STROKE QIA SUPPORTING EVIDENCE

(Q11 & Q13) Access to Services:
Post implementation of the redesigned Stroke pathway for UHDB patients, ensuring timely access to Hyperacute Stroke Services for the populations of East Staffs CCG and South East Staffs CCG is a key quality indicator.

Currently patients residing in East Staffs CCG and associate commissioning areas of Southern Derbyshire CCG, and South East Staffs CCG exhibiting symptoms of stroke are conveyed to and cared for by Queens Hospital Burton. It is acknowledged that there is a small cohort of patients from the South East Staffs locality whose conveyance travel time will increase due to centralising the HASU at Royal Derby (table below). However, it also needs to be acknowledged this patient population is able to access Hyperacute Stroke services from other Acute providers, currently commissioned by the CCGs within nationally recognised best practice travel conveyance times will continue to exist.

Rationale:
The Full Business Case (FBC) and the Patient Benefit Case (PBC) for the merger of Royal Derby Hospital and Queens Hospital Burton into the newly formed University Hospitals of Derby & Burton (UHDB), and national opinion as expressed by the National Director for Stroke, is that the threshold for a viable HASU is 600 admissions per year. Historically BHFT, and the now QHB are only partially compliant with the specifications for Hyper acute stroke services (NHS Midlands & East specification). It was therefore reasonably concluded, and expressed within that the stroke services for QHB could not continue in its current form.

Centralisation of hyper-acute stroke care is demonstrated to improve health outcomes, including mortality, by increasing thrombolysis rates, and possibly through the concentration of expertise and treatment of higher volumes of patients. Current national KPIs for patients receiving thrombolysis are within 4 hours of incident. The slightly extended travel conveyance times will not increase so significantly this 4 hour window is impacted on.

The redesigned pathway relocating HASU exclusively to the RDH site is also key in ensuring a further number of opportunities to improve access to interventions related to stroke, its diagnosis and related interventions such as vascular procedures. On admission to RDH the patient will have access to flow through scan and CT, a 24/7 Stroke physician and access to on site vascular teams.

WMAS & EMAS have been a key stakeholder in the wider merger consultation process and continues to be engaged in the proposed changes to the Stroke pathway.

As virtually all users of the new UHDB service will be conveyed to hospital by ambulance under blue light conditions, patients will be able to readily access the service offered in all acute providers commissioned by ESCCG & SESCCG, with UHDB RDH site being the identified HASU.

There is, however, likely to be some increased travel distance for some relatives and friends of the patient in accessing Royal Derby to visit the patient, depending on where they live in relation to the geographical location of the hospital, and in the majority of cases, it would be for an average of 3 days duration, where after the patient would be conveyed to either their place of residence to receive reablement services or, if medically unfit, receive in-patient rehabilitation in their local area, closer to home: Queens Hospital Burton, London Road, Sir Robert Peel, Tamworth or Samuel Johnson Lichfield.

All subsequent patient transfers post 3 days (or sooner if clinically appropriate and safe) will be subject to clinically led assessment and via a patient repatriation policy.

(Q11) Has evidence based practice been utilised?

Evidence 1

As part of the NHS England 7 day services, a number specialist services – including stroke thrombolysis - are expected to meet the four priority clinical standards. RDH already complies with all four priority standards in stroke medicine.

(https://www.england.nhs.uk/wp-content/uploads/2017/09/seven-day-service-clinical-standards-september-2017.pdf)

Professor Sir Bruce Keogh, the NHS Medical Director, supported by the Academy of Medical Royal Colleges, identified four of these standards which if met would be most likely to have the greatest impact on reducing variation in mortality risk.

