Stroke Services
Cheshire & Merseyside
Gap Analysis and Challenges in Service Provision
Cheshire & Merseyside Stroke Summit

- Summary of Stroke Services
- Identify gaps in service provision
- Identify and set standards for HASU care and ‘post 72 hours’ care
- Discuss next steps for service developments, collaboration and reconfiguration
University Hospital Aintree

29 bed Combined Stroke Unit with approx. 590 strokes p.a.

24/7 face to face Consultant delivered thrombolysis with 1 in 4 rota

24/7 Stroke Specialist Nurses

7/7 Stroke Specialist ward rounds

7/7 TIA Service

Capture Stroke data collection

Gap analysis:

Sustainable medical rota
7 day ESD service
Therapy staffing for 45mins/day
Increased speech therapy
MRI access weekday & weekend
Weekend carotid duplex
Data manager and improved data processes
Countess of Chester Hospital

28 bed combined Stroke Unit with approx. 450 strokes p.a.

24/7 thrombolysis. Telemedicine out of hours with 1 in 5 rota

7/7 Stroke Specialist ward rounds

7/7 TIA Service

Gap analysis:

7 day ESD service
Increased Stroke Specialist Nurse workforce
Weekend carotid duplex
No weekend therapy
Data collection/SSNAP entry
CCG KPIs
East Cheshire Hospital
(Macclesfield)

24 Bed Combined Stroke Unit, 300 strokes p.a.

Dedicated Consultant and Specialist Nurse

Pathways with other HASU’s for thrombolysis service

Gap analysis:

Increased Consultant workforce
Access to 24/7 thrombolysis service
7 day Stroke Specialist ward rounds
Increased Stroke Specialist Nurse workforce
TIA service
Rapid access to MRI
Weekend therapy services
ESD service
CCG KPIs
Mid Cheshire Hospitals (Leighton)

28 bed Combined Stroke Unit with approx 465 strokes p.a.

5/7 face to face Consultant delivered thrombolysis in hours

08.00 to 21.00 Stroke Specialist Nurses

Capture Stroke data collection planned

Gap analysis:

In hours thrombolysis on site but not out of hours
Stroke Specialist Nurses 24/7
Weekend Stroke Specialist ward rounds
Weekend TIA service
ESD Service – note: recently tendered
MRI access weekday & weekend
Weekend carotid duplex
No weekend therapy
Therapy staffing for 45mins/day
Neuropsychology service
CCG KPIs
## Royal Liverpool & Broadgreen University Hospital

<table>
<thead>
<tr>
<th>28 bed Acute Stroke Unit, 20 bed Stroke Rehabilitation Unit with 650-675 strokes p.a</th>
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</thead>
<tbody>
<tr>
<td>24/7 thrombolysis, telemedicine out of hours. 1 in 4 rota</td>
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<tr>
<td>24/7 Stroke Specialist Nurses</td>
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<tr>
<td>7/7 Stroke Specialist ward rounds</td>
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<tr>
<td>7/7 TIA Service</td>
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<tr>
<td>Capture Stroke data collection planned</td>
</tr>
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</table>

### Gap analysis:

- Sustainable medical rota
- Limited psychology service
- 7day ESD service
- Weekend carotid duplex
- Therapy staffing for 45mins/day
- CCG KPIs
Southport & Ormskirk Hospitals

28 bed Combined Stroke Unit with approx. 380 strokes p.a.

24/7 thrombolysis, telemedicine rota out of hours, 1 in 16 telemedicine rota as part of L&C network

Capture Stroke data collection planned

Gap analysis:

Increased Consultant workforce
24/7 Stroke Specialist Nurse cover
Weekend Stroke Specialist ward rounds
Weekend TIA service
MRI access weekday & weekend
Weekend carotid duplex
7 day therapy services
ESD Service
CCG KPIs
St Helens and Knowsley (Whiston)

16 bed Acute Stroke Unit and 23 Stroke Rehabilitation beds with approx. 650 strokes p.a.

24/7 face to face Consultant delivered thrombolysis, 1 in 8 rota shared with Warrington

24/7 Stroke Specialist Nurses

7/7 Stroke Specialist ward rounds

7/7 therapy input

Capture Stroke data collection planned

Gap analysis:

7 day ESD, pathways vary across three CCGs
Therapy staffing for 45mins/day
Weekend doppler access
Improved MRI access weekday & weekend
Weekend TIA service
Warrington & Halton Hospitals

24 bed Combined Stroke Unit with approx. 500 strokes p.a.

