

Reconfiguration of stroke services in East Kent

Purpose of briefing

The purpose of this briefing is to update the Kent Health and Overview Scrutiny Committee (HOSC) on the transfer of stroke services in East Kent from Kent and Canterbury Hospital (K&C) to the William Harvey Hospital (WHH).

Overview

The Kent and Medway acute stroke reconfiguration programme is a two-phased programme to develop three hyper-acute stroke units (HASU) at Dartford, Maidstone and Ashford.

The WHH was identified as the best option for a HASU in East Kent due to the existence of other services that are required to be located alongside a HASU such as the emergency department. Kent and Canterbury Hospital does not meet these co-dependency requirements and so was not considered as an option. Further information on the background to the programme is detailed in [Appendix 1](#)

The reconfiguration is being funded by the Kent and Medway health system from its capital allocation over a multi-year period, with the three schemes totaling more than £32m.

The programme is being delivered in two phases, with the units at Dartford and Maidstone launching in 2024. The unit at WHH is being delivered as a second phase due to the scale and complexity of the works.

Following delays to the East Kent programme, NHS Kent and Medway undertook a review of the East Kent scheme. The aim was to review the current delivery strategy, ascertain the funding requirement and affordability of the scheme, and ensure the scheme remains value for money. This additional assurance process was reported to Committee members in February 2024. The review has now concluded.

Design

The original design was for a 52-bed unit to be located at WHH on the site where the



critical care unit (CCU) now stands. During the pandemic, national funding was provided to develop a new CCU at the WHH to ensure Kent and Medway has sufficient critical care capacity and resilience to respond to population need. The intention was to develop the HASU underneath the new CCU, which stands on stilts.

Issue 1: Following delays to the programme resulting from legal and statutory processes, an activity review was undertaken in 2022 to test the assumptions in the earlier business case. This identified the East Kent unit would require 54 stroke beds. Space restrictions underneath the CCU meant these additional beds could not be accommodated within the stroke unit and would need to be located within the medical wards resulting in a split unit.

Issue 2: There is also now a requirement for the establishment of a triage and assessment bay to be located within the unit. This facility was established during the pandemic following the emergency transfer of East Kent stroke services to K&C. The establishment of the assessment bay has resulted in a significant improvement in service outcome data and it is now a nationally recognised model. Space restrictions under the CCU meant this area could not be accommodated.

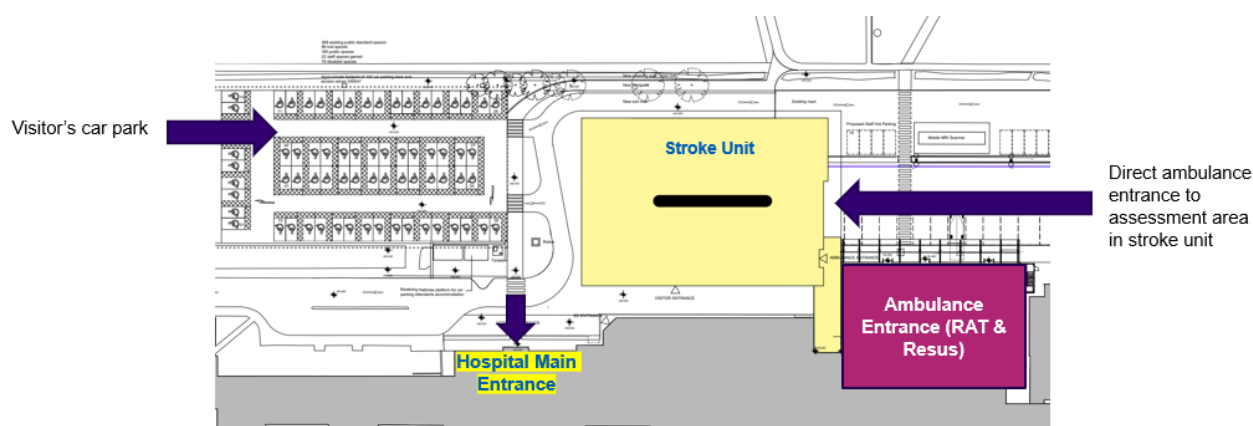
Issue 3: There are significant risks to undertaking major building works underneath a live CCU.

