Clinical Audit and Research in the LAS

Gurkamal Virdi
Assistant Head of Clinical Audit and Research
Clinical Audit and Research Unit (CARU)
Clinical & Quality Directorate
Structure of CARU

Head of Clinical Audit & Research

Assistant Head of Clinical Audit & Research

Clinical Audit Manager

Clinical Audit Staff (3)

Clinical database staff (6)

Clinical Audit and Research Steering Group

Research Manager

Clinical Audit & Research Administrator

Research staff (3)
Clinical Audit Programme

- LAS supports an annual programme of work
- Range of topic areas:
  - Topics identified using a set of Audit Triggers
  - Prioritisation Tool is applied to select high impact topics
- Different types of audit allow for in-depth ongoing review to snapshot look at practice
- Led by CARU
- Frontline clinician involvement
- Where possible work with partners in wider NHS
Examples of recent projects

- Paediatric pain management re-audit
- Paediatric respiratory assessment
- Obstetric emergencies
- Transient Loss of Consciousness (T-LOC)
- Adrenaline re-audit
- SUDICA
- Mental Health
- Overdose
Clinical Performance Indicators

Evidence Based:
- Cardiac Arrest
- Acute Coronary Syndrome (including heart attack)
- Difficulty In Breathing (asthma & COPD)
- Glycaemic Emergencies
- Stroke
- Mental Health (new)

Non-conveyed:
Clinical risk

1 in 40: General Documentation
Clinical Performance Indicators: influencing clinical practice

Level of care provided

"1/40"
Cardiac arrest
ACS
DIB
Glycaemic emergencies
Non-conveyed
Stroke
Mental health

Year
Apr-06 Apr-07 Apr-08 Apr-09 Apr-10 Apr-11 Apr-12 Apr-13
Measuring Ambulance Services nationally ...
Ambulance Quality Indicators

Cardiac Arrest
- Return of Spontaneous Circulation
- Survival to discharge

STEMI
- Call to balloon within 150 mins
- Care bundle:
  - Aspirin
  - GTN
  - Pain assessments
  - Analgesia

Stroke
- Call to HASU within 60 mins
- Care bundle:
  - FAST
  - BP
  - Blood sugar
Cardiac arrest survival rates 2012-13
Ambulance Quality Indicators

Cardiac Arrest
- Return of Spontaneous Circulation
- Survival to discharge

STEMI
- Call to balloon within 150 mins
- Care bundle:
  - Aspirin
  - GTN
  - Pain assessments
  - Analgesia
- 94% vs 90%
- 78% vs 79%

Stroke
- Call to HASU within 60 mins
- Care bundle:
  - FAST
  - BP
  - Blood sugar
- 67% vs 65%
- 95% vs 96%
Ambulance Service Cardiovascular Quality Initiative in the London Ambulance Service

Background:
The London Ambulance Service NHS Trust (LAS) participated in a national project in 2013 aimed to improve ‘clinical pathway’ for patients with chest pain. The Ambulance Service Cardiovascular Quality Initiative (ASCQI) was a project focused on improving patient care and outcomes for patients with chest pain, with the goal of reducing unnecessary hospital admissions. The project aimed to improve the speed and accuracy of diagnosis and treatment of patients with acute coronary syndromes (ACS), leading to a reduction in hospitalisation and improved patient outcomes.

Methodology:
The LAS undertook a retrospective analysis of patient data from 2013. The project team reviewed patient records and identified patterns of care. The objectives included improving the speed of diagnosis and treatment of patients with ACS, reducing the number of unnecessary hospital admissions, and improving patient outcomes.

Initial findings:
Initial findings showed that the project had led to an improvement in the speed and accuracy of diagnosis and treatment of patients with ACS. The project also led to a reduction in hospitalisation and improved patient outcomes.

Outcomes:
The project led to a significant reduction in hospitalisation and improved patient outcomes. The project also demonstrated the importance of collaborative working between different healthcare professionals and the benefits of implementing evidence-based practice.

ASCQI
London Ambulance Service NHS Trust
National CPIs

• Compare and benchmark LAS clinical performance with other Trusts in England

• Four areas:
  • hypoglycaemia
  • asthma
  • lower limb fracture (trauma)
  • febrile convulsions
Research Programme

- Programme is formed of internal, collaborative and externally led projects
- LAS is part of the North West Comprehensive Local Research Network (CLRN) and receives funding for research administration/management and governance
- Projects funded from range of sources, including:
  - Government bodies (e.g. National Institute of Health Research, Medical Research Council)
  - Charities
  - Industry
ISRAS Study Findings

HOT OFF THE PRESS
# FAST vs. ROSIER

<table>
<thead>
<tr>
<th></th>
<th>FAST</th>
<th>ROSIER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facial weakness</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Arm weakness</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Speech disturbance</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Leg weakness</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Visual field deficit</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Loss of consciousness/syncope*</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>Seizure activity*</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>

* These signs reduce the likelihood of a stroke
Paramedics from three Complexes conveying patients to the Royal London Hospital.

No difference in the proportion of strokes correctly identified by the ROSIER and FAST.

ROSIER correctly identified a marginally greater proportion of non-strokes than the FAST.

Absence of seizure activity predictive of stroke.

Next step to test modified FAST.
Ensuring Patient and Public Involvement (PPI) in research

• A Research specific PPI group is currently being established.
• Purpose of group will be to gain opinions on proposed research and advising on how we can ensure findings are widely disseminated
• Attend regular meetings (2 hours) and review documents providing comments as necessary
• First meeting next year...

Interested?

Send expressions of interest to Julia.Brown@lond-amb.nhs.uk
Any questions?

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