



**Stroke Care in the West Midlands: Clinical  
Review for the delivery of 7 Day Stroke  
Services**

## **Stroke Care in the West Midlands: Clinical Review Visits for 7 Day Services**

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## Contents

Contents .....	3
1 Executive Summary .....	5
2 Foreword.....	6
3 Summary Statement from Dr Indira Natarajan .....	7
4 Background.....	8
4.1 Status of Compliance.....	8
5 Introduction .....	10
5.1 Current Performance .....	10
5.2 Figure 1: HASU Map and Thrombectomy Centres in the West Midlands .....	13
5.3 Table 1: Patient Centred Performance table April-July 2017 .....	14
5.4 Table 2: Patient Centred Performance table August - November 2017 .....	15
5.5 Table 3: Patient Centred Performance table December 2017 – March 2018 .	16
6 Methodology .....	17
7 STP Findings .....	18
7.1 Birmingham and Solihull .....	18
7.1.1 Summary of good practice within stroke units.....	18
7.1.2 Summary of areas requiring improvement .....	20
7.1.3 Recommendations for the STP .....	22
7.2 The Black Country .....	22
7.2.1 Summary of good practice within stroke units.....	22
7.2.2 Summary of areas requiring improvement .....	25
7.2.3 Recommendations for the STP .....	27
7.3 Shropshire, Telford and Wrekin .....	27
7.3.1 Summary of good practice within stroke units.....	27
7.3.2 Summary of areas requiring improvement .....	29
7.3.3 Recommendations for the STP .....	31
7.4 Staffordshire and Stoke-on-Trent.....	32
7.4.1 Summary of good practice within stroke units.....	32
7.4.2 Summary of areas requiring improvement .....	34
7.4.3 Recommendations for the STP .....	35
7.5 Hereford and Worcester .....	35
7.5.1 Summary of good practice within stroke units.....	35
7.5.2 Summary of areas requiring improvement .....	37
7.5.3 Recommendations for the STP .....	39
7.6 Coventry and Warwickshire .....	40
7.6.1 Summary of good practice within stroke units.....	40
7.6.2 Summary of areas requiring improvement .....	42
7.6.3 Recommendations for the STP .....	44
8 Regional Findings .....	45
9 Regional Recommendations.....	45

10	Next Steps .....	46
11	Appendices .....	49
11.1	West Midlands Trusts compliance against Stroke 7DS standards .....	49
11.2	Governance Structure .....	51
11.3	Interview Template & Outline of Clinical Review Visits .....	52
11.4	Stroke STP Review Working Group: Terms of Reference .....	53
11.5	Thrombectomy Working Group: Terms of Reference .....	60
11.6	ESD & Rehabilitation Working Group Terms of Reference .....	65

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## 1 Executive Summary

This paper summarises:

1. Current stroke performance of hyper-acute stroke units (HASU) within the West Midlands
2. A summary of the clinical review visits of HASUs assessing compliance against 7 Day service standards for Acute Stroke care
3. The recommendations for improvement in stroke services across the West Midlands.

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## 2 Foreword

Stroke is one of the most significant causes of death and disability in the West Midlands. Our ability to prevent stroke and our ability to treat stroke has never been better. Our challenge is to implement a strategy to deliver prevention, treatment and rehabilitation at scale to the entire population of the West Midlands. Should we succeed in delivering this strategy, we will prevent thousands of strokes in the next decade.

For those unfortunate enough to suffer a stroke, we will provide prompt high quality treatment, including thrombectomy and thrombolysis, coupled to high quality rehabilitation, to reduce disability and maintain independent living.

I am pleased to have witnessed a great collaborative effort between all stakeholders to culminate in this stroke strategy for the west midlands and am highly optimistic that patients and populations will receive high quality stroke care as a consequence.



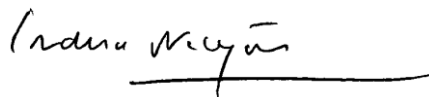
Professor Kiran Patel  
Medical Director  
West Midlands  
NHS England

### 3 Summary Statement from Dr Indira Natarajan

It was a great experience as Clinical Director for stroke services across the West Midlands to visit all the Hyper Acute Stroke Units and meet with all of the very committed teams in these units. The CVD Clinical Network was incredibly delighted to see how all the dedicated stroke teams are committed to delivering high quality care for our patients at such a vulnerable time in their lives.

The purpose of our visits is to support the teams to address issues to meet the high standards of care in all areas of stroke pathway and to deliver this 7 days a week. We have had the benefit of seeing different models of care being provided and highlighted strengths and weakness in each of the units and look forward to sharing this learning with our stroke colleagues.

We are working closely with each of the organisations trust executives to aid and support the stroke teams with the delivery of high standards of stroke care across the pathway, and look forward to building strong relationships with the teams into the future. A real learning point has been that a regional approach to solving some difficult issues gives us strength to stand together and address them with a unified collective approach.



Dr Indira Natarajan  
Clinical Director for Stroke  
West Midlands CVD Clinical Network  
NHS England

## 4 Background

Stroke is the fourth most common cause of death in the UK and the most common cause of disability. Whilst the reduced prevalence of smoking and high blood pressure has seen the incidence of strokes decline, in excess of 100,000 people in the UK suffer a stroke each year (State of the nation 2018). The West Midlands (Staffordshire, Shropshire, Coventry, Warwickshire, Birmingham, Black Country, Herefordshire and Worcestershire) has a higher than national prevalence of stroke at 1.8% against the national prevalence of 1.7% with the west midlands seeing around 12,000 strokes per year (SSNAP 2017-2018).

Together with the social care costs, the cost of all stroke care in the UK for those aged 45 years and over has been estimated at £26 billion a year; with overall costs of stroke rising to £43 billion in 2025 and £75 billion in 2035, an increase of 194% over 20 years (Stroke Association, State of the Nation, 2018). Based on average costings it is estimated that the total cost of all stroke care is £77 million in the West Midlands. Moreover, at the start of the last decade the quality of stroke care in England was found to be lagging behind other advanced economies. In recent decades clinical evidence has established that patients treated in specialist acute units have better outcomes. Morbidity and mortality rates could be substantially improved with rapid thrombolysis (the use of “clot busting” drugs), whilst specialist teams and integrated rehabilitation services enable better quality care and faster recover and the introduction of thrombectomy services will also greatly improve outcomes for patients

### 4.1 Status of Compliance

The NHS Operational Planning and Contracting Guidance for 2017-19 published in September 2016 clearly outlines our ambition that by November 2017, five urgent network specialist services, including hyper acute stroke services, will meet four priority standards for seven day services. These standards are:

- Standard 2: Time to consultant review
- Standard 5: Diagnostics
- Standard 6: Consultant directed interventions



- Standard 8: On-going review in high dependency areas.

An audit of compliance against the four priority standards for stroke services was undertaken during February 2018 in the West Midlands. The findings are summarised in appendix 1 Table 1 (p14).

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## 5 Introduction

Stroke patients require specialist multidisciplinary care and rehabilitation. A centralised model of acute stroke care, in which hyper-acute care is provided to all patients with stroke across an entire metropolitan area, can reduce mortality and length of stay. The Five year Forward View stated that by 2017, 25% of urgent and emergency services should comply with four priority clinical standards on every day of the week, rising to half by 2018 and complete coverage by 2020. It is evident that performance for stroke services against these standards in the West Midlands requires review to improve performance and hence outcomes for patients.

Following on from the action plan in the report 'Acute Stroke Care in the West Midlands: performance, 7 Day Services and Strategic Planning' published in October 2017, the West Midlands Cardiovascular (CVD) Clinical Network organised visits to all hyper-acute stroke units (HASUs) in the West Midlands.

The HASUs that were visited are detailed in figure 1.

### 5.1 Current Performance

The Sentinel Stroke National Audit Programme (SSNAP) is the single source of stroke data in England, Wales and Northern Ireland. Table 1 below demonstrates West Midlands HASUs current performance. The results in this table should be read in combination with the SSNAP Summary Report which includes named team results for the 44 key indicators which comprise the 10 domains. Full details, including access to this report and SSNAP data are available to download from the RCP website: [www.strokeaudit.org/results](http://www.strokeaudit.org/results).

In regards to the National expectation, teams are expected to achieve an A or B SSNAP grade, such scores are indicative of world-class stroke care and a good or excellent service in many aspects respectively. A SSNAP score of a C or less would suggest that some or several areas of care require improvement (SSNAP Public Report, 2017).

West Midlands SSNAP benchmarking data (table 1; page 14) shows that between April and July 2017, 2 out of 10 HASU centres were performing in the top 80% of

hospitals (rating A), 1 was performing between 70-79% (rating B), 5 are performing within 60-69% (rating C) and 2 hospitals are rated D.

From August and November 2017, 5 out of 10 Hospitals were rated B, 2 were performing at C and 3 were rated D (table 2; page 15). No hospitals were rated E.

This shows that **50% of West Midlands HASU stroke services were not meeting the required standards** and need improvements. SSNAP data between August and November 2017 highlighted the following particular areas where substantial improvements were required:

- 3 hospitals (Princess Royal Hospital Telford, Royal Stoke University Hospital and Hereford County Hospital) were rated as E in relation to speech and language therapy
- 3 hospitals (University Hospital Coventry, Worcestershire Royal Hospital and Hereford County Hospital) were rated E in relation to their stroke unit

With regards to Speech and Language Therapy, it must be highlighted that there is a known National shortage of Speech and Language Therapists impacting HASU centres across the UK and is not an issue localised to the West Midlands.

SSNAP data highlighted first class services in the following:

- 5 hospitals (Sandwell District Hospital, Russell's Hall Hospital, University Hospital Coventry, Royal Stoke Hospital and Hereford County Hospital) were rated A in relation to scanning
- 6 hospitals (Birmingham Heartlands Hospital, New Cross Hospital, University Hospital Coventry, Royal Stoke Hospital, Worcestershire Royal Hospital and Hereford County Hospital) were rated A in relation to Occupational Therapy
- 4 hospitals (Sandwell District Hospital, Royal Stoke Hospital, Worcestershire Royal Hospital and Hereford County Hospital) were rated A in relation to Physiotherapy
- 5 hospitals (Birmingham Heartlands Hospital, Princess Royal Hospital Telford, Queen Elizabeth Hospital Edgbaston, University Hospital Coventry and Royal Stoke Hospital) were rated A in relation to discharge processes

In the latest SSNAP data release (December 2017 to March 2018; table 3), the overall SSNP level rating remains unchanged with 50% of West Midland HASU

