Vascular Service Quality Management

Vascular Ultrasound diagnostic services should have a **Quality Management System** (QMS) which includes responsibilities, formalised policies, processes and procedures to assure the quality of all aspects of their activity. The QMS is used to inform and integrate agreed processes and monitor their effectiveness thereby informing future improvements. A QMS should be detailed and described in a **Quality Manual** (QM) which is an overarching document which states and describes the QMS.

The SVT recommend the following to ensure delivery of a quality assured service:

- A **Quality Manual** giving detailed descriptions of the whole QMS of how a service operates, and this may include a quality policy.
- A **Quality Policy**, which is a shorter document which summarises measurable quality objectives of the service (which may be a separate document or embedded within the QM)
- **SOPs or Protocols** for diagnostic tests (which may be separate documents or embedded within the QM)

Methods of assessing and assuring the quality of the service

These may include regular review and audit of the below processes with systems for identification and management of non-conformities.

- Patient/service user pathways (Referral to discharge management)
- Quality of clinical activity and clinical information systems
- Diagnostic image and report monitoring and management
- Audits of service user (patient/clinician) satisfaction

Documentation should be robustly managed to ensure that staff have access to the latest versions, and this will require processes for document control.

Quality Manual

This is a detailed document explaining the processes that staff need to follow to meet the requirements of the QMS. It may include information which fully explains (or signposts to supplementary documents) the following:

- Processes for all activities
- Pathways (e.g. clinical, document approval and human resource (HR) processes)
- Processes for management of user feedback plaudits and complaints
- Management of resources including staff and equipment

- Processes of internal audit
- Processes for management of capacity versus demand and extension of the service offered
- Risk Management
- Identification of non-conformities within the service
- Management review including follow-up actions

Supporting documents may include:

- Forms in use
- Records of equipment resources
- Records of staff resources

Management reviews (at least annually) to include:

- Business planning
- Referral review
- Service user feedback (staff, stakeholder & users/patients – plaudits and complaints)
- Internal audits
- Risk management reports
- Identification and control of non-conformities
- Objective setting aligned to local and national targets

Quality Policy

This document would typically include measurable targets and key performance indicators (KPIs). Performance indicators should be in-line with local and national targets and may include:

- Waiting times
- Management of DNAs (did not attend)
- Assessment of patient and other service user satisfaction
- Reporting time targets
- Professional guidance targets

Service & Clinical Audits

Audit is a method of examining processes and outcomes. Service and Clinical audits are an important part of the continuous quality improvement process and measures clinical care or service delivery against agreed standards which could be internal and/or external. Audit enables services to identify any non-conformity and also provides a method of assuring that service provision is in line with expectations. There is a saying that without audit "you don't know what you don't know", the assumption that processes are being followed isn't enough, and you need to check!

Audit methods should include horizontal and vertical audit. A horizontal audit will check a particular singular process across a specific area/s, such as reporting turnaround times or whether all staff up to date with mandatory training to see how the process functions. However a horizontal audit will not determine how it interacts or affects other related processes. A vertical audit will look at a number of processes which form part of a service pathway, such as the whole of the patient pathway from referral to discharge within a service or department. This for example would look at a number of processes including: referral receipt and processing, appointment process, scan procedures and reporting processes, and discharge outcomes. A combination of the 2 audit methods is required. If any non-conformity are picked up during either audit method with any processes or procedures it is necessary to do a more in depth audit or root cause analysis to identify how, where and why problems have occurred. You can then identify remedial actions and then re-audit once the new processes have been embedded to check that they are effective.

Services should develop documented audit procedures and plans to ensure that appropriate audits take place at agreed intervals, and this should include arrangements for analysis and reporting of results, learning and implementation of any corrective actions. Re-audit is essential to ensure that any changes in practice are embedded and effective. This constitutes an audit cycle and ensures that audit is a useful tool to inform service development rather than just a stand-alone process.

Audit of Vascular Ultrasound services should include:

- **Processes from referral to discharge**, these may include:
    - referral management including request acceptance/vetting
    - appointment booking
    - waiting time management
- **Audit of clinical processes** including:
    - infection control measures; patient identification; maintenance of dignity and confidentiality; consent
    - report content; authorisation; release timescales; appropriate escalation of urgent findings and amendments
- **Quality assurance audit of the clinical activity** which may include audit of:
    - Equipment management, procurement; maintenance; servicing; calibration; QA at appropriate intervals
    - Staffing, including: training; supervision; competency/sign-off; performance
    - adherence to evidence based clinical protocols
    - image and reporting quality, to include Uncertainty of Measurement
- **Additional Audits** may wish to include:

- Peer review/observational audit of adherence to processes (e.g. Infection control, communication, consent, dignity and privacy, following protocol etc)
- inter-observer variability to assure that different staff reach the same diagnosis
- comparison to alternative imaging methods (e.g. MDT)

References:

UKAS IQIPS V2