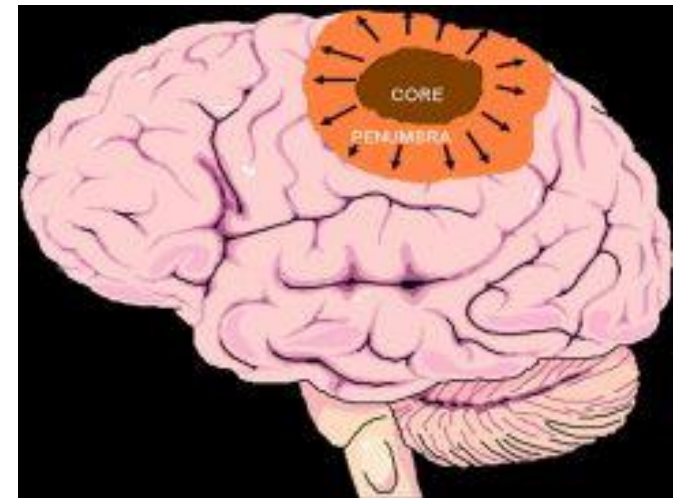
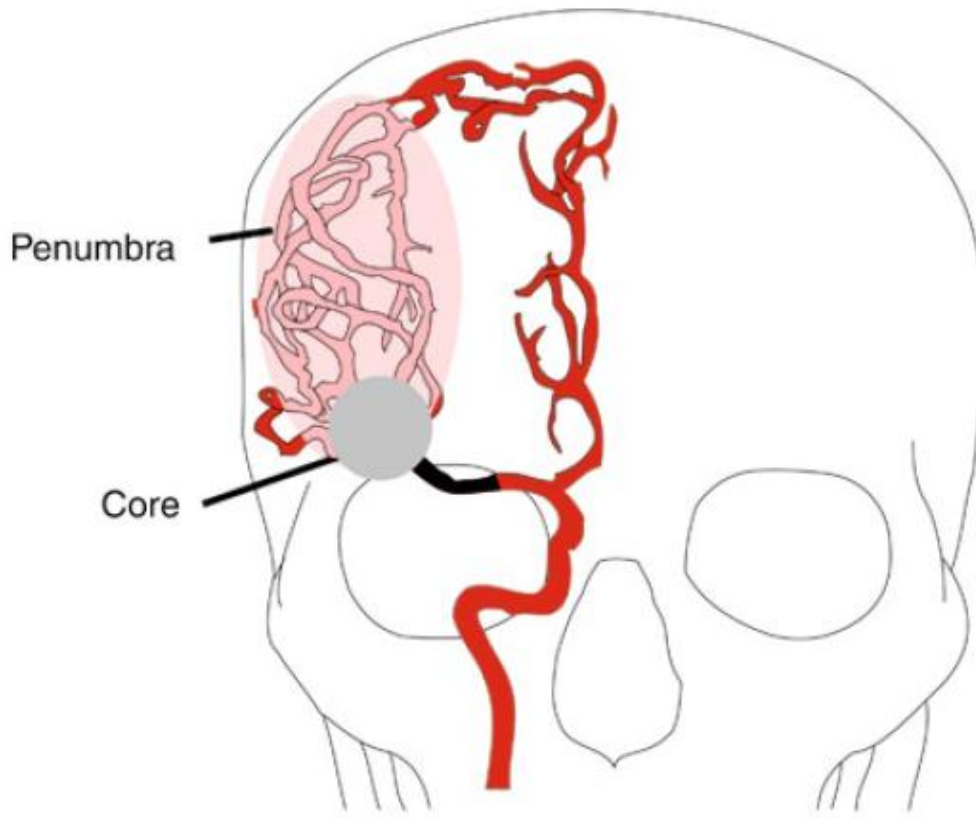