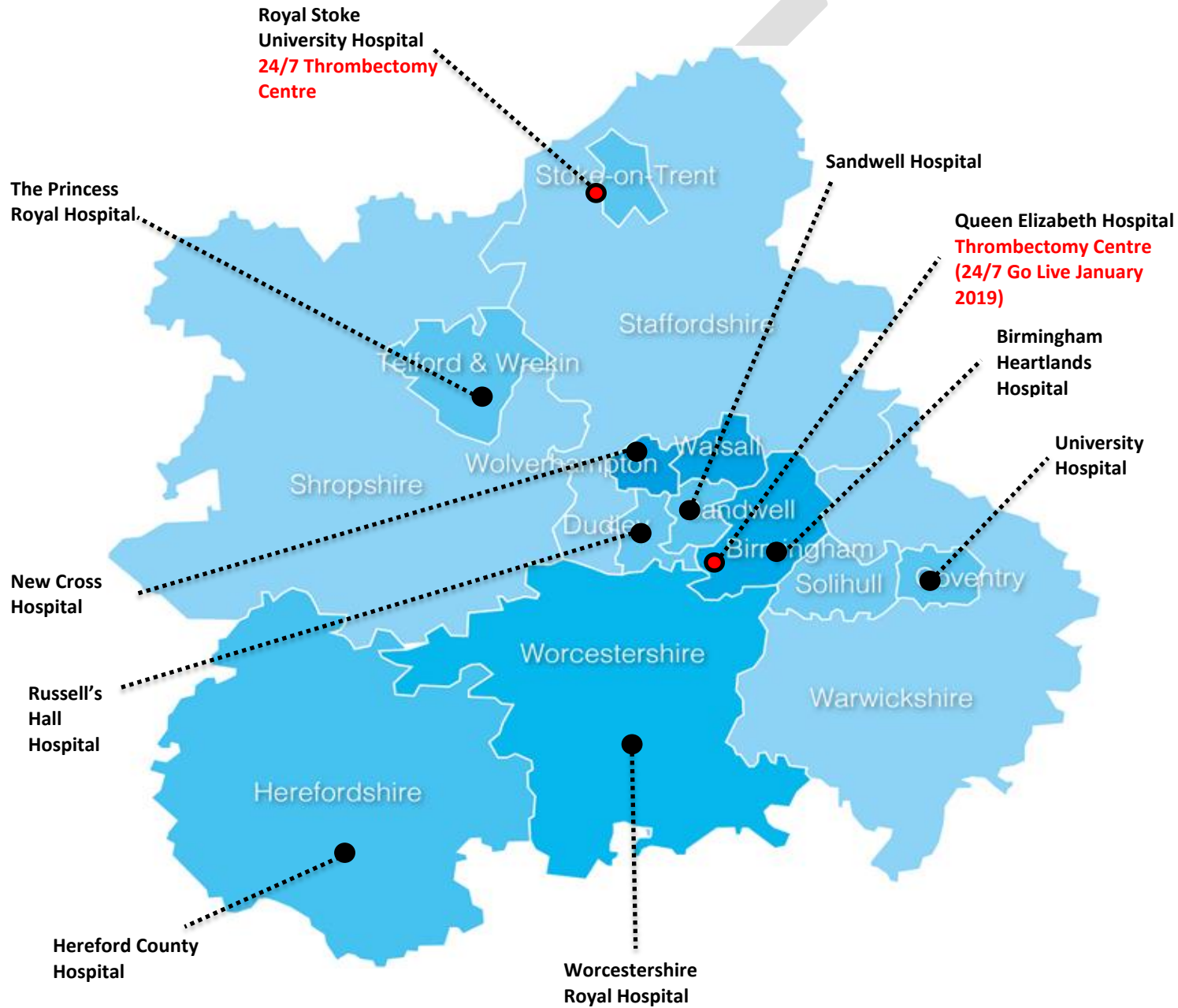
centres still requiring improvement; SSNAP data highlighted the following particular areas where substantial improvements were required:

- Princess Royal Hospital Telford was rated as E in relation to speech and language therapy with Royal Stoke University Hospital and Hereford County Hospital increasing their rating to D
- 4 hospitals (New Cross Hospital, University Hospital Coventry, Worcestershire Royal Hospital and Hereford County Hospital) were rated E in relation to their stroke unit

SSNAP data (2018) highlighted first class services in the following:

- 4 hospitals (Sandwell District Hospital, Russell's Hall Hospital, University Hospital Coventry and Royal Stoke Hospital) were rated A in relation to scanning
- 4 hospitals (Birmingham Heartlands Hospital, University Hospital Coventry, Royal Stoke Hospital and Worcestershire Royal Hospital) were rated A in relation to Occupational Therapy
- 2 hospitals (Royal Stoke Hospital and Worcestershire Royal Hospital) were rated A in relation to Physiotherapy
- 5 hospitals (Birmingham Heartlands Hospital, New Cross Hospital, Queen Elizabeth Hospital Edgbaston, University Hospital Coventry and Royal Stoke Hospital) were rated A in relation to discharge processes

## 5.2 Figure 1: HASU Map and Thrombectomy Centres in the West Midlands



### 5.3 Table 1: Patient Centred Performance table April-July 2017

#### Patient centred - April to July 2017

Routinely Admitting Teams		Number of patients		Overall Performance				Patient Centred Data											Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	PC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed
<b>Midlands &amp; East - West Midlands SCN</b>																						
Heart of England NHS Foundation Trust	Birmingham Heartlands Hospital	302	303	A	A	A	A	B	C	B	A	A	B	C	B	B	A	A	255	100%	1	0%
Royal Wolverhampton NHS Trust	New Cross Hospital	193	197	C	A↑	B↓	B↑	B	C	A↑↑	B↑	C↓↓	B↓	C↑	C	C↑	B	B↑	96	93%	43	45%
Sandwell and West Birmingham Hospitals NHS Trust	Sandwell District Hospital	201	198	C↓	A	B	C↓	A	B↑	D↓↓	B	C	B	E	C↓	B	B↓	C↓	139	100%	6	4%
Shrewsbury and Telford Hospital NHS Trust	Princess Royal Hospital Telford	318	310	D	A	B↑	D	D↓	D	C	D	B↓	D↓	E	D	B↑↑	B	D	238	100%	1	0%
South Warwickshire NHS Foundation Trust	Warwick Hospital	109	113	C	A	A	C	D	E	C	D	A	B	B↑	B	A	C↑	C	72	100%	0	0%
University Hospitals Birmingham NHS Foundation Trust	Queen Elizabeth Hospital Edgbaston	209	163	C↑	A	A	C↑	A↑	C↑	C↓	C↑	C	C↓	C	D↑	D	B↓	C	106	83%	38	36%
University Hospitals Coventry and Warwickshire NHS Trust	University Hospital Coventry	304	294	A↑	A	A	A↑	A	D	A↑	B	A	B↓	C↑	B	B	A	A↑	194	99%	29	15%
University Hospitals of North Midlands NHS Trust	Royal Stoke University Hospital	409	425	B	A	A	B	A	D	C	B	A	A	D↑	A↑	B↑	A	B	266	88%	176	66%
Worcestershire Acute Hospitals NHS Trust	Worcestershire Royal Hospital	277	226	D	B	C	D	C	E	D↓	E	A	B↑	D	D	D↑	A	D	136	71%	18	13%
Wye Valley NHS Trust	Hereford County Hospital	152	146	C↓	A	A	C↓	B	D↑	D↓	D↓↓	A	B↓	E	C↓	B	C↓	C↓	115	100%	1	1%

<b>Key</b>	
<b>Colour</b>	<b>Level</b>
	<b>A</b> - first class service
	<b>B</b> - good or excellent in many aspects
	<b>C</b> - reasonable overall - some areas require improvement
	<b>D</b> - several areas require improvement
	<b>E</b> - substantial improvement required
	<b>X</b> (Too few patients to report on)

### 5.4 Table 2: Patient Centred Performance table August - November 2017

#### Patient centred - August to November 2017

Routinely Admitting Teams		Number of patients		Overall Performance				Patient Centred Data													Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	PC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed		
<b>Midlands &amp; East - West Midlands SCN</b>																								
Heart of England NHS Foundation Trust	Birmingham Heartlands Hospital	255	274	B↓	A	A	B↓	B	C	B	B↓	A	B	C	B	B	A	B↓	228	100%	0	0%		
Royal Wolverhampton NHS Trust	New Cross Hospital	171	171	D↓	B↓	B	C↓	B	D↓	C↓↓	C↓	A↑↑	B	C	D↓	D↓	B	C↓	94	90%	26	28%		
Sandwell and West Birmingham Hospitals NHS Trust	Sandwell District Hospital	197	191	B↑	A	B	B↑	A	B	B↑↑	A↑	C	A↑	D↑	B↑	B	C↓	B↑	153	96%	16	10%		
Shrewsbury and Telford Hospital NHS Trust	Princess Royal Hospital Telford	309	313	D	A	B	D	D	C↑	D↓	C↑	B	D	E	D	A↑	A↑	D	244	98%	3	1%		
The Dudley Group NHS Foundation Trust	Russells Hall Hospital	164	150	B	B↓	A↑	A↑	A↑	B	B↑	A↑	D↓	B	B↑	A↑	A	B	A↑	99	83%	35	35%		
University Hospitals Birmingham NHS Foundation Trust	Queen Elizabeth Hospital Edgbaston	200	171	C	A	A	C	B↓	C	D↓	B↑	C	C	D↓	D	D	A↑	C	129	84%	41	32%		
University Hospitals Coventry and Warwickshire NHS Trust	University Hospital Coventry	306	317	B↓	A	A	B↓	A	E↓	B↓	C↓	A	B	D↓	B	B	A	B↓	181	100%	19	10%		
University Hospitals of North Midlands NHS Trust	Royal Stoke University Hospital	412	397	B	A	A	B	A	D	C	B	A	A	E↓	A	B	A	B	257	88%	174	68%		
Worcestershire Acute Hospitals NHS Trust	Worcestershire Royal Hospital	323	297	D	A↑	C	D	C	E	D	D↑	A	A↑	D	D	D	C↓↓	D	151	75%	17	11%		
Wye Valley NHS Trust	Hereford County Hospital	173	171	C	A	A	C	A↑	E↓	D	B↑↑	A	A↑	E	C	B	B↑	C	140	99%	4	3%		

Key	
Colour	Level
	A - first class service
	B - good or excellent in many aspects
	C - reasonable overall - some areas require improvement
	D - several areas require improvement
	E - substantial improvement required
	X (Too few patients to report on)

### 5.5 Table 3: Patient Centred Performance table December 2017 – March 2018

Routinely Admitting Teams		Number of patients		Overall Performance				Patient Centred Data											Six Month Assessment			
Trust	Team Name	Admit	Disch	SSNAP Level	CA	AC	Combined KI Level	D1 Scan	D2 SU	D3 Throm	D4 Spec Asst	D5 OT	D6 PT	D7 SALT	D8 MDT	D9 Std Disch	D10 Disch Proc	TC KI Level	Number Applicable	% Applicable	Number assessed	% Assessed
<b>Midlands &amp; East - West Midlands SCN</b>																						
Heart of England NHS Foundation Trust	Birmingham Heartlands Hospital	276	271	B	A	A	B	B	D↓	C↓	B	A	B	C	B	B	A	B	264	100%	2	1%
Royal Wolverhampton NHS Trust	New Cross Hospital	143	153	D	C↓	A↑	C	B	E↓	C	C	B↓	B	C	D	D	A↑	C	111	90%	32	29%
Sandwell and West Birmingham Hospitals NHS Trust	Sandwell District Hospital	167	173	B	A	B	B	A	B	B	B↓	C	B↓	D	B	B	C	B	163	99%	14	9%
Shrewsbury and Telford Hospital NHS Trust	Princess Royal Hospital Telford	327	323	D	A	C↓	D	C↑	D↓	C↑	D↓	C↓	D	E	D	B↓	B↓	D	282	99%	5	2%
The Dudley Group NHS Foundation Trust	Russells Hall Hospital	168	161	B	A↑	B↓	B↓	A	C↓	C↓	B↓	C↑	C↓	B	B↓	A	B	B↓	117	81%	41	35%
University Hospitals Birmingham NHS Foundation Trust	Queen Elizabeth Hospital Edgbaston	189	180	C	A	A	C	B	C	C↑	C↓	B↑	B↑	C↑	D	D	A	C	159	81%	44	28%
University Hospitals Coventry and Warwickshire NHS Trust	University Hospital Coventry	294	287	B	A	A	B	A	E	B	D↓	A	B	D	C↓	B	A	B	260	100%	30	12%
University Hospitals of North Midlands NHS Trust	Royal Stoke University Hospital	426	433	B	A	A	B	A	D	C	B	A	A	D↑	B↓	B	A	B	210	84%	116	55%
Worcestershire Acute Hospitals NHS Trust	Worcestershire Royal Hospital	283	280	D	A	C	D	C	E	D	D	A	A	D	D	D	C	D	151	65%	14	9%
Wye Valley NHS Trust	Hereford County Hospital	180	177	C	A	A	C	B↓	E	C↑	C↓	B↓	B↓	D↑	D↓	B	B	C	127	98%	7	6%