These Priority Clinical Standards are:

- **Standard 2: Time to Consultant Review**
- **Standard 5: Access to Diagnostics**
- **Standard 6: Access to Consultant-directed Interventions**
- **Standard 8: On-going Review**

Evidence 2

The challenges faced by BHFT's Stroke service were recognised by ESCCG in its Delivery of Change Plan for 2012 – 2016. This plan included a Commissioning intention to develop appropriate stroke models of care for the East Staffordshire area.
(http://www.eaststaffsbc.gov.uk/sites/default/files/docs/planning/planningpolicy/lpevidence/health/EastStaffsBoroughDeliveryofChangePlan2012-16.pdf)

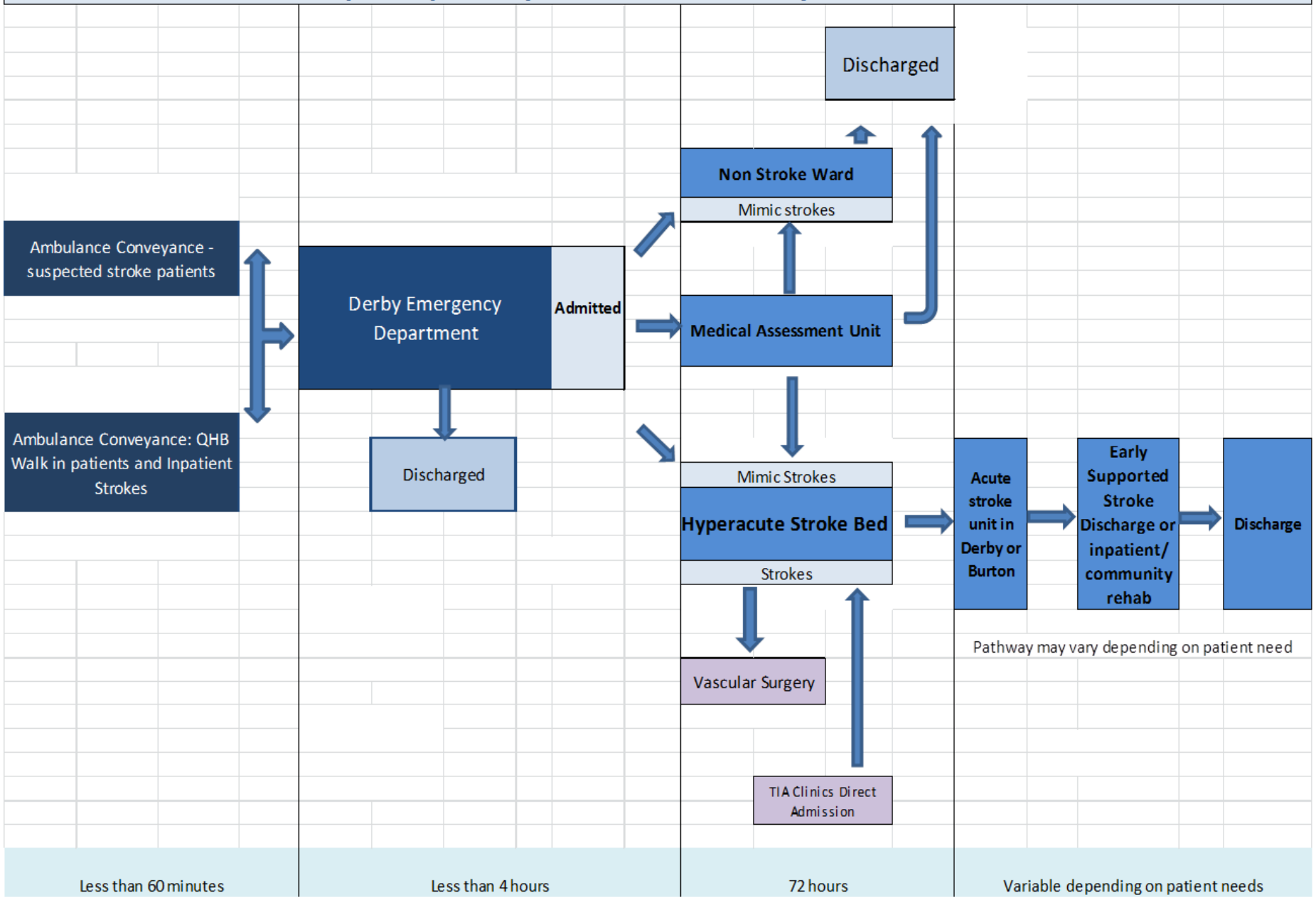
WMAS Emergency Transports from Staffordshire to Royal Derby & Burton (by originating postcode area)								
	Destination							
	ROYAL DERBY HOSPITAL			QUEENS HOSPITAL BURTON				
Postcode Area	Transport Count	Avg Dur Left Scene to At Hosp	Avg Dur Left Scene to At Hosp (hh:mm:ss)	Transport Count	**Stroke Transport Count (Based on 6%)**	Avg Dur Left Scene to At Hosp	Avg Dur Left Scene to At Hosp (hh:mm:ss)	**Minutes Difference between traveling to RDH vs QHB**
DE13	414	1,224.90	00:20:25	4,994	**300**	639.9	00:10:40	00:09:45
ST14	255	1,816.90	00:30:17	1,942	**117**	1,631.60	00:27:12	00:03:05
DE6	213	2,135.00	00:35:35	198	**12**	1,245.40	00:20:45	00:14:50
