke
AA22B
£2886 (£2177)

Likely stroke
WA18Y
£685 (£701)

Probable Stroke
with Dementia
AA22A
£3875 (£3708)

Likely stroke with
Dementia
WA18V
£2994 (£3046)
<table>
<thead>
<tr>
<th>Condition No.</th>
<th>Condition Name</th>
<th>New Coding</th>
<th>New Weight</th>
<th>Old Weight</th>
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<tbody>
<tr>
<td>1</td>
<td>Acute myocardial infarction</td>
<td>I21, I22, I23, I252, I258</td>
<td>5</td>
<td>1</td>
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<tr>
<td>2</td>
<td>Cerebral vascular accident</td>
<td>G450, G451, G452, G454, G458, G459, G46, I60-I69</td>
<td>11</td>
<td>1</td>
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<td>3</td>
<td>Congestive heart failure</td>
<td>I50</td>
<td>13</td>
<td>1</td>
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<td>4</td>
<td>Connective tissue disorder</td>
<td>M05, M060, M063, M069, M32, M332, M34, M353</td>
<td>4</td>
<td>1</td>
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<tr>
<td>5</td>
<td>Dementia</td>
<td>F00, F01, F02, F03, F051</td>
<td>14</td>
<td>1</td>
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<td>7</td>
<td>Liver disease</td>
<td>K702, K703, K717, K73, K74</td>
<td>8</td>
<td>1</td>
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<td>8</td>
<td>Peptic ulcer</td>
<td>K25, K26, K27, K28</td>
<td>9</td>
<td>1</td>
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<td>9</td>
<td>Peripheral vascular disease</td>
<td>I71, I739, I790, R02, Z958, Z959</td>
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<td>1</td>
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<td>Pulmonary disease</td>
<td>J40-J47, J60-J67</td>
<td>4</td>
<td>1</td>
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<tr>
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<td>Cancer</td>
<td>C00-C76, C80-C97</td>
<td>8</td>
<td>2</td>
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<tr>
<td>13</td>
<td>Paraplegia</td>
<td>G041, G81, G820, G821, G822</td>
<td>1</td>
<td>2</td>
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<td>14</td>
<td>Renal disease</td>
<td>I12, I13, N01, N03, N052-N056, N072-N074, N18, N19, N25</td>
<td>10</td>
<td>2</td>
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<td>15</td>
<td>Metastatic cancer</td>
<td>C77, C78, C79</td>
<td>14</td>
<td>3</td>
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<td>16</td>
<td>Severe liver disease</td>
<td>K721, K729, K766, K767</td>
<td>18</td>
<td>3</td>
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<td>17</td>
<td>HIV</td>
<td>B20, B21, B22, B23, B24</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>
Patient admitted with weakness

Treat as probable stroke

CT - NAD

Weakness resolved - discharge home

Impression: TIA

F/up in TIA clinic tomorrow
NHS Mandated Primary Diagnosis Definition:
The main condition treated or investigated during the relevant episode of health care. In the absence of a definitive diagnosis, the main signs, symptoms or abnormal findings should be recorded.
Clinical Coding Query

<table>
<thead>
<tr>
<th>Date</th>
<th>23.10.15</th>
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<tbody>
<tr>
<td>Patient ID</td>
<td>Block</td>
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<tr>
<td>Date admitted</td>
<td>Block</td>
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<tr>
<td>Date discharged</td>
<td>Block</td>
</tr>
<tr>
<td>Consultant</td>
<td>Block</td>
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</tbody>
</table>

Clinician Reviewing Case notes:

Coder: [Redacted]

Details of Query:

Does the patient have gastritis it doesn’t appear to be mentioned in the notes but is documented in a secondary diagnosis on the EPR letter secondary to NSAIDs. However in the notes it is written ‘likely UGIB secondary to NSAIDs not gastritis. Is this a typo? And am I right in coding the K92.2 with the adverse effect code for the NSAID or should I have just coded the UGIB?

Thanks
End of Life Care Plan

Box 1
ITU

Box 2
ITU/Care of Dying Pathway/End of Life Care Plan

Box 3
Care of Dying Pathway/End of Life Care Plan

Box 4
Non Care of Dying pathway/End of life Care Plan/Non ICU
"Box 4 deaths are the deaths that were not on ITU and not on Care of the Dying pathway"

No patient included in this audit has a problem with care that we consider to be the cause of death.