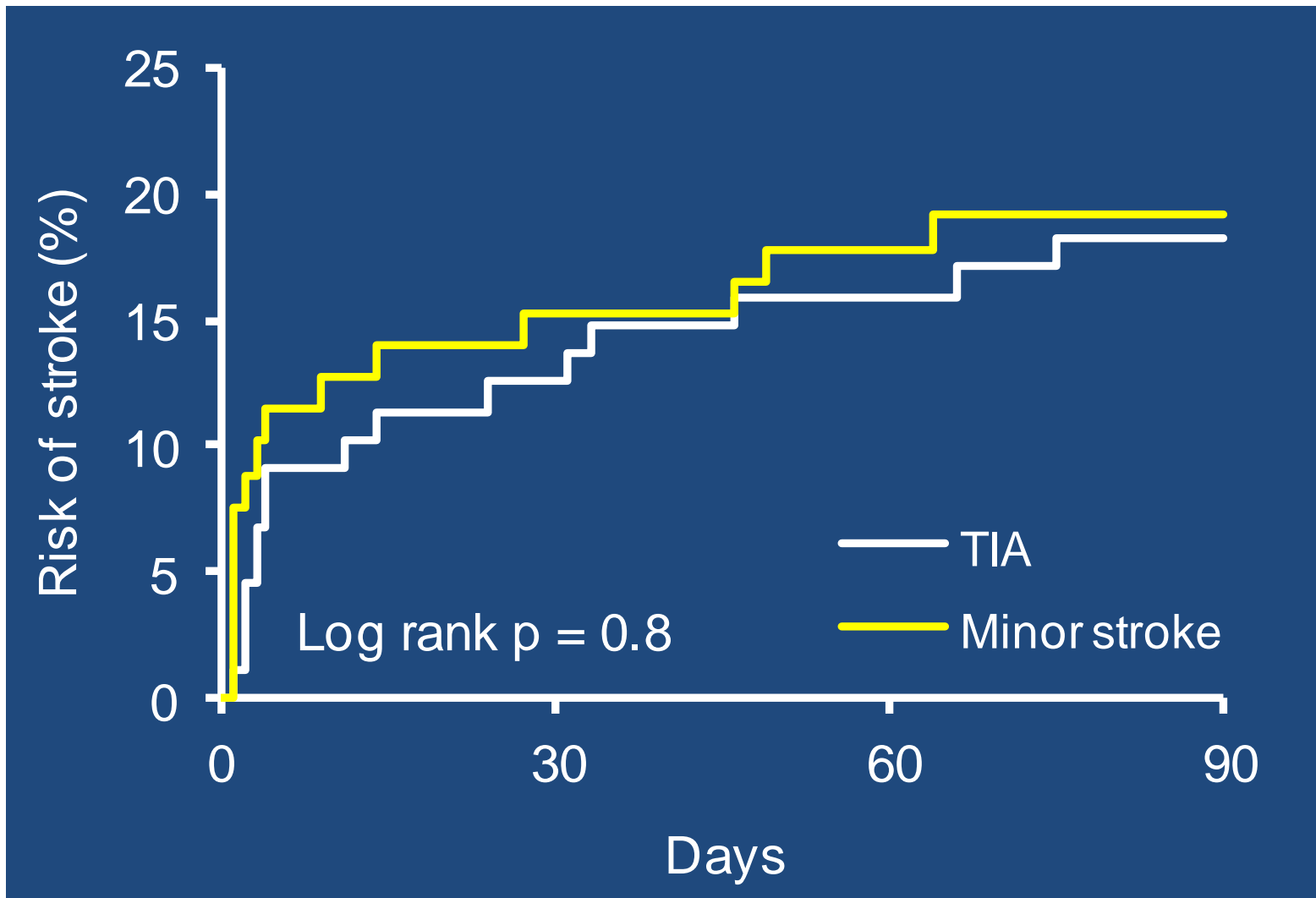
Dr Matthew Burn

Stroke Consultant BHT

Thames Valley SCN Stroke Lead

A stroke evolves over several hours – it is a dynamic situation

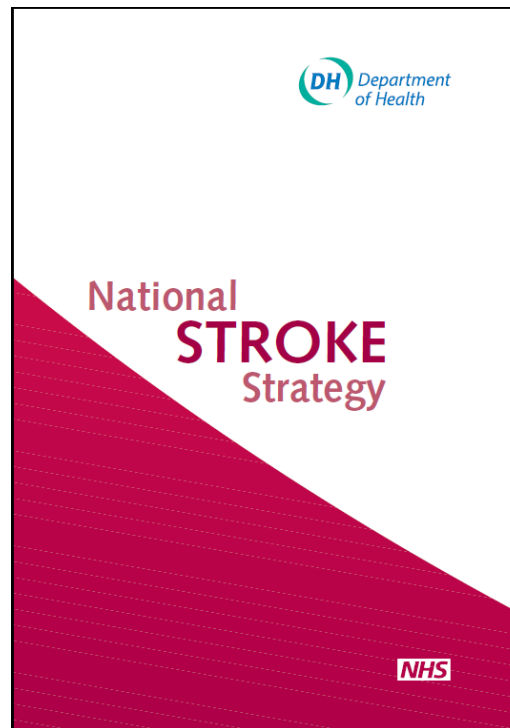




QM7. Urgent response

Marker of a quality service

- All patients with suspected acute stroke are immediately transferred by ambulance to a receiving hospital providing hyper-acute stroke services (where a stroke triage system, expert clinical assessment, timely imaging and the ability to deliver intravenous thrombolysis are available throughout the 24-hour period).



2007

33. The majority of stroke patients will require high-dependency care on an acute stroke unit for the first 24 hours of the illness. Most stroke progression occurs within the first 24 hours and so prompt access to an acute stroke unit is needed. Effective early management of stroke will reduce the need for intensive care beds. However, a small proportion of patients will require intensive care during the duration of their hospital admission.
34. Most hospitals now have a stroke unit, and the challenge is both to bring all units up to the standard of the best and to develop some of these to provide hyper-acute services.

Stroke networks include all healthcare organisations involved in the provision of services, for example acute trusts, ambulance trusts and primary care trusts. Networks make the most effective use possible of resources and expertise.

The average district general hospital will not have consultants with a full range of expertise in all the sub-disciplines available around the clock, and it would be wasteful for all hospitals to invest in high-tech facilities which were only used for a small number of people. Provision of hyper-acute stroke services is one area where networks serving a population of between 500,000 and two million can help to shape the most appropriate pattern of service for local needs (see Chapter 4, 'Working together').


The “Manchester model”

- Designed to deliver a thrombolysis (clot-busting) service to a whole population, leaving other patients going to a local hospital.
- All patients with suspected stroke who are within 4 hours of onset are taken to a Hyperacute Stroke Unit (HASU), while patients over 4 hours from onset are taken to the local Stroke Unit.
- This is what we have had in Thames Valley since 2011, with Wycombe working in partnership with Wexham Park.