Key	
Colour	Level
	A - first class service
	B - good or excellent in many aspects
	C - reasonable overall - some areas require improvement
	D - several areas require improvement
	E - substantial improvement required
	X (Too few patients to report on)



## 6 Methodology

To assess the regions abilities to meet National stroke standards for compliance against 7 days targets delivering urgent and emergency stroke care, the West Midlands Cardiovascular (CVD) Clinical Network carried out clinical review visits for all West Midland HASUs during January to April 2018. The Network team and regional Clinical Director for Stroke invited the Stroke teams from each HASU to take part in the visits and conducted structured interviews exploring the following (see *appendix 12.3 for interview template*):

- Pathways into ED
- Workforce, clinical, nursing and therapies
- Radiology
- Thrombectomy services
- Exit pathways
- Repatriation
- Rehabilitation and ESD
- Relationships with organisational senior management and CCGs

The visits identified key areas for improvement within HASU sites and emerging themes for the region. Visits were audio-recorded and transcribed for accuracy. Individual detailed site reports were produced and validated and reviewed by the network, clinical director and individual site teams.

Individual summary reports with key recommendations were generated and circulated to hospital CEO's/Trust executives, CCG leads and STP leads respectively.

The West Midlands CVD network aims to follow up and support all HASU sites with a 6 month review against their recommendations/action plans.

## 7 STP Findings

*To note: this report focuses on STP themes and individual items are summarised in confidential individual trust reports that have been shared with hospital CEO's.*

### 7.1 Birmingham and Solihull

#### 7.1.1 Summary of good practice within stroke units

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - FAST positive patients are pre-alerted from West Midlands Ambulance Service directly to ED or stroke team
  - Senior stroke nurses including Stroke Nurse Practitioners (SNPs) and Advanced Care Practitioners (ACPs) are available front line alongside the HASU stroke consultant and core medical trainees; stroke teams meet and greet all pre-alerted stroke patients in ED 7 days a week
  - HASU stroke consultant available on-call 24/7
  - Stroke nurses manage non-lysis/query patients with ED consultants and on-call stroke consultants
  - There is good support available for stroke teams from the ED teams
  - Robust pathways are in place for haemorrhages and anticoagulation reversal; there are no delays in accessing drugs
- HASU 7 Day Ward Round & ASU Ward Round
  - HASU ward rounds are 7 days a week, stroke consultant led and contain MDT members
  - HASU stroke consultants are supported by Stroke Nurse Practitioners (SNP) 7 days a week
  - There are 7 day services for therapy within one HASU unit in the STP
  - ASU ward and board rounds occur 5 days a week as per guidelines; Stroke Consultant led and contain MDT members
  - HASU Stroke Consultant covers ITU 7 days a week when required
- Early Support Discharge (ESD) and Community Stroke Team
  - ESD has support from the on-call stroke consultant
  - One HASU unit can request social care support via Supported Integrated Discharge (SID) model of care

- Units are implementing joint working with their partner community trust
- ESD teams go into intermediate care providers to provide and support stroke-specific skills in therapy
- There is a community stroke team (CST) that covers the North and Central area of Birmingham
- Workforce
  - Recruitment efforts are concentrating on nursing posts and therapists
  - Stroke Consultants are onsite and on-call 7 days a week providing the 24/7 7 day service; telemedicine and VPN access is available for off-site out of hours access
- High Risk and Low Risk TIA Clinics
  - High risk TIA clinics run 7 days a week
  - Clinics are run by stroke consultants and/or vascular surgeons
  - Low risk TIA clinics run 5 days a week
  - High/low risk TIA recommendations for classification have been adopted
- Vascular Surgery Access
  - The stroke teams have excellent relationships with the vascular and neuro-surgeons
  - Vascular surgeons are available on-call 24/7 providing 7 day services
  - Surgery is available 7 days a week
  - Carotid Doppler and CT scans are performed on all surgical patients with no issues reported
- Imaging Facilities & Regional Imaging Platform
  - The units have access to the Regional Imaging Sharing Platform
  - CT scans, CT-Angiograms and MRI scanning are available 7 days a week
  - Carotid Doppler scanning is available 6-7 days a week
  - Reporting is available 7 days a week
- Weekend Thrombectomy Services
  - *To note: The thrombectomy centre is currently operating a 09:00 – 17:00 weekday service however the business case for a 24/7 service*

*has been approved at trust level, pending contracts with specialised commissioning*

- HASUs have increased flexibility with bed base and staffing to accommodate the thrombectomy service
- The stroke teams have excellent working relationships with interventional radiology and CT-angiogram suite teams
- There is a protocol that clarifies and triages thrombectomy scanning with CT and CT-Angiogram
- Regional rotas for our of hour thrombectomy services have been discussed
- Formal repatriation pathways are under development with the West Midlands Clinical Network Regional Stroke Expert Advisory Group
- There is regional agreement that thrombectomy referrals will be consultant to consultant
- Weekend Repatriation
  - There are electronic repatriation lists
  - Staff across the STP have excellent working relationships with patients
- Other Comments/Feedback
  - Teams have relationships with the Stroke Association
  - There is access to vocational rehabilitation for young people
  - Staff members are proactive; training and education events are welcomed

### **7.1.2 Summary of areas requiring improvement**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - West Midlands Ambulance Service cannot directly communicate to the stroke teams
  - Sustainability of registrar workload and compliance; high workloads out of hours can cause issues
  - Therapy does not in-reach to ED
  - Stroke Nurse Practitioner cover is required 24/7
- HASU 7 Day Ward Round & ASU Ward Round

- Stroke specific therapy staff are required at weekends
- Stroke training required for general medical registrars that support or provide cover for HASU out of hours
- There is a lack of stroke specific junior doctors supporting stroke teams
- Early Support Discharge (ESD) and Community Stroke Team
  - ESD is under resourced with services currently running 5 days a week
  - There are delays with social care support and packages of care
  - Some units experience difficulties accessing in-patient stroke specific rehabilitation and stroke community beds
  - Provision of ESD services vary across the STP with different funding and models of care
  - There is no community stroke team in South Birmingham
- Workforce
  - Speech and language therapy staffing levels need to increase to meet 7 day services
  - Stroke specific nurse, consultant and junior doctor posts are vacant
- High Risk and Low Risk TIA Clinics
  - There are no rapid access clinics for minor strokes with therapy
- Vascular Surgery Access
  - None to report
- Imaging Facilities & Regional Imaging Platform
  - Some units experience capacity issues with Carotid Doppler scanning and delays in CT scanning within an hour
- Weekend Thrombectomy Services
  - Recruitment of additional staff is required to support the thrombectomy centre moving to a 24/7 service
- Weekend Repatriation
  - Units can experience delays with units within the Black Country and Hereford and Worcester STPs
- Other Comments/Feedback
  - Stroke specific rehabilitation access is raised as an STP wide issue; there is a gap in community stroke team provision
  - CCGs do not commission ESD in North or East Birmingham

- Robust follow up pathways need to be developed across the STP
- Medical cover for stroke is not 24/7, 7 days a week

### **7.1.3 Recommendations for the STP**

#### **Key immediate recommendations:**

- Access to community stroke beds needs to be improved & enhanced ESD could be implemented; raised as priority issue with CCGs
- Units carrying stroke consultant vacancies where joint posts could be considered
- Access to CT scans; there is a national expectation to perform CT scans within an hour however there are delays
- Units to increase access to Carotid Doppler scanning

#### **Issues to be addressed:**

- CCGs do not commission ESD for South, East or North Birmingham patients
- Social care provisions and pathways to be improved
- 6 month follow up in the community/GP practices to be improved
- Stroke medical cover for weekend and out of hours
- Pre-alerts from West Midlands Ambulance Service direct to stroke teams to be implemented
- Dedicated stroke therapy workforce would be of benefit
- Junior doctors to support stroke teams at weekends

## **7.2 The Black Country**

### **7.2.1 Summary of good practice within stroke units**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - FAST positive patients are pre-alerted from West Midlands Ambulance Service directly to ED or stroke team
  - The stroke teams have excellent relationships with ED medics
  - The stroke consultants and stroke registrars are available on-call 24/7 providing 7 day services

- The stroke teams are the first point of contact for stroke patients in ED; patients are prioritised for CT-scanning
- One site has Practice Education Facilitator nurses (PEFs) who train all nursing staff on thrombolysis; thrombolysis nurses are present on every shift and supernumerary to stroke nursing team
- Stroke nurses at one site are rotational through ED and ward; they are trained on the whole acute stroke pathway and operate as one team
- Robust pathways are in place for haemorrhages and anticoagulation reversal; there are no delays in accessing drugs
- HASU 7 Day Ward Round & ASU Ward Round
  - HASU ward rounds are 7 days a week, stroke consultant led and contain MDT members
  - All sites operate 7 day board rounds with MDT members present (medical and therapy led)
  - There is HASU bed protection in place
  - Therapy staff are stroke specific; 2 out of 3 units provide 7 day therapy services
  - ASU ward rounds are stroke consultant led and occur 7 days a week
  - Stroke Consultants support ITU 7 days a week when required
  - The stroke teams have excellent relationships and communication with neurology and neurosurgery
- Early Support Discharge (ESD) and Community Stroke Team
  - The stroke teams have excellent working relationships with their respective ESD teams
  - 1 out of 3 units are liaising with their local CCG regarding the reinstatement of packages of care via ESD
  - Palliative care beds in the community and community support is available
  - Stroke teams link in with the Stroke Association
- Workforce
  - Units are focusing recruitment efforts on nursing posts including Advanced Nurse Practitioners (ANPs) and Clinical Nurse Specialists (CNS)