An exercise was undertaken to explore whether there was an alternative location on the WHH site which would deliver the original HASU specification, and the best practice identified during the service centralisation at K&C.

Solution

The solution is confirmed as a 54-bed two-storey modular new build located in front of the Emergency Department (ED) as shown in [Figure 1](#). There has been in depth engagement with both the clinical and operational teams throughout the development of the design.

Figure 1: Location of HASU in front of ED



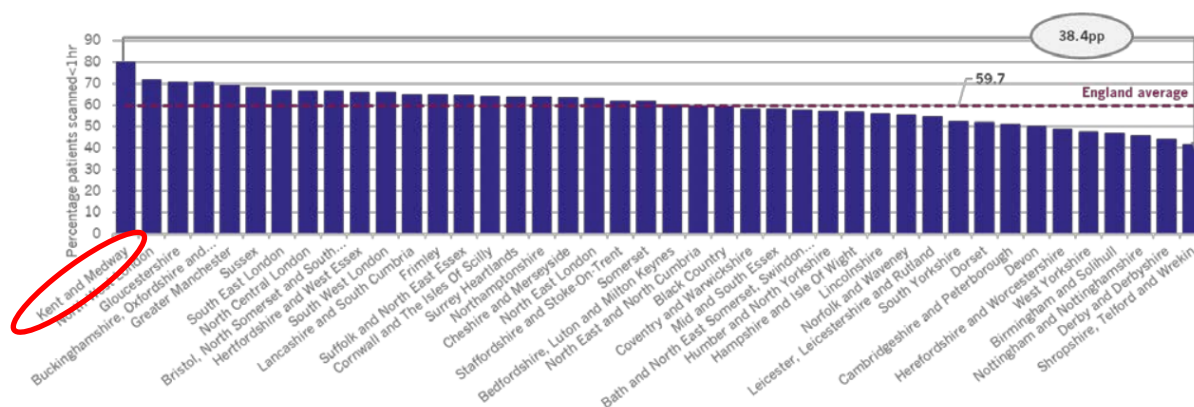
Benefits of the new location:

- Increased flexibility of design due to the entire unit being a new build and not constrained by existing co-adjacent services. It provides a larger footprint than the previous design.
- The unit is a purpose-built facility and will be able to accommodate the total beds required as opposed to splitting the beds between the stroke unit and medical wards. In addition, the existing bed base at WHH will be maintained.
- The new solution will have its own ambulance drop-off area and allow for direct admissions to the stroke unit, bypassing ED, which will support time-critical interventions and continued achievement of national standards.
- A CT scanner will be located within the unit for the immediate use of stroke patients. While stroke patients will be prioritised, the CT scanner will be accessible to non-stroke patients to maximise usage.
- The solution is a standalone build which removes the risk to carrying out building works under an operational CCU and disruption to co-adjacent wards.

The alterations to the design and location of the unit mean that patients will be dropped off by the ambulance for immediate triage, assessment and CT scanning in the one unit. Kent and Medway is now the national leader for the percentage of patients scanned within one hour of arrival due the development of the direct access model. There has been a significant improvement in patient outcomes as a result, and this new solution will enable the team to maintain these improvements and make further gains. Locating the CT scanner within the unit and adjacent to the assessment area will save even more time.

Figure 2: Percentage of patients scanned within one hour of arrival, by ICB (England) / LHB (Wales) 2023/24

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Source: Lord Darzi (2024) *Independent Investigation of the National Health Service in England*.