The “London model”

- In this model a HASU is defined as a unit that takes all patients with stroke for the first 72 hours of their care, regardless of whether are potentially eligible for thrombolysis.
- One feature of such units is a high volume of patients. This is associated with effective processes of care, and allows investment in augmented levels of staffing.
- A national consensus that if possible patients should be admitted to units seeing between 600-1500 patients a year.

Impact of centralising acute stroke services in English metropolitan areas on mortality and length of hospital stay: difference-in-differences analysis

 OPEN ACCESS

Stephen Morris *professor of health economics*¹, Rachael M Hunter *senior research associate*², Angus I G Ramsay *senior research associate*¹, Ruth Boaden *professor of service operations management*³, Christopher McKeivitt *reader*⁴, Catherine Perry *research associate*³, Nanik Pursani *patient representative*⁵, Anthony G Rudd *professor of stroke medicine*⁶, Lee H Schwamm *professor of neurology*⁷, Simon J Turner *senior research associate*¹, Pippa J Tyrrell *professor of stroke medicine*⁸, Charles D A Wolfe *professor of public health medicine*^{4,9}, Naomi J Fulop *professor of healthcare organisation and management*¹

BMJ 2014;349:g4757 doi: 10.1136/bmj.g4757 (Published 5 August 2014)

Significant decline in risk adjusted mortality at 3, 30, and 90 days in London.

In both areas there was a significant decline in risk adjusted length of stay.

Data from SINAP over the same period showed that more patients in London received care that was compliant with care processes (Manchester was similar to the rest of England).

User Experience of a Centralized Hyperacute Stroke Service

A Prospective Evaluation

Barry Moynihan, MD; Selina Paul, BSc; Hugh S. Markus, FRCP

Background and Purpose—Centralizing hyperacute stroke unit (HASU) care services allows improved access to thrombolysis but could be associated with worse patient experience, particularly when early repatriation to a local stroke recovery unit occurs as this may result in discontinuity of care. A centralized model of care was introduced in London, United Kingdom, with 8 HASUs providing acute care for the whole 8.3 million population, with repatriation on day 3 to a local stroke recovery unit. The patient and carer experience of this model of care has not been previously reported.

Methods—We undertook a prospective observational study of the new model of care in the South West London sector. Patient and carer experiences were evaluated using a modified Picker Questionnaire. Separate questionnaires were used for patients discharged directly home from the HASU, those repatriated to local stroke recovery units, and for carers of patients admitted to the HASU.

Results—Despite moving from a selected to nonselected admission pattern, thrombolysis rates increased from 6% to 9%. High satisfaction rates were reported among both patients and carers. Patients discharged directly home had higher satisfaction levels than those requiring repatriation to their local stroke unit, who were older and had more severe stroke. A total of 47% of carers expressed anxiety over the repatriation from the HASU back to the local stroke recovery unit, but few patients and carers reported an impact of this move on patient recovery.

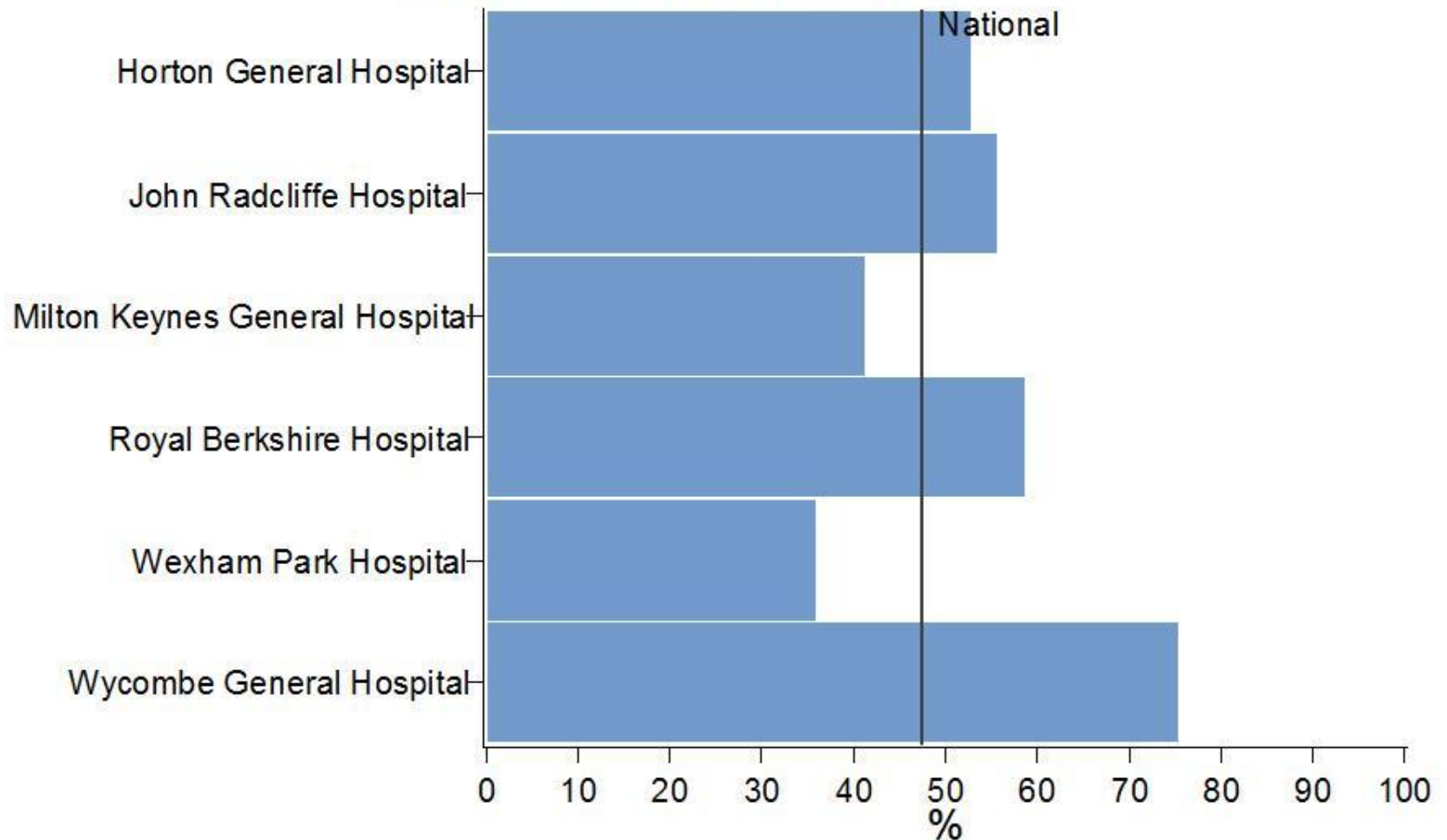
Conclusion—Centralized HASU care is associated with good levels of patient and carer satisfaction. (*Stroke*. 2013;44:2743-2747.)