- Units are proactive with training; programmes and sharing knowledge internally to support junior doctors, registrars and clinical fellows
- High Risk and Low Risk TIA Clinics
  - TIA clinics run 7 days a week with high/low risk triaging from stroke consultants using ABCD2 criteria or RCP guidelines
  - TIA clinics have dedicated imaging facilities; dedicated scanning slots for MRI, CT and Carotid Doppler's
  - All high risk TIA patients are seen within 24 hours
  - Units have dedicated stroke TIA nurse-led clinics or are reviewing training programmes to enable nurse-led clinics
- Vascular Surgery Access
  - The stroke teams have excellent relationships with the vascular surgeons
  - Carotid surgery is available 7 days a week with vascular opinions available out of hours 24/7
  - Referrals are electronic from consultant to surgeon
- Imaging Facilities & Regional Imaging Platform
  - Carotid Doppler's, CT scans (including CT-brain) and MRI are available 7 days a week
  - All units provide CT-Angiogram services with 1 of 3 sites providing 7 day services for CT-Angiogram scanning
  - The units have access to the Regional Imaging Sharing Platform
  - Reporting is available 7 days a week
- Weekend Thrombectomy Services
  - Teams across the STP ensure a stroke consultant to stroke consultant referral for thrombectomy
  - Thrombectomy repatriations are prioritised with protected beds; repatriation within 24-48 hours from thrombectomy centres
- Weekend Repatriation
  - Units in the STP report no issues with repatriation; teams aim to repatriate from external hospitals within 48-72 hours
  - Units report excellent repatriation pathways with North Midlands/Staffordshire region



- Other Comments/Feedback
  - Stroke nurses in the area are very willing and keen to undertake further specialist training
  - One unit has patient representatives through a stroke carers group; they are members of Quality Practice Development Training team who provide support between the acute trust and CCG
  - Units report excellent stroke pathways; frontline to ward are effective however exit strategies can be difficult
  - Community hospitals in the region provide stroke specialist nurse-led follow-up
  - Vocational rehabilitation is available

### **7.2.2 Summary of areas requiring improvement**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - West Midland Ambulance Service pre-alert is not consistent and not direct to the stroke team
  - Stroke nurses require further medical support out of hours for clinical decisions for non-stroke patients
- HASU 7 Day Ward Round & ASU Ward Round
  - Stroke consultant workforce affects the 14 hour review timescale for HASU patients
  - There is limited therapy input over the weekends; there are staffing issues
  - Speech and language therapy is a 5 day service across the STP
  - There are no dedicated junior doctors for stroke
  - There are no palliative stroke beds or hospices available
  - There are no stroke consultant led reviews at 6 months
- Early Support Discharge (ESD) and Community Stroke Team
  - ESD is a 5 day service across the STP
  - There is no community stroke team or nursing community follow-up
- Workforce
  - There are speech and language therapy shortages

- Stroke consultant and registrar workforce is an issue
- There are vacancies for trained nurses
- There is a lack of funding for external training courses
- High Risk and Low Risk TIA Clinics
  - High TIA referral rates has resulted in referrals exceeding 7 days
  - Neurology referral pathways from GPs are difficult and lengthy
- Vascular Surgery Access
  - Carotid surgery is not a 7 day service in all units
  - Surgery timelines can exceed the aim of 7 days
- Imaging Facilities & Regional Imaging Platform
  - Carotid Doppler scanning and CT-Angiograms are not a 7 day service in all units
  - Neuro-radiologist shortages impact on the reporting timelines for CT-Angiograms
  - MRI scanning access over the weekend and out of hours is highlighted as an issue for one unit
  - There are issues transmitting images to other units in the region
- Weekend Thrombectomy Services
  - Units are preparing for 24/7 thrombectomy centre; rotas, staffing, bed blocking and thrombolysis alerts will have to be re-modelled
- Weekend Repatriation
  - Capacity issues impact on repatriation for out of area patients
  - There are repatriation issues within the STP units
  - Geographical boundaries within the STP impact on where ambulance crews take stroke patients
  - There can be repatriation difficulties with Hereford and Worcester STP
- Other Comments/Feedback
  - There are long waiting lists for young stroke rehabilitation; there is no access to intermediate/community beds
  - There is a lack of stroke specific intermediate care in the STP
  - There are difficulties accessing vocational rehabilitation in the STP
  - Established and robust community services are required alongside funding from CCGs

- Access to social care services is difficult and the social care provision varies across the patch
- There are no stroke specific palliative care pathways
- Stroke teams highlighted the importance of ring fencing beds and maintaining speciality competencies

### **7.2.3 Recommendations for the STP**

*Following the clinical review site visits, Walsall and Wolverhampton units have centralised to Wolverhampton site which has been taken into account in the recommendations*

#### **Key immediate recommendations:**

- Workforce review – stroke consultants, registrars, therapy staffing and nursing posts to ensure 24/7 cover
- Variance in repatriation processes to be addressed
- Provision of sonographer and Carotid Doppler's to be reviewed to allow for 7 day services
- There is limited support from stroke specific junior doctors – training and educational programmes to be provided
- Medical/neuro outliers on the stroke unit
- Improvements required to access vascular surgery 7 days a week
- Improvements required in follow-up process for 6/52 or 6/12

#### **Issues to be addressed:**

- Variance in communication from West Midlands Ambulance Service and ED to Stroke teams across units – direct access is recommended
- Limited ESD provision due to lack of commissioning; CCG to review funding of ESD team/intermediate care beds/stroke community support service to provide 7 day services and extend inclusion criteria to complex patients
- Social care pathways to be reviewed by CCGs
- Palliative care provisions to be reviewed by CCGs

## **7.3 Shropshire, Telford and Wrekin**

### **7.3.1 Summary of good practice within stroke units**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - FAST positive patients are pre-alerted from West Midlands Ambulance Service directly to ED who 'FAST' bleep the stroke team
  - Stroke nurses provide 24/7 cover with stroke nurse specialists being supernumerary to the stroke ward
  - Stroke consultants are available on-call to support the stroke nurses with 24/7 thrombolysis cover
  - Units follow the guidelines for the haemorrhage pathway
- HASU 7 Day Ward Round & ASU Ward Round
  - HASU ward round is stroke consultant led 7 days a week with MDT staff members
  - ASU ward round is 5 days a week, stroke consultant led and contains MDT members
  - Therapy covers HASU, ASU and rehabilitation; therapy staff members attend the stroke team MDT
  - HASU stroke consultant covers ITU 7 days a week when required
  - The Stroke Association work alongside the stroke team to manage the follow-up of patients
- Early Support Discharge (ESD) and Community Stroke Team
  - ESD team operates out of two bases to cover the STP
  - ESD are able to provide therapy and rehabilitation in patients' own homes
  - ESD are able to carry out a return to work for young strokes
- Workforce
  - Extensive staffing reviews have been undertaken for 7 day services for therapy
  - Workforce modelling has been performed for 24/7 services for stroke
  - Units provide regular stroke specific training for medical registrars
- High Risk and Low Risk TIA Clinics
  - TIA clinics run 7 days a week
- Vascular Surgery Access

- The stroke teams have excellent relationships with the vascular surgeons
- There is a robust vascular surgery service with no issues reported
- Imaging Facilities & Regional Imaging Platform
  - CT scanning is available 7 days a week with stroke nurse specialists and stroke nurses being able to request scans
  - External reporting is available 7 days a week
  - Carotid Doppler scan access is 5 days a week
  - MRI is accessible for stroke patients if required
- Weekend Thrombectomy Services
  - No issues are reported with the thrombectomy centre
- Weekend Repatriation
  - No issues are reported with repatriation
- Other Comments/Feedback
  - Hospices and palliative care are available; care begins on the stroke ward
  - Discharge to access models have been commissioned in the STP
  - ESD teams are able to refer onto services including driving, vocational rehabilitation, sensory deprivation and ophthalmology
  - Speech and Language Therapy teams have been trialling assistant posts – these have been successful in releasing qualified clinical time

### **7.3.2 Summary of areas requiring improvement**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - Stroke consultants do not in-reach to ED due to staffing issues; non-thrombolysis patients are seen by ED consultants and stroke nurse specialists
  - Nurse shortages can impact on nurse bleep holders attending ED for stroke patients
  - Local haemorrhage pathways are not in place but guidelines are adhered too
  - There are delays accessing anticoagulation reversal

- HASU 7 Day Ward Round & ASU Ward Round
  - Stroke consultant staffing levels impact on ward cover and out-patient services when there is sickness or annual leave; there is no capacity
  - Therapy on HASU is a 5 day service currently due to staff shortages; there are no stroke assessments or rehabilitation provided on the ward at weekends
  - There is no dedicated dietetic support available
  - Junior doctors are not available to support stroke ward at weekends; patients are delayed at discharge
  - Bed capacity is an issue in regards to moving non-medical patients from the stroke ward
  - There are delays with stroke consultant follow ups; patients are on waiting lists
- Early Support Discharge (ESD) and Community Stroke Team
  - ESD is currently a 5 day service
  - Neurorehabilitation team in the community is not stroke specific
  - ESD team does not contain any nursing members of staff
- Workforce
  - There are workforce issues with trained therapists (occupational, physio and speech and language), general medicine, stroke consultants and stroke nurse specialists
  - There are medical registrar vacancies
- High Risk and Low Risk TIA Clinics
  - High risk TIA's are not seen within 24 hours
  - TIA referrals should be triaged by the stroke consultants; protected time is required
  - External triage services for TIA clinics are not satisfactory
  - GPs require direct access to stroke consultants
- Vascular Surgery Access
  - There are no operations scheduled at weekends
  - Vascular sonographer shortages result in limited capacity for Carotid Doppler scanning
- Imaging Facilities & Regional Imaging Platform

- CT scanning is not 24/7
- There is variable access to CT-Angiograms
- Carotid Doppler scanning is available 5 days a week
- Units do not have access to the regional imaging sharing platform
- Weekend Thrombectomy Services
  - Units can experience delays with neurosurgical advice from the thrombectomy centre
- Weekend Repatriation
  - Geography and boundaries are an issue for repatriation in the STP; there are difficulties establishing boundaries between units
- Other Comments/Feedback
  - Palliative care 'fast track' referral pathways have been amended by CCGs in the STP; this delays patients
  - There are no stroke specific community beds in the STP
  - Rehabilitation in the community is not supported by CCGs
  - Units are not actively referring to the Stroke Association
  - Workforce improvement plans are under review in the STP
  - Units are keen to upskill and train nurses to advanced practitioners

### **7.3.3 Recommendations for the STP**

#### **Key immediate recommendations:**

- Workforce review – stroke consultants, registrars, therapy staffing and nursing posts to ensure 24/7 cover
- Units carrying stroke consultant vacancies where joint posts could be considered
- Business case for 24/7 scanning to radiology
- Access to community stroke beds needs to be improved & enhanced ESD could be implemented
- Triaging of TIA patients by stroke consultants
- Improvements required in follow-up process for 6/52 or 6/12

### **Issues to be addressed:**

- Pre-alerts from West Midlands Ambulance Service direct to stroke teams to be implemented
- Training and education of stroke workforce; advanced nurse practitioners as a priority
- Provision of sonographer and Carotid Doppler's to be reviewed to allow for 7 day services
- Fast track pathways for palliative care to be reviewed