Total deaths 26
- 4 deaths in ITU
- 12 deaths on IPOC (individualised plan of care for dying)
- 10 Box 4 deaths

**Box 4 deaths**
- Medicine deaths 10
- Surgery deaths 0
- MSK 0

Charts with no major drug omissions 4/4

Patients on Correct ward 7/7

Thromboprophylaxis given 7/7

Seen within 24 hours by a Senior Doctor 7/7

Post take checklist completed 3/4

Ward round checklist completed 0/3

Sepsis Six 3/4

Acute Kidney Injury 0/0

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**Classification of deaths in Box 4**
- Deaths shortly after admission (admitted to die) 0/10
- Deaths where care of dying would have been appropriate / death predicted 7/10
- Deaths where death was not predicted / easily predictable 3/10
“Openness. Honesty. Transparency”

Sir Robert Francis 2013
Our Deaths Coding Process

1. Deaths Coding Team – Morbidity not mortality coding
2. Primary Diagnosis – Main Condition Treated or Investigated
3. Deaths audit
4. Death Coding proforma
5. Notes taken to consultant secretary
Thinking Ahead...

Earlier in the year we were asked to produce a list of the greatest patient safety risks in the Trust at this time. After some deliberation the list we produced (in order of risk was:

1. Aspiration Pneumonia
2. GI Haemorrhage
3. Intestinal Obstruction
4. High Risk Medications (Opioide, Warfarin, Midazolam etc)
5. Patients NIM / NNT
6. Drug Omissions
7. Rare but dangerous medications (Methotrexate etc)
8. Hospital Overload (like last March)
9. Patients in the wrong place for their primary condition (like being isolated with heart failure)
10. Exclusion of deteriorating Patients
11. Patient Identification (Where have you even picked up the wrong set of notes?)

We know that there are other risks, but these have either been the focus of a lot of activity (like sepsis) or not amenable to action (weekend cover).

Good outcomes. Good Teams

This is our 6th year, and our experience of patterns throughout the organisation is growing. We wanted to share our reflections of the year passed, and thoughts about the year ahead.

New Year... that moment when we should look back and consider how good our year was and, and what we should do in the year ahead of us.

In order to help you make your plans and objectives, we have summarised the outcomes from last years audits.

These were: Team performed better than even, mortality data was good, our own accounts, including quality awards awards.

And there are things we could do better.

Our key for this New Year are:

- Dedicated Medications - aussies GC / HR
- CIPPS Pharmacy
- GP Medication
- CIPPPS Pharmacy - because you should be informed promptly about any changes and where we can improve
- Out of hours - some little old ladies can get 1 trust, GPs can get 1 trust.

- It's a nice thing, important and we aren't there yet.

Martin Farrier
Clinical Director for Quality and Safety
Alison Unsworth
Senior Cadet
Quality Champions

- Improvement Projects
- Opportunity to work with others

200 champions

- 3 Day Course
- Bronze
- Silver
- Gold

Generate Quality Improvement
Quality Champions

Team:
- Respiratory Physician
- Palliative Care Nurse
- Clinical Coder

Goal:
Reduce number of people who develop aspiration pneumonia in hospital

Our Strategy
- Engage
- Empower
- Measure
- Reduce Harm

Care Bundle
- Avoid Sedatives
- Early S.A.L.T
- Oral Hygiene
- Avoid nursing Supine

