Identifying cases

The Trauma Audit & Research Network (TARN)

Foundation session
Identifying cases:
2 case studies
System 1: Retrospective Data capture

Employed by St. Peter’s Hospital - Chertsey

Trauma Unit

South West London and Surrey Major Trauma Network
TARN data coordinators are based in ED

Good communication with Trauma Consultant, ED nurses and the network’s TARN coordinator based at the MTC
• Notified about transfers out
• Clinicians notify the TARN coordinators of patients they have seen on wards

ED reception has a TARN folder
• CAS card for trauma patients
• Coordinators check for eligibility – can identify some cases live

Also use ICD10 coding to identify patients and the unmatched transfers report (more later)
Clinical (ICD10) codes

- Clinical coding departments use a coding system called ICD10
- ICD10: International Classification of Diseases
- ICD10 codes document: Admission reason (Injury, Medical, Elective, Complication)
- ICD10 codes that begin with S or T indicate injury e.g.
  - S82.2: fracture to shaft of tibia
  - S82.21: open shaft of tibia
  - S82.20: closed shaft of tibia
  - T055: Traumatic amputation of both legs
System 1: Retrospective Data capture

Clinical (ICD10) codes

- Trust IT dept. can use a TARN SQL script to generate weekly spreadsheet showing:
  - Patients discharged previous week with any relevant S or T ICD10 code
  - Filtering out:
    - <3 days stay, discharge destination = home
    - 65+ isolated NOF
    - 65+ isolated pubic rami fracture
    - Minor injuries
- Full list of all relevant ICD10 codes: [www.tarn.ac.uk/resources](http://www.tarn.ac.uk/resources)
- Spreadsheet categorises TARN Inclusion
- Result: List of potential TARN patients
- Check imaging reports to ensure inclusion
Example ICD10 spreadsheet

- Patients potentially have multiple ICD10 (Diagnosis) codes
- Ensure you reviews the first 5 diagnosis codes
- Reviewing Primary Diagnosis code only – will definitely result in missed cases
System 1: Retrospective Data capture

**Clinical (ICD10) codes:** Advantages

- Captures patients who bypass ED (transfers in, GP admissions)
- TARN can liaise with IT to help set this up: Off the shelf SQL script
- Limited staff resource required
- Used by most Trauma Units who employ Retrospective data capture
- Used as backup to “live” data capture by most Major Trauma Centres
Only admitted patients are assigned an ICD10 code

- Transfers out from ED - *Use ‘Unmatched Transfers’ report*
- Deaths in ED

Separate system required to capture these

- Accuracy of Trust ICD10 coding
- Use of NOS (not otherwise specified) codes can increase potential cases
- Cases admitted for Rehabilitation only – not easily identified
- Delay between discharge and clinical coding
System 2: Live Data capture

Employed by Nottingham University Hospital

Major Trauma Centre
East Midlands Major Trauma Network
System 2: Live Data capture
Employed by Nottingham University Hospital Major Trauma Centre

- Pre-alert booklet completed and scanned in; coordinators have access to EMAS online system

- Audit lead and TARN database manager produce daily reports which filter out relevant patients

- TARN team is based in the major trauma department; are notified by MT fellows re eligible patients

- Attend morning case discussion meetings and follow up with physios and ICU staff re any trauma patients they have seen

- Clinical Frailty query to pick up patients who bypass ED
  - Elderly patients admitted directly to wards
When eligible cases identified:

- Early care data collected by data coordinators whilst still inpatient.

- Later care data (Operation, ICU, Imaging, Ward, Discharge data) taken from online systems; using daily discharge spreadsheet and in-house pro formas.
System 2: Live Data capture: Advantages

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✓ Can achieve high level of case ascertainment and meet MTC discharge deadline, as cases are dispatched soon after discharge

✓ Improved communication with clinicians in relevant departments helps identify cases

✓ Case notes only required for “missed” cases identified post discharge.

✓ Major Trauma Co-ordinators involved very early on and band 2 physio helps chase any missing data

✓ Easily identify transfers as coordinators are split between the MTC and TUs within the network

✓ Best practise sharing with coordinators from other networks and MTCs (Addenbrookes and UHCW)
System 2: Live Data capture: Disadvantages

Employed by Royal Stoke University Hospital Major Trauma Centre

- Greater staff resource required
  - 2 full time MTC coordinators, others are split between MTC and TUs
  - Complex system requiring a high level of training
  - Maintaining communication within the hospital

- Post discharge ICD10 report required to capture “missed” patients.

- Deaths data: not easily available from coroners, however major trauma fellows can notify coordinators of deaths on the ward
Key points

- Communication between departments is key
  - Awareness of TARN
  - Access to the relevant systems

- Hospitals and networks can share ideas
  - Can be circulated in TARN newsletter, contact support@tarn.ac.uk
Collecting the data

- Retrospective Data Entry: Post discharge
- Enter data directly from notes or use Pro-forma
- CORE PROFORMA IN RESOURCES SECTION OF WEBSITE
- DO NOT have to start and finish a submission in one session