5/7 face to face Consultant delivered thrombolysis in hours, shared rota 1:8 with Whiston out of hours

7/7 Stroke Specialist ward rounds

8-4pm Stroke Nurse Specialist on week days

7/7 TIA Service

Capture Stroke data collection planned

Gap analysis:

Substantive Consultant appointments
In hours thrombolysis on site but not after 8pm or at weekends
Extended Stroke Nurse Specialist cover
Weekend therapy services
7 day ESD
Weekend MRI
CCG KPIs
Wirral University Teaching Hospitals (Arrowe Park)

| 28 bed Acute Stroke Unit, 20 bed Stroke Rehabilitation Unit with 630-650 strokes p.a. |
| 24/7 thrombolysis, face to face consultant delivered |
| 24/7 Stroke Specialist Nurses |
| 7/7 Stroke Specialist ward rounds |
| 7/7 TIA Service |
| 7 day therapy for HASU |
| Capture Stroke data collection in use |

Gap analysis:

ESD capacity needs increasing, partial 7 day cover
Weekend carotid duplex
Weekend therapy for patients on rehabilitation unit
Stroke Unit Nursing Workforce

• Difficult to compare staffing on different units with data provided
• Need to understand staffing for beds providing hyper-acute’ first 72 hours of care and then post 72 hours
• Published guidance from BASP (British Association of Stroke Physicians – June 2014):
  – ‘Level 2’ staffing for first 72 hours
  – 2.9 WTE nurses per bed
  – 80:20% trained to untrained staffing ratio
  – Currently no specification for staffing levels for post 72 hours
Stroke Unit Therapy Workforce

- Difficult to calculate WTE staffing in different units

- Access to 7 days services should apply to hyper-acute, rehabilitation phase and ESD services

- Published guidance from BASP (British Association of Stroke Physicians – June 2014):
  - 1 WTE Physiotherapist per 5 beds, service 7 days a week
  - 1 WTE Occupational Therapist per 5 beds, service 7 days a week
  - 1 WTE Speech & Language Therapist per 10 beds, service 7 days a week
## Gap analysis

<table>
<thead>
<tr>
<th></th>
<th>No. of strokes per year</th>
<th>24/7 thrombolysis service</th>
<th>Consultants working in stroke service (inputting into thrombolysis rota)</th>
<th>Specialist nursing workforce (WTE)</th>
<th>ESD service</th>
<th>7/7 therapy provision for ‘acute unit’</th>
<th>7/7 TIA service</th>
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Other Standards for Reconfiguration

- 600-1500 stroke admissions per year
- Maximum 45 minute travel time
- 6 consultants with stroke expertise on rota
- Daily consultant ward rounds
- 100% patients continuous physiological monitoring
- 95% of patients admitted directly to HASU from A&E
- Scanning standards (100% urgent patients scanned next slot and all within 24 hours)
- 50% appropriate patients thrombolysed within 30 mins; 90% within 45 mins of arrival
- Needs to be a financially viable service

Professor Tony Rudd – National Stroke Lead
Scanned within 1 hour

- Arrowe Park Hospital
- Countess of Chester Hospital
- Leighton Hospital
- Macclesfield District General Hospital
- Royal Liverpool University Hospital
- Southport and Fomby District General
- University Hospital Aintree
- Warrington Hospital
- Whiston Hospital

Source: SSNAP Oct-Dec 2013
Patient-centred results at team level for Key Indicator 1.1A

Cheshire and Mersey SCN
If eligible, first ward is SU, SU within 4 hours of clock start (including ITU/CCU/HDU, excluding already in hospital) SSNAP 2013
Direct to SU within 4 hours

- Arrowe Park Hospital
- Countess of Chester Hospital
- Leighton Hospital
- Macclesfield District General Hospital
- Royal Liverpool University Hospital
- Southport and Fomby District General
- University Hospital Aintree
- Warrington Hospital
- Whiston Hospital

Source: SSNAP Oct-Dec 2013
Patient-centred results at team level for Key Indicator 2.1A

Cheshire and Mersey SCN
Clock start to scan time

- Arrow Park Hospital
- Countess of Chester Hospital
- Leighton Hospital
- Macclesfield District General Hospital
- Royal Liverpool University Hospital
- Southport and Fomby District General
- University Hospital Aintree
- Warrington Hospital
- Whiston Hospital

Source: SSNAP Oct-Dec 2013
Patient-centred results at team level for Key Indicator 1.3A

Cheshire and Mersey SCN
Thrombolysis rate (RCP criteria)

- Arrowe Park Hospital
- Countess of Chester Hospital
- Leighton Hospital
- Macclesfield District General Hospital
- Royal Liverpool University Hospital
- Southport and Fomby District General
- University Hospital Aintree
- Warrington Hospital
- Whiston Hospital

Source: SSNAP Oct-Dec 2013
Patient-centred results at team level for Key Indicator 3.2A

Cheshire and Mersey SCN
Other Important Considerations

- 7 day therapy
- Therapy intensity
- Access to ESD and longer term rehabilitation
- Psychology services
- Vocational rehabilitation
Successful Stroke Services

• SSNAP doesn’t tell the whole story in terms of performance

• Other elements of a quality service than need to be taken into consideration

• Support of Acute Trusts and CCG’s in current financial climate

• Redesign of Stroke Services
  - not one size fits all
  - geography, population density, paramedic travel times
  - workforce, sustainability
  - innovation and technology