South West Strategic Clinical Network

Bigger, Better, Faster?

An options appraisal for the reconfiguration of emergency heart attack and stroke services for the South West of England

Executive Summary

South West Cardiovascular Strategic Clinical Network
on behalf of NHS South

April 2016

Executive Summary

1.1. This report summarises the response of the South West Cardiovascular Strategic Clinical Network (SW CV SCN) to the objectives of the 2013 NHS England Urgent and Emergency Care Review (UECR). The UECR seeks to reconfigure existing acute services to establish a network of Specialist Emergency Centres for the provision of care for heart attacks (primary percutaneous coronary intervention (PPCI) for ST-segment elevation myocardial infarction (STEMI)) and hyperacute stroke. The purpose of such specialist cardiovascular centres is to maximise good outcomes through the provision of high quality services that are resilient and sustainable over the longer term, and that meet the minimum thresholds of institutional activity for these conditions laid out in professional guidance and in national policy and commissioning specifications.

1.2. The SW CV SCN was tasked by NHS South, South West with mapping the provision of hyperacute stroke, PPCI and complex cardiology services for the region. The remit of the project was to provide the clinical context and to understand the regional and local implications of national policy and standards on emergency and elective cardiac and stroke services, not including financial modelling, and to ensure an open and transparent process for providers and commissioners.

1.3. The SW CV SCN established a steering group to supervise the project, and enlisted the operational modelling expertise of academic colleagues in the SW Peninsula CLAHRC (Collaboration for Leadership in Applied Health Research and Care). The steering group reported to providers and commissioners through the SCN's Cardiac and Stroke Commissioning Advisory Groups (CAGs), and consulted with public and patient representatives through the SW Senate Citizen's Assembly and the Health & Wellbeing Boards.

1.4. A model was constructed to analyse the benefits to patients from the concentration of specialist services in a variety of geographical configurations across the South West of England, ranging from a 2-centre to a 15-centre configuration. As well as the net clinical benefit, the analysis took into consideration issues of minimum institutional activity, and co-dependency with other critical services such as vascular surgery and interventional neuroradiology.

1.5. For PPCI provision, the model confirmed that minimum institutional activity could not be sustained with the present configuration of 10 Heart Attack Centres (HACs). The clinical benefit (defined in terms of mortality at 1 year) is substantially unaltered by a reduction in the number of HACs from 10 to 4, but secondary considerations of co-dependency and the displacement of patients to centres outside the SW region support an increase in the minimum number of HACs to 6 or 7. A reduction in the number of Hyperacute Stroke Units (HASUs - providing care for the first 72 hours after acute

stroke) from the present 14 to between 8 and 10 maintains the clinical benefit (defined in terms of patients with minimal disability after thrombolysis), with a varying number of patients (between 345 and 736) being displaced to acute stroke centres outside the SW region.

1.6. The modelling exercise identified seven options for further consideration, ranging from a 'least change' option of retaining 10 HACs and 14 HASUs, to a configuration comprising 6 HACs and 8 HASUs. This latter option, whilst maximising the benefits to patients from the concentration of expertise in fewer specialist centres, also involved the greatest geographical inequity, with rural communities principally in North Devon and Wiltshire having to travel the greatest distances to access time-critical interventions in an emergency. A range of intermediate options that mitigate the geographical disbenefits without jeopardising the clinical benefits from consolidation were also identified, involving 6 or 7 HACs and 8, 9 or 10 HASUs. Additional ambulance activity for this range of options is estimated at 3.7-6.1 hours/day for emergency STEMI and stroke calls, and 7.5-10.7 hours/day for repatriation to local acute hospitals after hyperacute care.

1.7. This detailed, evidence-based analysis of the clinical case for the reconfiguration of heart attack and hyperacute stroke services within the SW region has shown that in order to develop a regional network of cardiovascular centres that is resilient to anticipated changes in demand, technology and workforce, services should be provided in either 6 or 7 HACs and between 8 and 10 HASUs. Taken as a whole region, the incremental gains from configurations at the upper end of that range are marginal. However, the disbenefits from reconfiguration are not equally spread across the region, with particular issues of emergency access for people in North Devon, Wiltshire, and in some configurations, Torbay.

1.8. The SW CV SCN makes two recommendations to local and specialised commissioners on the strength of this modelling project. First, commissioners should embark on further consultation with patients and the public on the implications of these options, and critically on the balance to be struck between the concentration of expertise in Specialist Emergency Centres and issues relating to geographical access. This is particularly relevant for NHS Northern, Eastern and Western Devon Clinical Commissioning Group (CCG) and for NHS Wiltshire CCG, where the geographical impact of reconfiguration is greatest. Second, commissioners should consider how these plans for cardiovascular disease transformation are incorporated into their Sustainability and Transformation Plan (STP) within their particular Transformation Footprint, in order to progress implementation through the decision-making process laid out in the 2015 NHS England policy '*Planning, Assuring and Delivering Service Change for Patients*'.

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