

ANNEX A

DRAFT – Thrombectomy Service Update and Expansion Outline

Background

1. As part of the [Stroke Improvement Plan](#), published in June, a commitment was made to publish a plan outlining future expansion of the national thrombectomy service.
2. There are currently several workstreams in development that are critical to the expansion of the national thrombectomy service.

Current Service

3. The thrombectomy service model is a 'hub and spoke' model of care delivery, with three 'hub' hospitals performing thrombectomies and eligible patients transferred from 'spoke' hospitals across the country.
4. The three hubs are based at Queen Elizabeth University Hospital (NHS Greater Glasgow and Clyde), Royal Infirmary of Edinburgh (NHS Lothian) and Ninewells Hospital (NHS Tayside), with the other hospitals within these Health Boards, and across all other Boards, serving as spokes.
5. The East of Scotland Hub, based at Royal Infirmary of Edinburgh, is currently operating:
 - Sunday to Friday, between 08:00-20:00, for patients presenting to the Royal Infirmary of Edinburgh
 - Monday to Friday, between 08:00-20:00, for patients presenting to St John's Hospital, Livingston
 - Monday to Friday, between 09:00-17:00, for patients presenting to Forth Valley Hospital.
6. The West of Scotland Hub, based at Queen Elizabeth University Hospital Glasgow, is currently operating:
 - Monday to Friday, between 09:00-17:00, for patients presenting to the Queen Elizabeth University Hospital.
7. The North of Scotland Hub, based at Ninewells Hospital, Dundee, is currently operating:
 - Monday to Friday, between 09:00-17:00 and accepting referrals from NHS Tayside, NHS Grampian, and NHS Fife.
 - A go live date for NHS Highland NHS Orkney and NHS Shetland to refer patients into the service is awaiting finalisation.

Spoke hospital 'go-live' timeline

8. It is expected that regions will have finalised rollout plans for all spoke hospitals to refer to their regional thrombectomy hub by the end of January 2024, and all spoke referrals to hubs will be live within current operating hours by the end of Spring 2024.
9. This will help ensure that suitable patients from all geographical regions in Scotland will have access to the thrombectomy service, within the operating hours of their regional hub, via their local spoke hospital. Patients requiring a thrombectomy in Argyll and Bute and Western Isles will be transferred to Queen Elizabeth University Hospital.
10. In the East of Scotland, preparations for regional spokes to refer patients Monday-Friday are well underway:
 - Referrals from NHS Forth Valley and NHS Lothian are already underway.
 - Referrals from NHS Borders are planned go live on 18th December 2023.
 - NHS Fife is planned to transfer to the East of Scotland service in early 2024.
11. Work has been undertaken to scope the feasibility of increasing current service hours from 09:00-17:00 to 08:00-20:00 in the North of Scotland and West of Scotland hubs.
12. An agreement in principle has been reached to provide in year funding for the West of Scotland to expand to 08:00-20:00 service provision, six days per week. Following successful recruitment to approved posts, West of Scotland will expand to 08:00-20:00. Regular progress updates on this process will be provided.
13. An agreement in principle has been reached to provide in year funding for the North of Scotland to expand to 08:00-20:00 service provision, Monday to Friday.
14. A national repatriation policy has been developed. This will support timely transfer of patients back to their local hospital following thrombectomy and facilitate the roll out of thrombectomy to spoke units.

Modelling

15. Refreshed data modelling has been undertaken, to ensure service readiness is aligned with likely case numbers, and this will support the option appraisal process.

16. Revised modelling suggests an annual figure of 1100 patients, increased from previous figure of 800, who could benefit from a 24/7 national thrombectomy service.
17. Further modelling will be undertaken on an ongoing basis to support the options appraisal process to scope future service expansion.

Options Appraisal

18. An Options Appraisal will be undertaken to consider the future model of the national thrombectomy service, including possible approaches to 24/7 service provision.
19. This work will be led by National Planning and will bring together subject matter experts (SMEs) to determine the most feasible options.
20. It is anticipated that this process will run between January and April 2024 with final recommendations to inform next steps towards a 24/7 thrombectomy service due in April 2024.

Artificial Intelligence

21. The procurement of artificial intelligence software to assist in safely identifying patients who may benefit from a thrombectomy based on radiology scans is critical to maximising access to thrombectomy from spoke hospitals.
22. National procurement of an artificial intelligence software package to support real time interpretation of CT Angiography and CT Perfusion scans is underway.
23. The software will aid clinical teams in the spoke and hub hospitals in identifying patients who are likely to benefit from thrombectomy as accurately as possible.
24. A Project Board for this work has been convened.