## **7.4 Staffordshire and Stoke-on-Trent**

### **7.4.1 Summary of good practice within stroke units**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - FAST positive patients are pre-alerted from West Midlands Ambulance Service directly to stroke teams; stroke teams meet and greet all pre-alerted stroke patients in ED 7 days a week
  - The stroke teams have excellent relationships with ED medics and stroke consultants support ED 7 days a week
  - Stroke Nurse Practitioners (SNP) provide 24/7 cover and rotate between the stroke ward and ED
  - Stroke specific therapy can in-reach to ambulatory units
  - Neurology consultants support stroke consultants with on-call cover for stroke out of hours
  - Robust pathways are in place for haemorrhages and anticoagulation reversal; there are no delays in accessing drugs
- HASU 7 Day Ward Round & ASU Ward Round
  - HASU ward round is 7 days a week, stroke consultant led and includes MDT members
  - HASU beds are well protected
  - ASU ward round is stroke consultant led 7 days a week
  - All therapy and nursing staff are stroke specific; team managed by stroke team/division in one budget
  - Stroke therapists are protected



- HASU stroke consultant covers ITU 7 days a week when required
- Early Support Discharge (ESD) and Community Stroke Team
  - ESD is a 7 day service; the therapy staff cover ESD and stroke ward as one team
  - Unit therapy team provides community stroke service at the weekends
  - Follow ups are provided by a consultant at 6 weeks and the community stroke teams at 6 months
- Workforce
  - Unit reports good recruiting rates with no issues recruiting into nursing posts; there is a clear progression pathway from ward nurse to SNP
- High Risk and Low Risk TIA Clinics
  - TIA clinics run 7 days a week and are stroke consultant led; high risk seen as priority
  - Stroke consultant will triage all referrals; all high risk patients with atrial fibrillation will be seen within 24 hours
  - Low risk will be seen within 5 days
- Vascular Surgery Access
  - The stroke team have an excellent relationship with the vascular surgeons
  - Vascular surgery service is 7 days a week
- Imaging Facilities & Regional Imaging Platform
  - MRI and CT scanning available 24/7
  - CT-Angiograms available 7 days a week and are performed at the weekend in place of Carotid Doppler's (which are available 5 days a week)
- Weekend Thrombectomy Services
  - Thrombectomy centre runs 7 day services, 24 hours a day
  - Thrombectomy follow up is consultant managed
  - The stroke team have an excellent relationship with neurosurgery
  - Regional cross working is under discussion; STP to support other tertiary centres in Birmingham and Solihull STP and Coventry and Warwickshire STP
- Weekend Repatriation

- There are no issues with repatriation to other units in the region
- There are excellent repatriation pathways with the Black Country STP
- Unit can face resistance from patients due to Stafford name however staff overcome difficulties and manage this well
- Other Comments/Feedback
  - The Stroke Association work closely with the STP
  - Palliative care arrangements are available; ESD can support palliative patients who are unable to leave the unit
  - The unit has palliative care champions (nurses on stroke ward)
  - Specialist neuro-rehabilitation is accessible
  - Keele University provides a stroke training programme accessible by all staff; this aids high staff retention rates

#### **7.4.2 Summary of areas requiring improvement**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - None to report
- HASU 7 Day Ward Round & ASU Ward Round
  - None to report
- Early Support Discharge (ESD) and Community Stroke Team
  - None to report
- Workforce
  - There are speech and language therapist shortages
- High Risk and Low Risk TIA Clinics
  - None to report
- Vascular Surgery Access
  - None to report
- Imaging Facilities & Regional Imaging Platform
  - Carotid Doppler scanning is not available 7 days a week
  - The thrombectomy centre is reviewing CT-perfusion interpretation
- Weekend Thrombectomy Services

- Stroke consultant staffing levels need to increase to maintain 24/7 services at thrombectomy centre
- Thrombectomy centre referrals should be between stroke consultants however units outside the STP fail to address referrals correctly
- Weekend Repatriation
  - Units experience repatriation issues with Shropshire, Telford and Wrekin STP; there are bed management issues
- Other Comments/Feedback
  - Thrombectomy repatriation pathways need to be outlined and clear with ring fencing of beds from referring units across the region

### **7.4.3 Recommendations for the STP**

#### **Key immediate recommendations:**

- Speech and language therapy recruitment and training of existing therapy assistants to be implemented
- Provision of sonographer and Carotid Doppler's to be reviewed to allow for 7 day services

#### **Issues to be addressed:**

- Stroke consultant staffing levels for a sustainable 24/7 thrombectomy centre
- Thrombectomy referral pathways and repatriation timelines

## **7.5 Hereford and Worcester**

### **7.5.1 Summary of good practice within stroke units**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - FAST positive patients are pre-alerted from West Midlands Ambulance Service directly to ED or the stroke team; stroke clinical nurse specialists meet stroke patients in ED
  - Stroke specialist nurses provide cover 7 days a week (not 24/7) being supernumerary to the stroke ward
  - There are pathways for anticoagulation reversal
- HASU 7 Day Ward Round & ASU Ward Round

- ASU ward round occurs 5 days a week, is stroke consultant led and includes MDT members
- Stroke consultants are available on-call to support ED and ITU during weekdays
- HASU ward rounds are stroke consultant led and include MDT members
- Stroke nurses are available 7 days a week (not 24/7)
- Early Support Discharge (ESD) and Community Stroke Team
  - Specialist stroke nurses refer directly to ESD
  - Community rehabilitation teams are available in the STP area (7 day service from one unit)
  - ESD and community rehabilitation teams perform follow up visits
  - ESD discharge planning is effective with targets being met regularly
  - Community rehabilitation teams work closely with the Stroke Association and can contact the clinical lead for stroke if any problems arise
- Workforce
  - Stroke consultants are providing additional support to clinical nurse specialists and nurses to assist with the transition to 7 day services
  - Junior doctors have excellent relationships with nurses
  - Stroke nurses are protected for HASU and experienced clinical nurse specialists provide support for the stroke ward nurses
- High Risk and Low Risk TIA Clinics
  - TIA clinics run 5 days a week
  - Vascular labs are available to support TIA clinics
  - Electronic referrals available for TIA clinics
- Vascular Surgery Access
  - The stroke consultants have excellent relationships with the vascular surgeons
  - Stroke teams can take part in the vascular surgeon MDT
  - Vascular surgeons work across the STP area; patient pathways are robust

- Imaging Facilities & Regional Imaging Platform
  - CT-Angiograms are available in one unit
  - CT scanning is available 7 days a week
  - MRI scanning is available 7 days a week in one unit
  - Units have access to the image sharing platform
  - Stroke clinical nurse specialists can request scans
- Weekend Thrombectomy Services
  - Stroke teams have successfully sent patients to the thrombectomy centre under the current service provision
  - Stroke teams have identified that established pathways would assist with meeting thrombectomy timelines (door to intervention)
- Weekend Repatriation
  - Patients can be repatriated to stroke wards or directly into the community rehabilitation teams from the units in the STP
- Other Comments/Feedback
  - Palliative care beds and hospices are available in the STP
  - Vocational therapy is available
  - There are community neuro-rehabilitation services and access to health psychology
  - Units are keen to enhance community stroke rehabilitation

### **7.5.2 Summary of areas requiring improvement**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - There are no stroke specific team members available overnight/out of hours; stroke patients will be triaged by ED consultants and/or medical team
  - Stroke consultants are on-site 5 days a week with current staffing and provide cover for non-stroke specialities on general medical rotas
  - West Midlands Ambulance Service cannot speak directly to stroke team and Welsh ambulance services do not pre-alert

- HASU 7 Day Ward Round & ASU Ward Round
  - HASU ward round occurs 5 days a week with the stroke consultant; medical consultants review HASU patients at weekends
  - No therapy is provided at the weekend on the HASU and ASU
  - There is no speech and language cover at weekends
  - General medical teams provide cover at the weekends; there are no stroke specific middle grade doctors or registrars available
- Early Support Discharge (ESD) and Community Stroke Team
  - There are no inpatient stroke specific beds in the community
  - ESD is a 5 day service; current staffing does not allow for 7 day working
  - Workforce staffing issues prevent ESD bridging the gap between acute and social care
  - Follow up of patients is an issue across the STP; there is no medical follow up
  - There are significantly high waiting times for psychological support
- Workforce
  - There are shortages in stroke consultant, therapy (occupational, physio and speech and language therapy) and nurse posts
  - Funding for junior doctor training posts and junior doctor vacancies are an issue
- High Risk and Low Risk TIA Clinics
  - The STP has no TIA services available at the weekends
- Vascular Surgery Access
  - The STP has no vascular surgery access at the weekends
- Imaging Facilities & Regional Imaging Platform
  - Carotid Doppler and MRI access at the weekend is not standard
  - CT-Angiograms are not available at one unit
  - Units have issues accessing the regional imaging platform
- Weekend Thrombectomy Services
  - Repatriation of patients from Birmingham thrombectomy centre currently 5 days a week

- Concerns are raised for journey times from rural areas of Hereford and Worcester to thrombectomy centre
- Weekend Repatriation
  - Units experience repatriation issues with Shropshire, Telford and Wrekin STP
- Other Comments/Feedback
  - Concerns are raised for availability of CT scans, lack of medical staffing and ring fencing of beds for stroke patients
  - There are no competency frameworks for nurse-led or GP-led TIA clinics
  - There are no medical registrars for stroke

### **7.5.3 Recommendations for the STP**

*Clinical review visit took into account configuration work currently taking place*

#### **Key immediate recommendations:**

- Workforce: Stroke consultant cover must be extended to weekends; there are opportunities within existing workforce to achieve this
- Weekend therapy to be provided utilising existing workforce
- Weekend provision of vascular surgery to be provided
- Weekend TIA service to be shared between Hereford and Worcester; both units to provide consultant cover rotationally

#### **Issues to be addressed:**

- 6/12 follow-up lacks consistency and a robust process
- Fractious relationship with ED and Ambulance Service at one unit
- Stroke patients are not being admitted to stroke unit in a timely manner; stroke unit is managing inappropriate/non-stroke patients and this has an impact on service delivery, workforce and patient outcomes
- Stroke beds to be ring fenced
- Scanning facilities to be reviewed to allow 7 day services
- Training and education of all stroke staff grades

## 7.6 Coventry and Warwickshire

### 7.6.1 Summary of good practice within stroke units

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - FAST positive patients are pre-alerted from West Midlands Ambulance Service directly to ED; ED send FAST alert to stroke team (consultant, nurse & registrar)
  - Stroke nurses provide 24/7 cover; stroke clinical nurse practitioner and stroke ward nurses
  - Robust pathways are in place for haemorrhages and anticoagulation reversal; there are no delays in accessing drugs
  - There are ring fenced beds in ED for thrombolysis FAST positive patients
  - The stroke team have educational videos for stroke available to all medical registrars
  - Minor strokes can be seen by a non-stroke specific therapy team in ED
- HASU 7 Day Ward Round & ASU Ward Round
  - HASU ward round is 7 days a week, stroke and neurology consultant led, and contains MDT members
  - There are discharge to assess beds in the community for ASU patients requiring ongoing rehabilitation
  - Specialist stroke therapy on HASU is a 7 day service
  - HASU stroke and neurology consultants cover ITU 7 days a week when required
- Early Support Discharge (ESD) and Community Stroke Team
  - ESD discharge is 7 days a week for Coventry patients
  - Units have completed a pilot for enhanced ESD teams; pilot was very successful
  - There is access to a community neurorehabilitation team (young stroke)
  - There are palliative care beds and fast track referrals available in the STP; this is an effective pathway