Pilot ward - patients coded with Aspiration Pneumonia (J690) May to December

Discharged 2013:
- 53%
- Died 47%

Discharged 2014:
- 68%
- Died 32%
- Efficiency of Bone Bank Service
- Customer Care focus in Estates
- Frenulotomy Clinic for Babies
- Breast Feeding of Premature Babies
- 12–16 yr olds in A&E Safeguarding
- Moving & Handling Induction
- Immobile Patients with possible DVT
- Dehydration in Nursing Homes
- Ambulatory Assessment Discharge
- Reducing Falls in Hospital
- Training in Dysphagia Screening
- Discharge of Vulnerable Adults
- Communication on Rainbow Ward
- Nutritional supplements in #NOF
- Speedy Transfer to Side Rooms
- Patient Weights
- Harm From Urinary Catheters
- Improving Appointment Letters
- Reducing Deaths from Sepsis
- Shared Decision Making in Maternity
- Preventing Readmissions (Urology)
- Improving Experience on Ward 5
- Infections in Newborn Babies
- Improving Patient Information in ENT
- Improving Experience in Audiology
- Improving Hourly Rounding
- Improving the Birth Environment
- Improving the Complaints Process
- Addressing Inpatient Stay for Stroke
- Preparation of Patient Bed Spaces
- Timely & Effective Discharge
- Prevention of Periop Hypothermia
- Improving Audiology Patient Pathway
- Reducing NBM Medication Omissions
- Improving Patient Worries & Concerns
- Sustaining the Safer Surgery Checklist
- Avoiding Readmissions in Oncology
- Harm From Post Operative Delirium
- Privacy & Dignity in Theatre
- Nurse Led Discharge in Surgery
- Preventing Falls
- Rapid Discharge at End of Life
- Improving Hydration
- Reducing LoS in #NOF
- Reducing Medication Omissions
- Reducing Pressure Ulcers
Ortho-geriatrician
Increased Awareness
Exec buy-in
Monthly MDT meeting
Feedback
Changes to pathway
A-Z guidelines on preoptimisation

Fracture Neck of Femur

% of Deaths from Fracture Neck of Femur

15/16 April to July
Still divided opinion over HSMR
Finding Loopholes

These codes will attribute a higher HSMR

Pneumonia – J189
End of Live Care Plan -Z518
Alzheimer's Disease - G309

These codes will attribute a lower HSMR

Bronchopneumonia – J180
Palliative Care – Z515
Alzheimer's Dementia - G309/F009

Lower Risk - high HSMR

Higher Risk – low HSMR
Now: Observed Deaths – All Diagnosis

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“The true value of having close working relationships with clinical coders cannot be underestimated; their detailed understanding of the services provided by the Division combined with their specialist knowledge reaps huge benefits for both finance, data quality and outcomes”
Rebecca Lyon
Deputy Director of Operations & Performance - Medical Division

“Coders are one of the most underestimated resources in a hospital. They are dependable and are anchored in the rules of ICD10. They know exactly how the hospital systems work. They can read the illegible, and identify the unknown. They can find the lost. They speak “medicine”, and make pacman-like IT systems sing”

But the very best thing about coders is that they understand data because they create it.”
Dr Martin Farrier
Associate Medical Director

“Working with Clinical Coding has really helped make an impact in improving our stroke patient experience and pathway. Alison’s input and support has been invaluable, without it we could not have achieved what we have in improved Stroke performance. Engagement with Clinical Coding has been essential in allowing us to articulate where service improvement is required and helped us target our efforts.”
Wendy Tasker
Advanced Practitioner/Lead Stroke /TIA Team
Why do we need accurate data? Measure Care

Monitor Care

Improve Outcomes
MORE THAN CODING
Stroke

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**Admission to stroke unit within 4 hours**

**Full measure description:** Admission to stroke unit within four hours of hospital arrival

**What does this mean?** All patients with a suspected stroke should be admitted directly to a specialist stroke unit following either from the community or from an A&E department.

**Why is it important?** A stroke unit is a discrete area in the hospital that is staffed by a specialist stroke multidisciplinary team responsible for the treatment of stroke patients. Treatment in a stroke unit reduces deaths and increases the number of independent and non-institutional stroke survivors (NICE CI 63).

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**Brain scan within 24 hours of arriving at hospital**

**Full measure description:** Brain scan within 24 hours of arrival

**What does this mean?** If the doctor decides that you need a brain scan following your arrival at hospital, we measure the time from your admission until the scan is performed.

**Why is it important?** A stroke causes damage to the brain, so a scan is used to build a clinical picture of the patient’s condition and whether they should be treated with clot-busting medication.

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**Aspirin within 24 hours of arriving at hospital**

**Full measure description:** Aspirin within 24 hours of arriving at hospital

**What does this mean?** To ensure you are given aspirin as soon as possible by doctors and nurses or ambulance staff.

**Why is it important?** Aspirin is routinely given to all patients who the doctors and nurse think have had a stroke as it is proven to be effective in preventing blood from clotting. It does this by reducing the ‘stickiness’ of platelets, i.e. the small blood cells that clump together to form a clot.
Thank you
End of Presentation

Not the end of our Journey........