2014

- In some services there is a compelling case for greater concentration of care. In these services there is a strong relationship between the number of patients and the quality of care, derived from the greater experience these more practiced clinicians have, access to costly specialised facilities and equipment, and the greater standardisation of care that tends to occur. For example, consolidating 32 stroke units to 8 specialist ones in London achieved a 17% reduction in patient length of stay. (Page 23)

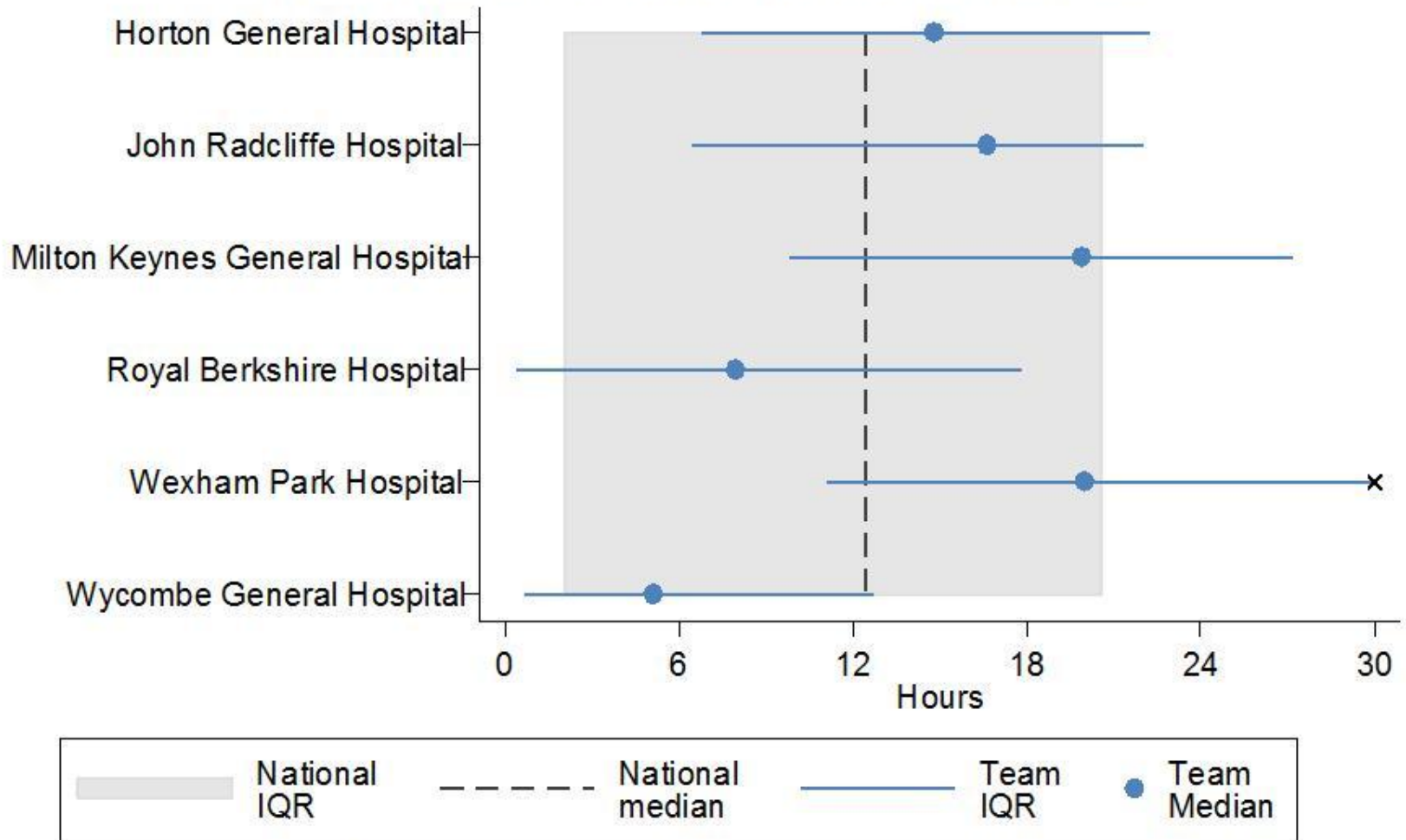
Scanned within 1 hour



Source: SSNAP July-Sep 2015
Patient-centred results at team level for Key Indicator 1.1A