- Workforce
  - There is an excellent working relationship between stroke and neurology consultants
  - Unit has full complement of occupational and physio-therapists
- High Risk and Low Risk TIA Clinics
  - TIA clinics run 7 days a week
  - Stroke consultant referral direct to on-call consultant vascular surgeon; same day or fast track access
  - TIA patients triaged by stroke nurse using ABCD criteria
  - High risk seen within 24 hours and low risk seen within days
- Vascular Surgery Access
  - The stroke teams have excellent relationships with vascular surgeons
  - Neuro-surgery is available in the STP
  - Consultant vascular surgeon available on-call 7 days a week
- Imaging Facilities & Regional Imaging Platform
  - CT scanning and Carotid Doppler's available 7 days a week
  - CT scans for all stroke patients within 1 hour available
  - Safe to discharge pathways are in place for MRI scanning
- Weekend Thrombectomy Services
  - Thrombectomy patients are promptly repatriated from the thrombectomy centre; currently available in normal working hours
  - STP supports stroke consultant to stroke consultant thrombectomy referrals
  - To support 24/7 thrombectomy, there are plans for 24/7 stroke consultant on-call rota in line with centralisation process
- Weekend Repatriation
  - Repatriation within the STP is good
  - Repatriation from other units in the region is prompt
- Other Comments/Feedback
  - Good working relationships between units and centres in the STP
  - Stroke teams have good relationships with the Stroke Association
  - Units have agreements with local universities for nurses to attend stroke modules

- Nurses have access to health assessment training, internal neuroscience course and stroke training day alongside internal academic meetings

### **7.6.2 Summary of areas requiring improvement**

- Stroke Presentations at Emergency Department (ED) & Anticoagulation Reversal
  - West Midlands Ambulance Service cannot pre-alert the stroke team directly
  - Out of hours stroke cover is provided by neurology consultants and neurology registrar; stroke consultant is not on-call
  - Overnight, the FAST bleep is not covered by stroke specific staff
- HASU 7 Day Ward Round & ASU Ward Round
  - Weekends, out of hours and bank holidays are covered by the neurology consultants; there are no stroke consultants on site
  - Bed blocking of non-stroke patients is an issue and can leave stroke patients with delays accessing the stroke ward
  - There is no funding for stroke specific rehabilitation or therapy; general rehabilitation is provided
  - There are stroke rehabilitation beds within a hospital in the STP but these are not staffed or managed by stroke trained therapists or consultants, and are available for 5/7 days
- Early Support Discharge (ESD) and Community Stroke Team
  - There are no stroke specific community beds
  - ESD is a 5 day service
  - North and South Warwickshire have no ESD teams
  - Access to neuro-psychologists and speech and language therapy is an issue in the STP (especially at weekends)
- Workforce
  - There are workforce issues with nursing, speech and language therapy and stroke consultants
  - The STP have challenges recruiting interventional neuro-radiologists

- High Risk and Low Risk TIA Clinics
  - None to report
- Vascular Surgery Access
  - Vascular surgery access is not a 7 day service
- Imaging Facilities & Regional Imaging Platform
  - CT-Angiogram provision is not standard and access is problematic
  - Units experience delays uploading images using the regional imaging platform
  - MRI scanning is not routine at weekends
- Weekend Thrombectomy Services
  - Repatriation of patients from Birmingham thrombectomy centre currently 5 days a week
  - Delays from referring units to thrombectomy centre are an issue; stroke teams highlight that timelines and pathways need to be agreed across the region
- Weekend Repatriation
  - Repatriation to other hospitals in the STP can be delayed
  - Units have experienced delays with the Black Country STP repatriating their patients
- Other Comments/Feedback
  - Vocational rehabilitation for young stroke patients is not available in the STP
  - Stroke teams highlight the difficulties accessing community based therapy; patients cannot be discharged without community therapy
  - Stroke teams raise concerns with the sustainability of centralisation and sufficient trained staff across medical, nursing and community teams
  - Stroke teams highlight the lack of nursing resources for training in the STP

### **7.6.3 Recommendations for the STP**

#### **Key immediate recommendations:**

- Medical outliers on the stroke unit; stroke patients are not being admitted to stroke unit and the unit is managing inappropriate patients. This impacts on service delivery, workforce and patient outcomes
- Stroke consultant cover is required at evenings/weekend – consultant workforce to be increased
- Access to 7-day vascular surgery service to be implemented
- Improvements to access and reporting of radiology (CT-A and MRI) in line with national requirements and guidance
- Enhanced ESD could be implemented to provide 7 day ESD service

#### **Issues to be addressed:**

- Workforce – in particular Interventional Neuro Radiologists (INR) and speech and language therapy (SALT); training of existing therapy assistants could be implemented to assist trained SALT
- Education and training for all stroke staff grades
- CCG does not commission stroke specific community rehabilitation beds or therapy
- Pre-alerts direct from West Midlands Ambulance Service to stroke teams to be implemented
- Access to vocational rehabilitation
- The team have concerns that once centralisation takes place, there will not be sufficient consultants numbers to staff the rota, sufficient nursing numbers and that community teams will not be trained to the correct level required

## 8 Regional Findings

Throughout this process each of the HASU sites have received individualised reviews with key areas of improvements, some of which were unique to their service, however common issues have been identified across the region as a whole.

The following areas have been identified as pressures in the system in the West Midlands:

- Workforce
  - Joint consultant posts to be considered where possible and this could include a thrombectomy regional rota
  - Upskilling of nursing workforce
  - Focus on therapy staffing, specifically speech and language therapy
- ESD and community rehabilitation
  - Commissioning of stroke specific community beds
  - Commissioning of ESD and/or community stroke teams
- Communication with the West Midlands Ambulance Service
  - A standardised regionally agreed pre-alert protocol is required
- Imaging
  - Access to the Regional Image Sharing Platform (RISP; developed by University Hospitals Birmingham NHS Foundation Trust)
- Repatriation following HASU and ASU acute stays
- Patients follow-up in the acute or primary care setting following an acute episode

## 9 Regional Recommendations

There are six key regional recommendations that the Clinical Network advises which have been identified following the aforementioned reviews.

### 1. Workforce

A network approach to the recruitment and rotas of Consultants, this would afford the opportunity for Consultants' to practice in a tertiary neuroscience centre despite permanent positions in a DGH, this may also encourage potential trainees into consistently vacant positions. This could be achieved with a regional thrombectomy

rota. Further investment and support for the upskilling of nursing staff and greater and more creative utilisation of advanced nursing roles, particularly in the frontline/acute setting.

## **2. ESD and community rehabilitation**

Commitment from commissioners is required to ensure equitable access to ESD and community rehab is achieved across the region. The development of robust pathways is a necessity.

## **3. West Midlands Ambulance Service**

The unwarranted variation in communications between the WMAS and emergency department and stroke teams could be improved with a regional agreed protocol, eliminating localised procedures. This could prompt a significant increase in pre-alerts for FAST positive patients.

## **4. Imaging**

Regional utilisation of the image sharing platform would ensure a standardised protocol could be implemented with imaging access available 7 days a week; regionals rotas developed and improved transfer times for thrombectomy-appropriate patients.

## **5. Repatriation following HASU and ASU acute stay**

A standardised regionally agreed protocol, with clear escalation to the Chief Operating/Executive Officers, will ensure timely and appropriate repatriation following treatment at one of the neuroscience centres.

## **6. Stroke patients' follow-up**

Develop and implement robust process for follow-up of patients at 6-weeks following an acute episode, including complex patients in the community.

## **10 Next Steps**

In order to support the aforementioned system-wide issues and ensure improvement plans are initiated the West Midlands CVD Clinical Network have established two

working groups and continue to support two additional working groups led by University Hospitals Birmingham NHS Foundation Trust and Health Education England, respectively. The objectives of each of these working groups have been agreed and reflect the following prerequisites that need to be addressed to support a sustainable reconfiguration of stroke services in the West Midlands:

**Workforce** - led by Health Education England and supported by the West Midlands Stroke STP Review Group; the Stroke STP Review group acts as an expert consultative body for the provision of stroke care across the region on behalf of the West Midlands STPs and will advise on wider system on issues regarding the development and delivery of stroke specific services for the population of the region. The group will agree regional protocols, policies and service configuration (see *appendix 11.4 for terms of reference*)

**Thrombectomy** – led by the Thrombectomy Working Group; the working group will advise on wider system issues regarding the development of a sustainable thrombectomy service for the population of the region (see *appendix 11.5 for terms of reference*). The group is chaired by the three thrombectomy centre clinical leads; Dr Indira Natarajan (University Hospital North Midlands NHS Trust), Dr Anthony Kenton (University Hospitals Coventry and Warwickshire NHS Trust) and Dr Don Sims (University Hospital Birmingham NHS Foundation Trust).

**ESD and community rehabilitation** – led by the ESD & Rehabilitation Working group; the group acts as an expert consultative body for the provision of ESD pathways and a strategy for increasing the percentage of patients discharged with ESD. It will advise on wider system issues regarding the provisions of community services for the stroke population of the region (see *appendix 11.6 for terms of reference*). The group is chaired by Dr Sissi Ispoglou, Stroke Clinical Lead (Sandwell and West Birmingham NHS Trust) & Carron Sintler, Consultant Physiotherapist (University Hospitals Birmingham NHS Foundation Trust/Birmingham Healthcare & Community Trust).

**West Midlands Ambulance Service** – communication regarding pre-alerts are being supported through the Stroke STP Review Group

**Radiology/Imaging** - led by Dr Johnathan Hopkin, Lead Interventional Radiologist at University Hospital Birmingham NHS Foundation Trust

**Repatriation following HASU and ASU acute stay** – led by the Clinical Network and the Stroke Expert Advisory Group

**Stroke patients' follow-up** – Led by the Clinical Network Thrombectomy/ESD & rehabilitation working groups; processes and procedures for 6 week follow up will be explored

These areas have also been highlighted at the STP Clinical Reference Group for support. The CVD Clinical Network has offered support to all sites following on from the clinical review visits; action logs and recommendations will be followed up including future site visits in 6 months' time.



