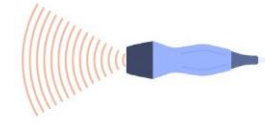


Developing an Advanced Clinical Practitioner led integrated valve clinic



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Introduction

The number of patients >65 years living with valvular heart disease in the UK is predicted to double to 3 million between 2015 and 2046 and has been dubbed the 'next cardiac epidemic' (d'Arcy 2011).

Specialist valve clinics improve patient outcomes and reduce the number of unnecessary echocardiograms (Ionescu, McKenzie et al. 2015).

Current practice at SWFT is for valve patients to be followed up in general cardiology clinics with the timing of imaging at the discretion of the treating cardiologist.

OBJECTIVES

- Develop a trial of a combined valve surveillance and echo clinic.
- Improve the quality of care and valve imaging through an MDT approach.
- Build a business case for a comprehensive local valve service.



METHODS

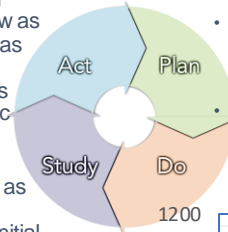
A key stakeholder meeting was arranged with the general manager for cardiology, imaging lead cardiologist and 2 ACPs, 1 British Society of Echocardiography (BSE) accredited, 1 in training. The development of a valve clinic was agreed in principle and potential funding was identified via the NHS heart valve disease targeted revenue funding. Further meetings were arranged with all cardiologists, cardiac investigations and booking departments.

A Plan, Do, Study, Act (PDSA) approach was chosen to enable a flexible approach to continuous improvement while running an initial 2 year trial focussing on those most likely to benefit.

- Clinic design: 4 x 1hr slots weekly with combined echo
- Inclusion criteria; patients with left sided valve disease of at least moderate severity.
- Exclusion criteria; contraindications to intervention, prosthetic valves, other primary cardiac complaints e.g. HFREF, AF, angina.

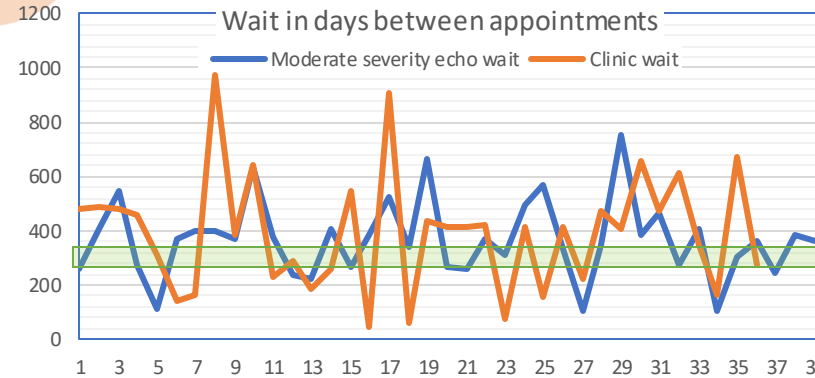
Potential patients are identified via the radiology booking system with future dated echo requests that were cross referenced with cardiology access plans. Patients meeting criteria who are due, or overdue clinic follow up are selected with an 'opt-out' model.

A prospective audit will include guideline directed echo intervals (Bennett, Stout et al. 2022), timing of intervention (Vahanian, Beyersdorf et al. 2021) and actual versus planned clinic waits. Patients meeting criteria not included the valve clinic will serve as controls for a business case for appropriate staffing and resources for a sustainable multidisciplinary valve clinic.



RESULTS

- Of 71 screened, 41 potential patients were identified for April and May 2024 and are detailed in table 1.
- The planned timing of all follow up clinics was ≤1 year, however 39% waited more than 401.5 days between their last clinic appointments.
- There was wide variability in time between echocardiograms for moderate severity disease (figure 1) with only 28% having this at 1 year +/-10%.



Clinic and echo waits	
Clinic wait (median days)	412
Clinic wait >401.5 days	39%
Moderate valve dx	73%
Echo wait (median days)	367
Echo within 365 days +/-10%	28%

Patient demographics	
Patients screened	71
Excluded	30
Included	41
Age (median)	77
Female sex	49%

CONCLUSIONS

Engagement of relevant stakeholders and alignment with local network priorities has helped build the case for a dedicated local valve clinic.

This will likely reduce the considerable variability in the timing of echo and follow up as well as freeing up consultant clinic and echo slots. Ongoing improvements will include the development of educational resources, patient feedback and analysis of audit data to demonstrate value and expand the clinic in the future.

Skills learned in the BCS emerging leaders program such as aligning project goals with stakeholder's priorities have been invaluable.

REFERENCES

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