Thames Valley SCN

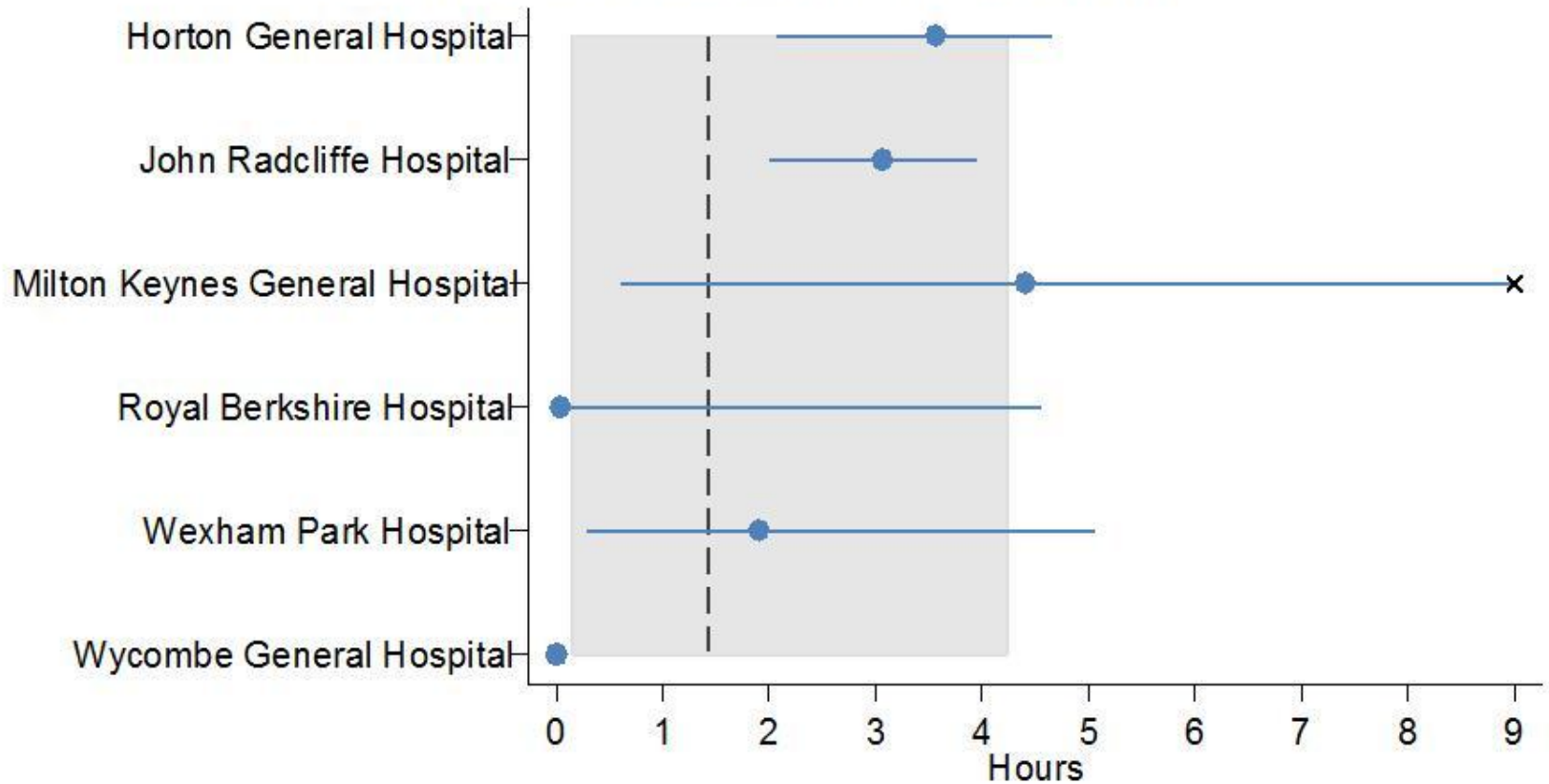
Clock start to stroke consultant time



Source: SSNAP July-Sep 2015
 Patient-centred results at team level for Key Indicator 4.2A