Timeline

Establishment of the unit in East Kent was originally scheduled for March 2026; however, this timeline is no longer achievable following the revision of the scheme. The current estimated timeline will see the approval of the full business case (FBC) in May 2025, with construction commencing in June 2025 and running for 22 months. The build completion date is April 2027.

A Procure 23 partner (Integrated Health Projects) has been appointed to support the trust with the HASU development.

The need for investment prior to the move to WHH

The stroke team is committed to delivering further improvements in stroke care to improve patient outcomes and experience (see [Service performance](#) section). Without investment in the workforce, the HASU model of care cannot be delivered and some of the improvements made to date may not be sustainable.

Delivery of HASU standards of care are dependent on having the required establishment to enable:

- A seven-day therapy service
- Improved nursing care
- Improved medicine management and medicine optimisation through a dedicated pharmacist
- Improved psychological care with the provision of a psychologist.

NHS Kent and Medway has agreed to fund recruitment to the HASU establishment of 52 beds ahead of the transfer to WHH to enable delivery of the HASU model of care and mitigate the risks to the service. This agreement increases the current bed base

by two beds and the workforce by 18.5% (37.27wte). This will ensure equitable stroke services are provided across Kent and Medway and allow for the early achievement of HASU benefits in East Kent. Staffing levels will be increased to 54 beds on transfer of the service.

Service performance

The EKHUFT stroke unit has among the best performance in the country. Most recent data from Stroke Sentinel National Audit Programme (SSNAP) is shown in **Table 1**.

Table 1: SSNAP key indicators April 2023 – March 2024

Indicator	National	Kent & Medway	EKHUFT
% of patients scanned within 1 hours of clock start	59.5	79.9	95.7
% of patients scanned within 12 hours of clock start	95.6	97.8	99.5
Median time between clock start and scan (hours:mins)	0:42	0:22	0:15
% of patients directly admitted to a stroke unit within 4 hours of clock start	46.7	68.8	83.9
% of all stroke patients given thrombolysis (all stroke types)	11.6	13.3	17.8
% of patients who were thrombolysed within 1 hour of clock start	59.1	72.3	80.5
Median time between clock start and thrombolysis (hours:mins)	0:54	0:46	0:45
% of patients assessed by a stroke specialist consultant physician within 24h of clock start	84.4	91.8	98.9
Median time between clock start and being assessed by stroke consultant (hours:mins)	6:43	1:30	0:35

Clinical improvements in East Kent

The temporary consolidation of services on one site ahead of the move to WHH has contributed to the significant improvements in processes of care and outcomes in East Kent, such as:

- A significant reduction in door to scan times. Nationally only 61.9% of patients are scanned within an hour compared to 97.7% at EKHUFT, with a median scan time of 12 minutes compared to 39 minutes nationally (SSNAP July-Sept 2024).
- Consistently high IV thrombolysis rates. The last annual figures show 17.8% of patients were thrombolysed compared to the national average of 11.6% (SSNAP Apr 2023-Mar 2024).
- A significant reduction in adjusted mortality, saving 65 patients lives per year. This is currently the lowest in the Kent and Medway and second lowest in the South East and West NHSE regions.
- EKHUFT, in partnership with SECAMB, developed the first pre-hospital video triage of patients in the country in May 2020, winning the 2022 HSJ patient safety award. The result of the triage is that the patient is directed to the most appropriate care pathway, such as the stroke unit, emergency department, TIA clinic or follow up by a GP without the need for hospital attendance.
- The new assessment and triage arrangements within the UTC at K&C has resulted in an improvement in door to needle time for thrombolysis in ischemic stroke. The median time is 46 minutes from clock start to thrombolysis compared to 56 minutes nationally (SSNAP July – Sept 2024).

The planned move to WHH will build on these improvements further by ensuring compliance with the national standards and alignment with the HASU requirements.

