

Thrombectomy Services in Northern Ireland: “A Game Changer”

Challenge:

To develop a services to support the delivery of intra-arterial treatment (thrombectomy) across a region (Northern Ireland).

Solutions:

Network and staff commitment

Our service evolved on the back of the enthusiasm and good will of clinicians and neuroradiologists who were keen to provide thrombectomy services. We also had good connections with hospitals through Northern Ireland and a network for thrombectomy referrals was already starting to emerge. While more planning and investment was required for full 24/7 service, we committed to service provision within working hours.

Development of regional guidance

In 2015, regional referral guidelines as part of the Northern Ireland Stroke Network were developed.

Key characteristics of this guidance included:

- Involvement of all of the trusts, including the ambulance service, ensured a comprehensive pathway and ownership of the project.
- Guidance covered all steps of the process from front door of local hospital to repatriation after thrombectomy
- Agreement to provide imaging (without delay) to patients potentially eligible
- Support from Belfast-based neuroradiologists to other trusts in network and clear, established lines of communication to discuss potential cases
- Transfer by blue-light ambulance directly to the RVH radiology department was agreed, with 5 minute alert to Belfast Stroke team to ensure immediate processing on arrival
- Adoption of “parallel processing” – stroke and neuroradiology teams working in parallel to ensure the patient goes to imaging as soon as possible

Impact:

Recently we undertook an analysis of outcomes in almost 150 patients treated over the last 3 years. We compared rates of functional independence at 3 months in those who presented directly to Belfast versus those transferred from elsewhere. Although patients coming via another hospital took longer to reach Belfast, they were processed more rapidly on arrival (median door to groin puncture 37 min). Around 50% regained functional independence in both groups.

Obviously anything less than a 24/7 thrombectomy service is unsatisfactory. However, even with our limited service to date, many real patients have benefited. One of my delights at

our stroke review clinic is seeing patients and their families who have been rescued from the devastating consequences of stroke due to large vessel occlusion.

Reflection and next steps:

Within Belfast, provision of 24/7 thrombectomy will require expansion of bed numbers, stroke unit staff (both medical and non-medical) and additional neuroradiologists. The service will also have implications for other specialties such as emergency medicine, neurology anaesthetics and ICU.

In our favour, enthusiasm, team working and good will have brought us a long way to date. Until now a “can do” attitude has prevailed. However we have reached a point where significant investment and reorganisation of services is required to take us where we need to go.

This piece was written by Dr Ivan Wiggam, Consultant Stroke Physician and Lead Clinician for Stroke at Belfast Health & Social Care Trust.