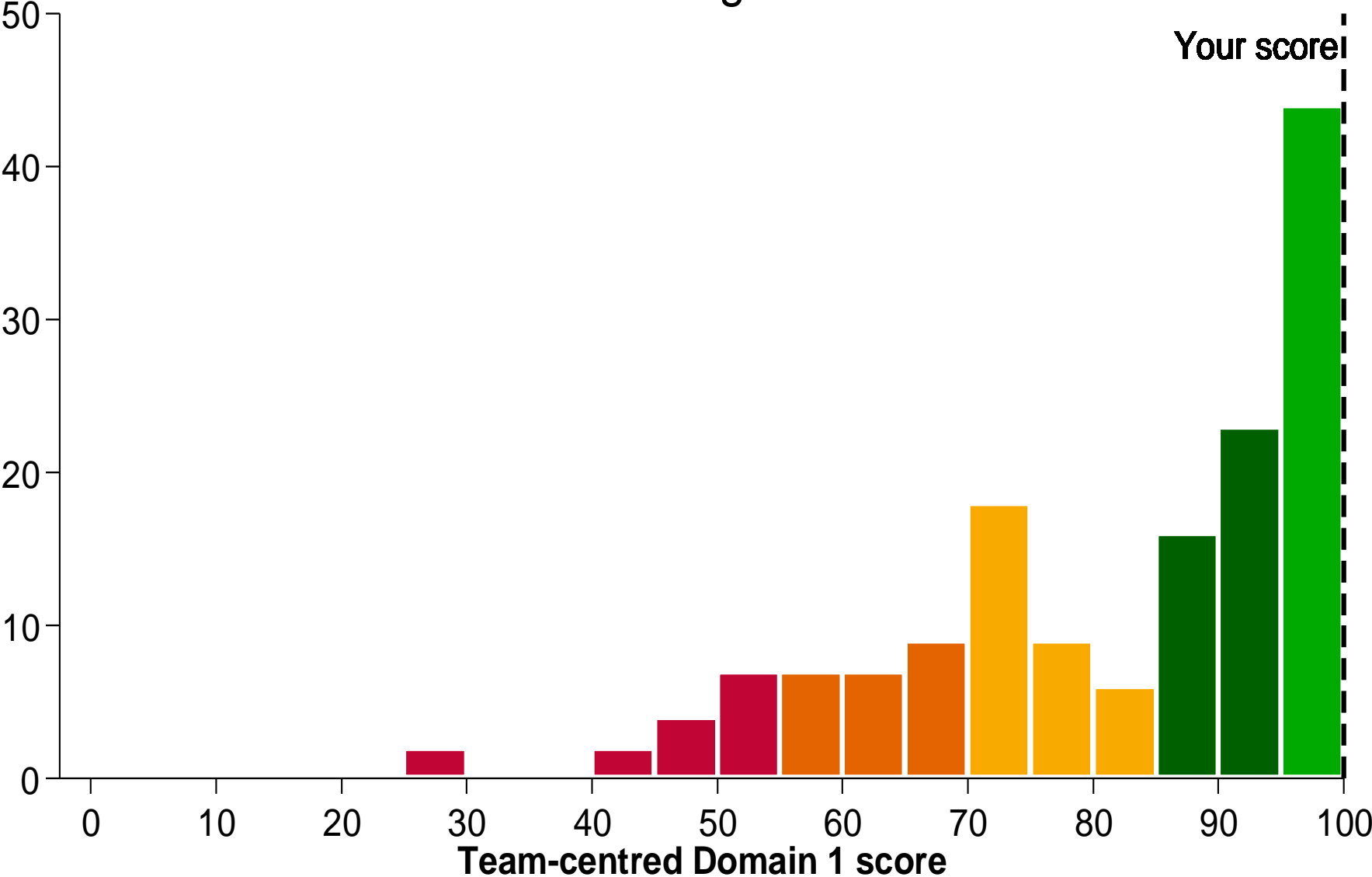
Thames Valley SCN

Clock start to stroke nurse time



Source: SSNAP July-Sep 2015
 Patient-centred results at team level for Key Indicator 4.4A