DE14	153	1,179.60	00:19:40	5,493	**330**	473.9	00:07:54	00:11:46
DE15	99	1,464.10	00:24:24	2,901	**174**	735.8	00:12:16	00:12:08
WS13	94	1,826.50	00:30:26	4,476	**269**	1,495.20	00:24:55	00:05:31
ST10	46	2,674.10	00:44:34	12	**1**	2,344.20	00:39:04	00:05:30
WS15	35	2,056.10	00:34:16	2,335	**140**	1,972.90	00:32:53	00:01:23
WS14	31	1,808.50	00:30:08	998	**60**	1,538.90	00:25:39	00:04:29
WS7	18	2,455.70	00:40:56	1,331	**80**	2,085.10	00:34:45	00:06:11
SK17	15	3,418.00	00:56:58				00:00:00	-
ST13	13	2,949.90	00:49:10				00:00:00	-
B79	13	1,858.40	00:30:58	645	**39**	1,821.70	00:30:22	00:00:36
B77	6	3,090.50	00:51:31	387	**23**	2,105.70	00:35:06	00:16:25
B78	6	2,198.30	00:36:38	297	**18**	1,940.60	00:32:21	00:04:17
SK11	1	3,511.00	00:58:31				00:00:00	-
ST11	1	1,831.00	00:30:31				00:00:00	-
ST15	1	2,396.00	00:39:56				00:00:00	-
ST4	1	2,059.00	00:34:19				00:00:00	-
ST16			00:00:00	2	**0**	3,602.50	00:00:00	-
ST17			00:00:00	2	**0**	2,314.50	00:38:34	-
ST18			00:00:00	19	**1**	2,550.90	00:42:31	-
WS11			00:00:00	22	**1**	2,137.20	00:35:37	-
WS12			00:00:00	24	**1**	2,350.30	00:39:10	-
WS9			00:00:00	1	**0**	1,896.00	00:31:36	-
N/V	1	1,186.00	00:19:46	54	**3**	1,022.20	00:17:02	00:02:44
Grand Total	**1,416**	**1,676.60**	**00:27:57**	**26,133**	**1,568**	**1,139.30**	**00:18:59**	**00:08:58**