## 11 Appendices

### 11.1 West Midlands Trusts compliance against Stroke 7DS standards

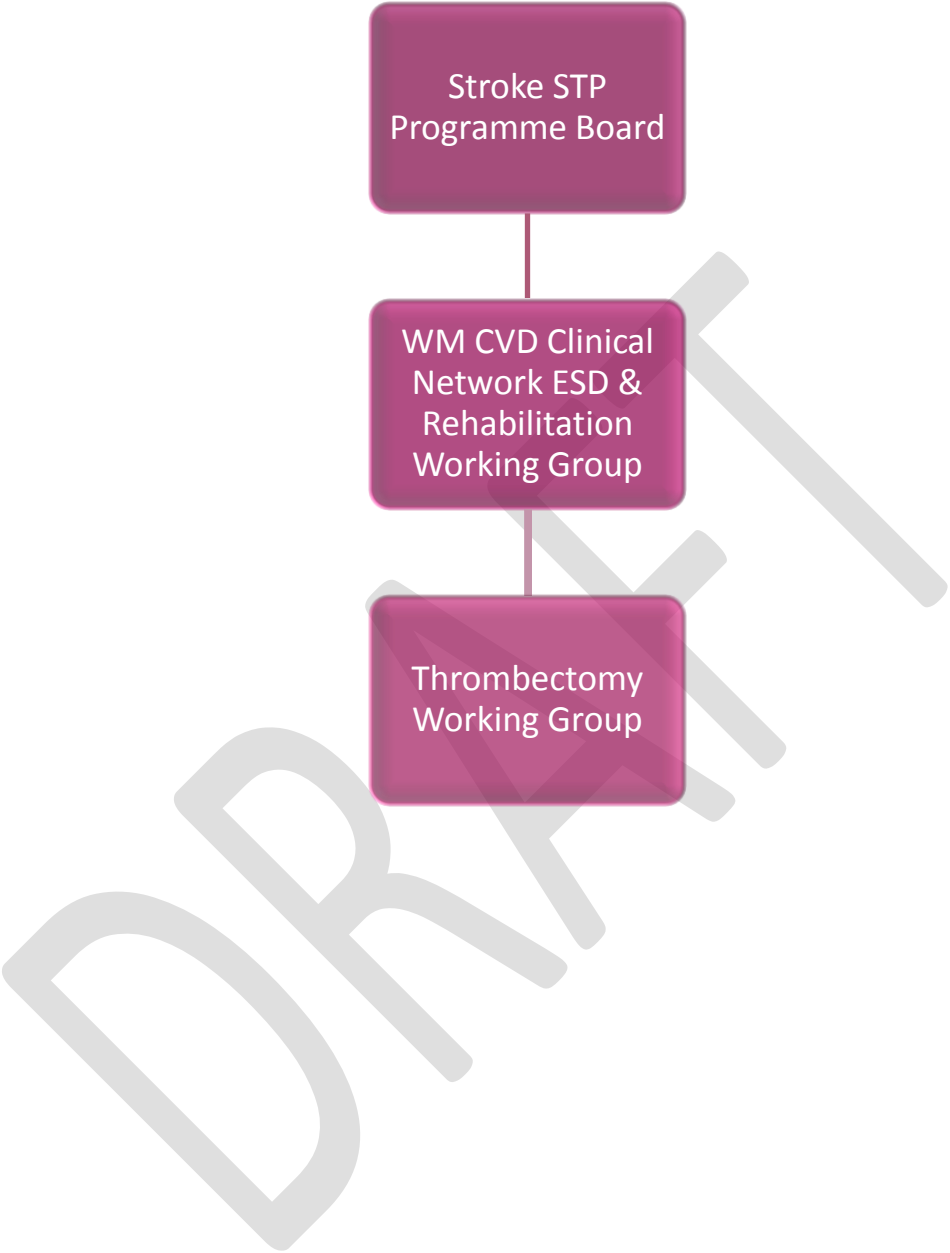
Table 1: Compliance against 7DS four priority standards across the West Midlands in February 2018					
STP	Trust	Standard 2: Thorough clinical assessment of an emergency admission by a stroke consultant within 14 hours of arrival	Standard 5: 7 day access to diagnostic services (testing and reporting) for inpatients and high risk TIA and minor strokes	Standard 6: Access to consultant-delivered interventions. Patients should receive urgent interventions within a timeframe that does not reduce the quality of their care (safety, experience and efficacy).	Standard 8: Ongoing consultant-directed review. Daily ward rounds and delegation: Every patient in an acute inpatient bed should be seen face to face by a consultant every day (and twice daily in high-dependency areas)
Herefordshire and Worcestershire	Worcestershire Acute Hospitals NHS Trust	Not assured	Assured	Assured	Not assured
	Wye Valley NHS Trust	Not assured	Assured	Not assured	Not assured
Black Country and West Birmingham	The Dudley Group NHS Foundation Trust	Assured	Assured	Assured	Assured
	Sandwell and West Birmingham Hospitals NHS Trust	Assured	Not assured	Assured	Assured
	The Royal Wolverhampton NHS Trust	Assured	Assured	Assured	Assured
Birmingham and Solihull	Heart of England Foundation Trust	Assured	Assured	Assured	Assured
	University Hospitals Birmingham NHS Foundation Trust	Assured	Assured	Assured	Assured
Coventry and Warwickshire	University Hospital Coventry and Warwickshire NHS	Assured	Not assured	Not assured	Assured

Shropshire, Telford & Wrekin	Trust				
	Shrewsbury and Telford NHS Trust	TBC	Assured	Assured	Assured
Staffordshire & Stroke on Trent	University Hospitals North Midlands NHS Trust	Assured	Assured	Assured	Assured

DRAFT

## 11.2 Governance Structure

Stroke STP Programme Board and Stroke Expert Advisory Group (EAG)



# 11.3 Interview Template & Outline of Clinical Review Visits

## Clinical Review visit for Acute Stroke 7 Day Service – Outline of Visit

January - April 2018  
Visitors: Dr Indira Natarajan, Victoria Millward, Jodie Powell & Sarah Rogers (West Midlands CVD Clinical Network)  
Duration of visit: 2 hours

### Meeting Agenda

- 1 7 day ward round
- 2 MDT members presence
- 3 HASU ward round
- 4 Weekend TIA working
- 5 Weekend thrombectomy services
- 6 Weekend repatriation
- 7 Imaging facilities
- 8 Community stroke team covering early support and discharge
- 9 Action plan development

*Please note, the visits will be audio recorded for the purpose of writing accurate minutes only. Recordings will be deleted once minutes are complete.*

# Terms of reference

*NHSE West Midlands STP Stroke Review Working Group -  
Supporting the delivery of quality stroke care for STPs*

DRAFT



**Document filename: NHSE Stroke West Midlands Review Group - Terms of reference**

<b>Directorate / programme</b>	Medical	<b>Project</b>	NHSE Stroke West Midlands Review group
<b>Document reference</b>			
<b>Programme manager</b>	Victoria Millward	<b>Status</b>	DRAFT
<b>Owner</b>	Kiran Patel	<b>Version</b>	2
<b>Author</b>	Victoria Millward	<b>Version issue date</b>	[Publish Date]

## Document management

### Revision history

Version	Date	Summary of changes
0.1	18/09/17	Initial draft for comment to Medical Director
0.2	19/10/17	STP Executives Group

### Reviewers

This document must be reviewed by the following people:

Reviewer name	Title/responsibility	Date	Version
Kiran Patel	Medical Director NHSE WM	18/09/17	1
Victoria Millward	Head of CVD Clinical Network WM	18/09/17	1
NHSE West Midlands Stroke Review Group	Senior leadership	19/09/17	1

### Approved by

This document must be approved by the following people:

Name	Signature	Title	Date	Version
Kiran Patel		Medical Director	18/09/17	2
STP Executives Group				
Accountable Officers				

## Document control

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### Outline Terms of Reference

#### NHSE Stroke West Midlands Review Group

##### 1. Background

There are approximately 152,000 strokes in the United Kingdom every year and one in five strokes are fatal. Mortality rate has halved since 1993, partly due to better control of risk factors and partly due to better understanding and delivery of best practice in acute care. The prevalence of stroke is expected to rise as a result of underlying risk factors at a population level as well as demographic change in the population. In 2007, the Department of Health set out a national strategy for stroke with expected standards of care. It proposed the development of hyper-acute centres in a 'hub and spoke model' supported by an increase in the range of clinicians available to provide specialist acute input (The Kinds Fund).

The Health and Social Care Act 2012 promulgated the concept of clinically led commissioning and led to the development of Clinical Commissioning Groups. Independent clinical advice to commissioners, providers and the wider health and social care system is essential to coach, catalyse, challenge and where appropriate, constrain developments in order to meet the needs of patients and populations. The development of a Stroke Services review, led by clinicians, provides an opportunity for the system to benefit from high quality advice. Whilst the Stroke review is invaluable in the support it will offer to the system, ultimately commissioners remain accountable for the commissioning of services and providers are accountable for the quality of service delivery. We aspire however, to deliver a review which builds upon what the London stroke review did for the London population, for residents of the West Midlands.

## 2. Purpose

The WM Stroke review group will act as an expert consultative body for the provision of stroke care across the region on behalf of the West Midlands STPs and will advise on wider system on issues regarding the development and delivery of stroke specific services for the population of the region. It will aspire to guide quality improvement along the entire stroke pathway, from prevention, through treatment to rehabilitation.

## 3. Governance

The WM Stroke Review Group will be managed and supported by NHS England (West Midlands) CVD Clinical Network on behalf of the West Midlands STPs. The Chair will report to the West Midlands STP Chief Executives forum.

## 4. Membership

The core membership of the WM Stroke Review Group will comprise:

<b>Membership role</b>
Independent Chair, NHS England Medical Director
Co-Chair, National Clinical Director
CVD Network: Clinical Director, Head of Network & Programme management support
NHS Improvement
Specialised commissioners
STP Stroke leads
Public Health England
Health Education England
West Midlands Ambulance Service
Patient and 3 <sup>rd</sup> sector Groups e.g. Stroke Association
West Midlands Clinical Senate
Data and Analytic Support (CSU)

Quoracy to be determined

## 5. Deputies

By agreement of the Chair.

## 6. Voting Members

All members as described in the Membership above.



## **7. Frequency of Meetings**

The WM Stroke Review group will meet at a frequency required by the programme of work defined at the outset. At least 8 weeks advance notice shall be provided when organising meetings in order to enable clinicians to reschedule clinical commitments and attend. Initially, it will convene monthly.

Urgent matters arising between meetings: In the event of an urgent matter arising between meetings that cannot wait for resolution until the next scheduled meeting the Chair in consultation with the Network Manager will convene a virtual or real meeting with at least 2 other members to take such action as is necessary. The minuted rationale for and outcome of the extraordinary meeting will be conveyed to the group membership and to the Chair.

## **8. Core Activities**

It is expected that the core activities of the Review group will include:

- Identifying current proposals which have been robustly determined to date i.e. recent reviews and proposals in Black Country and Coventry and Warwickshire.
- Identifying and defining national priorities and policies within the clinical programme area. e.g. 7DS and thrombectomy.
- Quality: Defining what good quality looks like in the specific clinical area. What are the metrics which enable measurement of quality? How and where do we collate these metrics and how should we utilise them to improve quality and outcomes? The Review will Identify current performance and outcomes, with a view to mitigating risk and suboptimal performance and outcome. Thus promoting the development and delivery of best practice, evidenced based care, with an emphasis on ensuring equitable, high quality service provision and a seamless transition in care across the whole patient pathway
- Providing support, advice and recommendations to commissioners (NHS England and STPs/Clinical Commissioning Groups) to help meet the NHS Constitution
- Horizon scanning innovation and transformation opportunities to support commissioning and quality improvement

- Reviewing new or existing clinical guidelines, policies and procedures, their impact and challenges to implementation at scale across the West Midlands
- Reviewing current service configuration and workforce plans to meet current and future need
- Support STP's to deliver against the Urgent and Emergency Care 7 day Service Standards for the delivery of stroke care.