Appendix 1

Background on the reconfiguration of acute stroke services

The Kent and Medway Stroke Review was commissioned in 2014 in response to concerns by Kent and Medway Clinical Commissioning Groups (CCGs) about the performance and sustainability of hospital stroke services across all units in Kent and Medway. The CCGs and hospital trusts were tasked with developing proposals to improve outcomes for patients, reducing deaths and disability.

The review recommended a model of care involving specialist stroke services consolidated at three hospitals, each with a hyper-acute stroke unit (HASU) and an acute stroke unit (ASU), to ensure rapid access to specialist staff, equipment, and imaging to improve quality and outcomes for patients.

HASUs enable patients to have rapid access to the right skills and equipment and be treated 24/7 on a dedicated stroke unit, staffed by specialist teams. Following a stroke, a patient will be taken directly to a HASU where they will receive dedicated expert care, including immediate assessment, access to a CT scan and clot-busting drugs (if appropriate) within 30 minutes of arrival at the hospital.

ASUs are for subsequent (after 72 hours) hospital care. These units offer ongoing specialist care with seven-day therapies services (physiotherapy, occupational therapy, speech and language therapy and dietetics input) and effective multi-disciplinary team (MDT) working.

Public consultation on the proposal was undertaken in 2018 and the decision to establish HASU/ASUs in Dartford, Maidstone and Ashford was made the following year. Following a review into the decision-making process, the Secretary of State granted approval to proceed in November 2021.

Since the NHS decision in 2019, there have been three emergency temporary changes to stroke services in Kent and Medway:

- Tunbridge Wells Hospital stroke service transferred to Maidstone Hospital in September 2019 due to staffing challenges.
- In April 2020, in response to Covid, East Kent Hospitals University Foundation Trust (EKHUFT) transferred its stroke services at William Harvey Hospital (WHH) and Queen Elizabeth the Queen Mother Hospital (QEQM) to the Kent and Canterbury Hospital (K&C). The stroke service remains at Canterbury at this time.
- Medway Hospital stroke service closed in July 2020 due to staffing challenges.



Reconfiguration of acute stroke services in East Kent

The majority of stroke patients that would previously have gone to Medway Hospital are now going to Maidstone Hospital with a small number going to Darent Valley Hospital.

Following the consolidation of stroke units onto three sites, service performance has increased significantly. Data from the Sentinel Stroke National Audit Programme (SSNAP), which measures the quality and organisation of stroke care in the NHS, demonstrates the improvement across provider organisations. Further improvements are anticipated following the full implementation of the three HASUs.

SSNAP ratings pre and post consolidation of stroke units

Hospital	Dec 16 - Mar 17	April - Jul 17	Aug - Nov 17	Dec 17 - Mar 18	Apr - Jul 18	Jul - Sep 18	Oct - Dec 18	Jan - Mar 19	Apr - Jun 19	Jul - Sep 19	Oct - Dec 19	Jan - Mar 20	April - Jun 20	Jul - Sep 20	Oct - Dec 20	Jan - Mar 21	April - Jun 21	Jul - Sep 21	Oct - Dec 21	Jan - Mar 22	April - Jun 22	Jul - Sep 22	Oct - Dec 22	Jan - Mar 23	April - Jun 23	Jul - Sep 23	Oct - Dec 23	Jan - Mar 24	April - Jun 24	Jul - Sep 24
DVH	D	D	D	E	D	D	D	D	C	D	D	D		C			D	C	B	B	B	B	C	C	B	B	B	C	B	B
QEQM	D	C	D	D	D	D	D	D	D	C	D	D																		
VHH	C	B	B	B	B	C	C	D	D	C	D	D																		
K&C														A			A	A	A	B	B	B	B	A	A	A	A	A	A	A
MGH	A	A	B	B	B	B	A	A	B	B	C	D		A			A	A	B	B	B	A	B	A	A	A	A	A	A	A
TWH	C	C	C	C	C	B	C	B	C	C																				
MMH	D	D	D	E	E	E	E	D	D	D	E	E																		

 Clinical audit was suspended for the duration of this quarter.