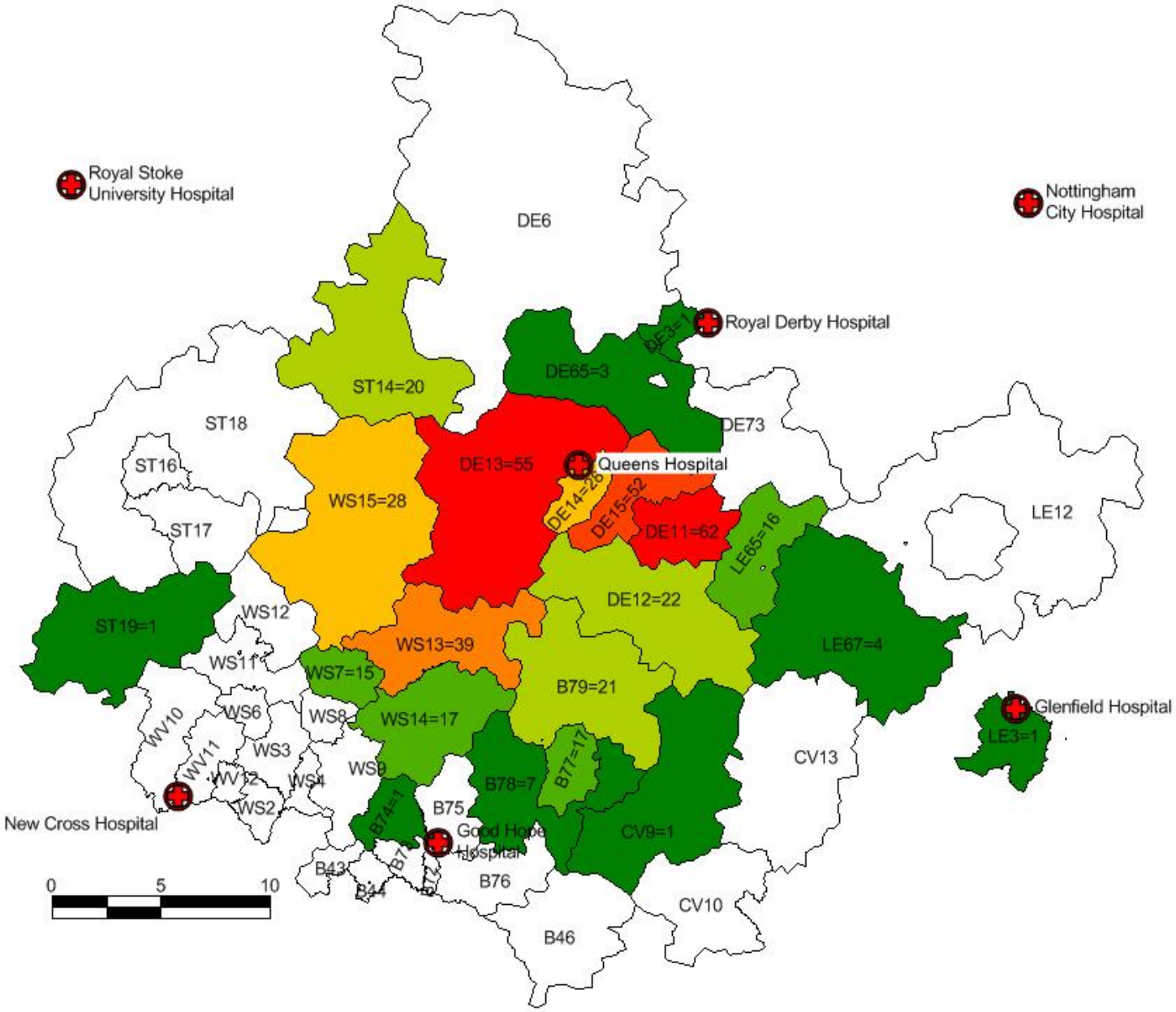
The average ~9 minute difference between the 2 sites is relatively small. The hub and spoke models in London and Manchester have shown improved outcomes (and they will have had the same issues with increased transportation time from further afield) – i.e. this change in model is backed up by evidence and guidance.

Also please note outlier postcodes such as SK11 from which only 1 patient was taken to RDH is likely to skew data to make time taken to RDH seem artificially higher, thus, making the actual travel time differences even smaller.

NHS
University Hospitals of Derby and Burton
NHS Foundation Trust

Proposed pathway for Burton and Derby Stroke Services




Royal Stoke University Hospital
Nottingham City Hospital
Royal Derby Hospital
Queens Hospital
Glenfield Hospital
New Cross Hospital
Good Hope Hospital
DE6
DE3=1
DE65=3
ST14=20
ST18
DE73
ST16
DE13=55
DE14=28
DE15=52
DE11=62
WS15=28
ST17
LE12
LE65=16
DE12=22
ST19=1
WS12
WS13=39
LE67=4
WS11
WS7=15
B79=21
WS14=17
WV10
WS6
WS8
LE3=1
WS3
WV11
WS9
B77=17
CV13
WV12
WS4
B78=7
WS2
B74=1
B75
CV9=1
B43
B76
B44
CV10
B46
0
5
10