## **9. Communication**

It is expected that the membership, remit and minutes of the group will be shared with the STP Executive, NHSE DCO team and hence Regional Office of NHS England and upon request, any constituent organisations.

## **10. Conflict of Interests**

All conflict of interests (pecuniary and non pecuniary) must be declared and notified to the Chair in advance of any meetings. Members will be asked to withdraw by the Chair from any items that involve a conflict of interest.

## **11. Review**

These terms of reference will be reviewed annually or sooner if required.

Membership of the group will be reviewed and appointed to annually in line with these Terms of reference

## **Annexe A: Stroke working group priorities/Recommendations**

1. Generate options for thrombectomy provision across W Mids
2. Generate options for HASU configuration across W Mids
3. 7 day services for stroke – map current provision and identify areas of need/reconfiguration using The Kings Fund Reconfiguring Stroke Care Guidance; The [reconfiguration of clinical services report](#) provides new insights into the drivers of reconfiguration and the underpinning evidence. It builds on a major analysis, commissioned by the National Institute for Health Research (NIHR), of reviews of service reconfigurations conducted by the National Clinical Advisory Team (NCAT).
4. Concentrate specific advice for stroke service provision at STP level in order to add support to STPs as required.

# Terms of Reference

NHS England West Midlands Thrombectomy Working Group  
*Supporting the delivery of the Stroke STP working group*

DRAFT



## Document management

Document filename: NHSE Stroke West Midlands Review Group - Terms of reference

<b>Directorate / programme</b>	Medical	<b>Project</b>	NHSE West Midlands Thrombectomy Working Group
<b>Document reference</b>			
<b>Programme manager</b>	Victoria Millward	<b>Status</b>	DRAFT
<b>Owner(s)</b>	Dr Indira Patel Dr Don Sims Dr Tony Kenton	<b>Version</b>	0.1
<b>Author</b>	Jodie Powell	<b>Version issue date</b>	

## Revision history

Version	Date	Summary of changes
0.1	25/05/2018	First draft
0.2	31/05/2018	Correction to Trust names

## Reviewers

This document must be reviewed by the following people:

Reviewer name	Title/responsibility	Date	Version
Dr Don Sims, Dr Tony Kenton, Dr Indira Natarajan	Clinical Leads	31/05/2018	
Victoria Millward	Head of CVD Network		

## Approved by

This document must be approved by the following people:

Name	Signature	Title	Date	Version
Dr Don Sims		Clinical Leads	31/05/2018	0.2
Dr Tony Kenton		Clinical Lead	31/05/2018	0.2
Dr Indira Natarajan		Stroke Clinical Director		
Victoria Millward		HoN- CVD		

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## **Outline Terms of Reference**

### **NHSE West Midlands Thrombectomy Working Group**

#### **11. Background**

Mechanical thrombectomy is an invasive procedure which is offered to patients suffering from an acute ischemic stroke. It is performed in a tertiary neurosciences centre, at present in the West Midlands this includes University Hospital North Midlands and University Hospital Birmingham, with University Hospital Coventry due to launch their service in 2019.

#### **12. Purpose**

The West Midlands Thrombectomy working group will act as an expert consultative body for the provision of a thrombectomy service across the region on behalf of the West Midlands STPs. It will advise on wider system issues regarding the development of a sustainable thrombectomy service for the population of the region.

#### **13. Governance**

The West Midlands Thrombectomy Working Group will be managed and supported by NHS England (West Midlands) CVD Clinical Network on behalf of the West Midlands STPs. The Clinical Lead(s) will report to the Stroke EAG and Stroke STP.

#### **14. Membership**

The core membership of the West Midlands Thrombectomy Working Group will comprise of:

<b>Membership role</b>
Stroke EAG: Clinical Leads
CVD Network: Head of Network and Senior Quality Improvement Manager
WMAS
Head of Radiology Department (Neuroradiologist)
Specialised Commissioning
CCGs

<b>Membership role</b>
SSNAP Data team
ESD working group representative

Quoracy to be determined

### **15. Deputies**

By agreement of the Chair.

### **16. Voting Members**

All members as described in the Membership above.

### **17. Frequency of Meetings**

The West Midlands Thrombectomy Working Group will meet at a frequency required by the programme of work defined at the outset. Initially the group will meet face-to-face with virtual meetings thereafter.

At least 6 weeks advance notice shall be provided when organising meetings in order to enable clinicians to reschedule clinical commitments and attend.

Urgent matters arising between meetings: In the event of an urgent matter arising between meetings that cannot wait for resolution until the next scheduled meeting the Chair in consultation with the Senior QI Manager (CVD Clinical Network) who will convene a virtual or real meeting with at least 2 other members to take such action as is necessary.

### **18. Core Activities**

Primary objectives to deliver the aforementioned purpose of the work group is to define and develop a regional unified pathway that encompasses a number of points:

- Identify clear clinical indications (with qualifiers around new potential research / indications).

- Imaging

Collaborate with the Regional Image Sharing Platform Clinical Lead to ensure accessibility to the platform to allow for real-time review of images to facilitate decision making for patients appropriate for thrombectomy.

- Pathway into and out of the thrombectomy service

Determine and develop the pathway for patients going through the thrombectomy service and develop the pathway for repatriation/transfer (including escalation process) to referring centre or on-ward rehabilitation destination. Agree expectations

for referring centres, including Imaging (modality and availability to see) and transfer times. Expectations of accepting trusts (accompanied patients / pumps running / catheters in place etc.)

- Collaborate with WMAS to determine the appropriate categorisation for thrombectomy-appropriate stroke patients to ensure timely admission into neuroscience centre.
- Agree a regional consensus for the process for Consultant-to-Consultant referral process, both in-hours and out-of-hours practice. Determine site specific favoured centre (with back-ups) to build a relationship and prevent having to call every centre in the region every time
- Develop an SOP for the inputting of data into the SSNAP database for patients transferred out of the tertiary centre where the thrombectomy is performed.
- Agree a standard process for the 6-month follow-up of patients following a thrombectomy.
- Clarify the current/proposed thrombectomy tariff – transition point onto the stroke pathway tariff. Working with CCG's and the national team to determine to correct uplift percentage for the thrombectomy patients to ensure a financially viable service is developed.

## **19. Communication**

Upon request it is expected that the membership, remit and minutes of the group will be shared with the STP group, NHSE DCO team and hence Regional Office of NHS England and any constituent organisations.

## **20. Conflict of Interests**

All conflict of interests (pecuniary and non-pecuniary) must be declared and notified to the Chair in advance of any meetings. Members will be asked to withdraw by the Chair from any items that involve a conflict of interest.

## **11. Review**

These terms of reference will be reviewed annually or sooner if required.

Membership of the group will be reviewed and appointed to annually in line with these Terms of reference



## 11.6 ESD & Rehabilitation Working Group Terms of Reference



**West Midlands**  
Clinical Networks

# Terms of Reference

NHS England West Midlands ESD & Rehabilitation Working Group  
*Supporting the delivery of the Stroke STP Working Group & Stroke Expert  
Advisory Group work programme*



**Document filename: NHSE Stroke West Midlands Review Group - Terms of reference**

<b>Directorate / programme</b>	Medical	<b>Project</b>	NHSE West Midlands ESD & Rehabilitation Working Group
<b>Document reference</b>			
<b>Programme manager</b>	Victoria Millward	<b>Status</b>	DRAFT
<b>Owner</b>	Carron Sinter	<b>Version</b>	0.1
<b>Author</b>	Sarah Rogers	<b>Version issue date</b>	[Publish Date]

## Document management

## Revision history

Version	Date	Summary of changes
0.1		

## Reviewers

This document must be reviewed by the following people:

Reviewer name	Title/responsibility	Date	Version
Carron Sintler	Project Lead		
Victoria Millward	Head of CVD Clinical Network WM		
Dr Sissi Ispoglou	Clinical Lead stroke physician		
NHSE West Midlands ESD & Rehabilitation Working Group			

## Approved by

This document must be approved by the following people:

Name	Signature	Title	Date	Version
Dr Sissi Ispoglou		Clinical Lead		
Dr Kiran Patel		Medical Director NHSE WM		
Stroke EAG				

## Document control

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## Outline Terms of Reference

### NHSE West Midlands ESD & Rehabilitation Working Group

#### 21. Background

Early supported discharge (ESD) and rehabilitation are vital parts of the stroke care pathway that enable patients to increase their independence and function through access to various specialist therapeutic interventions. Currently in the West Midlands there is inequitable care and variable access to services both in the acute and community sectors.

#### 22. Purpose

The West Midlands ESD & Rehabilitation working group will act as an expert consultative body for the provision of ESD pathways and a strategy for increasing the percentage of patients discharged with ESD. It will advise on wider system issues regarding the provisions of community services for the stroke population of the region.

#### 23. Governance

The West Midlands ESD & Rehabilitation Working Group will be managed and supported by NHS England (West Midlands) CVD Clinical Network on behalf of the West Midlands STPs. The Clinical Lead will report to the Stroke Expert Advisory Group (EAG) and Stroke STP Review Group.

#### 24. Membership

- The core membership of the West Midlands ESD & Rehabilitation Working Group will comprise of:
  - Carron Sintler - Project Lead
  - Dr Sissi Ispoglou - Clinical lead
  - Sarah Rogers - Project Manager & Project Support

- Core specialist professions from each STP.
  - Occupational therapy
  - Physiotherapy
  - Speech and language therapy
  - Dietitian
  - Psychology
  - Stroke medicine
  - Social services

Other professional groups such as pharmacy, ophthalmology and general practice, for example, will be approached where expert opinions are required.

Quoracy to be determined

## **25. Deputies**

By agreement of the Chair.

## **26. Voting Members**

All members as described in the Membership above.

## **27. Frequency of Meetings**

The West Midlands ESD & Rehabilitation Working Group will meet at a frequency required by the programme of work defined at the outset. Initially the group will meet face-to-face on a monthly to bi-monthly basis with fortnightly virtual meetings if required.

At least 6 weeks advance notice shall be provided when organising meetings in order to enable clinicians to reschedule clinical commitments and attend.

Urgent matters arising between meetings: In the event of an urgent matter arising between meetings that cannot wait for resolution until the next scheduled meeting the Chair in consultation with the CVD Clinical Network will convene a virtual or real meeting with at least 2 other members to take such action as is necessary.

## **28. Core Activities**

Primary objectives to deliver the aforementioned purpose of the work group include:-

- Development of a proposed model of ESD across the West Midlands
- Proposed pathway for rehabilitation & community pathways across the West Midlands (STP specific)
- Produce a good practice model for increasing ESD

Proposed pathways for non-ESD patients, for example, severe or highly complex patients requiring in-patient rehabilitation, or end of life care

### **29. Communication**

Upon request it is expected that the membership, remit and minutes of the group will be shared with the STP group, Stroke EAG, NHSE DCO team and hence Regional Office of NHS England and any constituent organisations.

### **30. Conflict of Interests**

All conflict of interests (pecuniary and non-pecuniary) must be declared and notified to the Chair in advance of any meetings. Members will be asked to withdraw by the Chair from any items that involve a conflict of interest.

### **11. Review**

These terms of reference will be reviewed annually or sooner if required. Membership of the group will be reviewed and appointed to annually in line with these Terms of reference