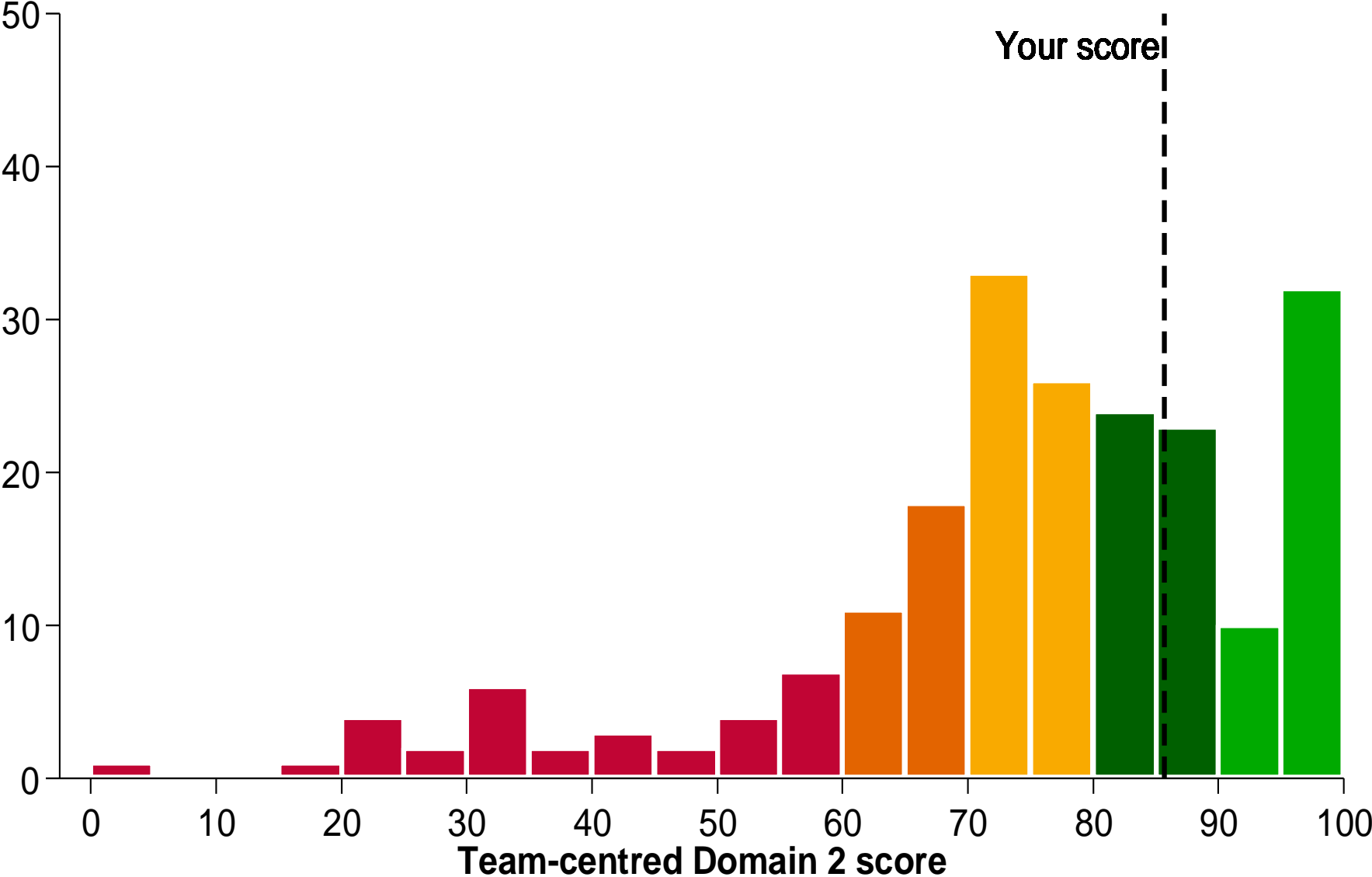
Scanning



Source: SSNAP July-Sep 2015
Team-centred results for Domain 1

Team 105

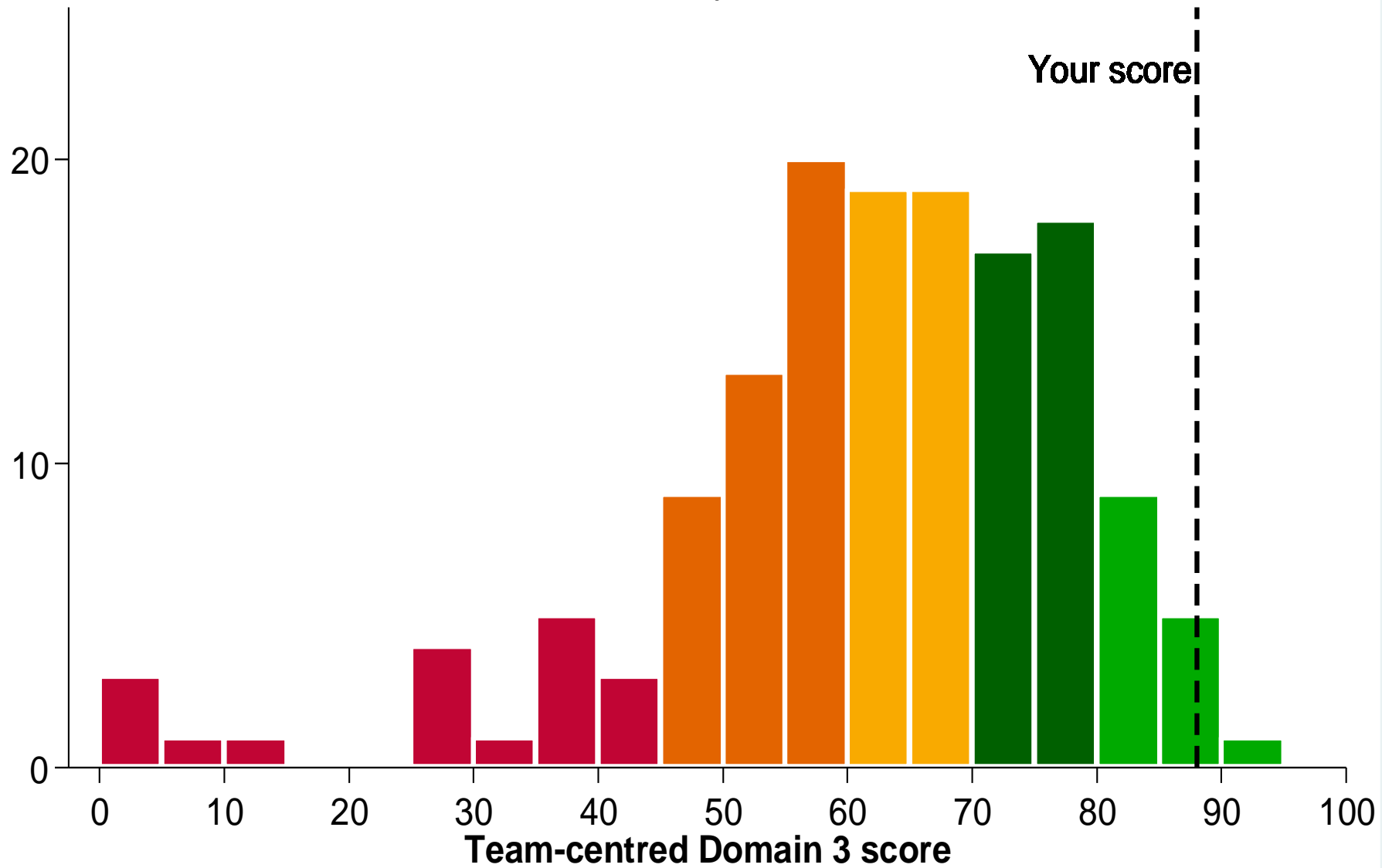
Stroke unit



Source: SSNAP July-Sep 2015
Team-centred results for Domain 2

Team 105

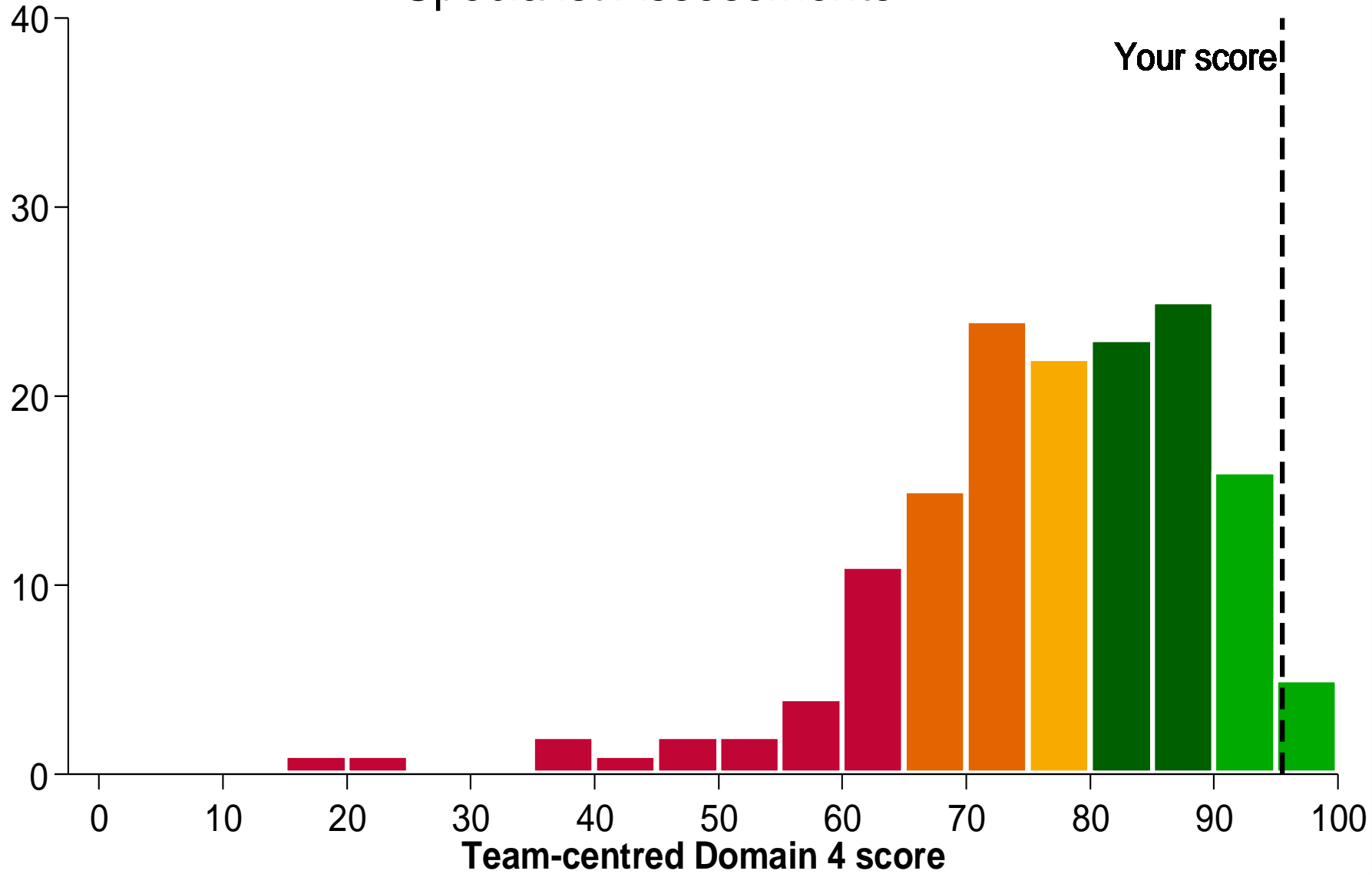
Thrombolysis



Source: SSNAP July-Sep 2015
Team-centred results for Domain 3

Team 105

Specialist Assessments



Source: SSNAP July-Sep 2015
Team-centred results for Domain 4

Team 105

SSNAP team results – Jul-Sep 15

SSNAP Scoring Summary:	Wycombe General Hospital	Wexham Park Hospital
SSNAP level	A	D
SSNAP score	87	57.8
<i>Team-centred post-72h all teams cohort</i>	145	75
Team-centred KI levels:		
1) Scanning	A	D
2) Stroke unit	B	D
3) Thrombolysis	A	E
4) Specialist Assessments	A	E
5) Occupational therapy	A	A
6) Physiotherapy	B	B
7) Speech and Language therapy	C	A
8) MDT working	B	A
9) Standards by discharge	B	B
10) Discharge processes	A	B

- Move to the London model is supported by the Thames Valley Senate.
- Similar reconfigurations around the country.
- Locally we plan to continue to work in partnership with Frimley Healthcare.