**Echocardiography Facilities/Training/Governance/Quality WG Members**

I give my consent to participate in this survey? Y

What is your current position?

Trainee/fellow

Consultant cardiologist (general)

Consultant paediatric cardiologist (imaging subspecialist)

If you are a trainee, what year are you in your training?

**Setting**

Is there an echocardiography lab\* in your cardiology department?

(\*echocardiography lab is defined as ≥2 echocardiogram machines with dedicated imaging cardiac physiologist(s) and imaging paediatric cardiologist(s) (FASE or EACVI)):

Is your echocardiography laboratory EACVI accredited?

Is your echocardiography laboratory accredited By National Scientific societies?

Is the accreditation standard accreditation (see attachment)?

Is the accreditation advanced accreditation (see attachment)?

If not accredited, is your lab interested in seeking accreditation?

Where is the echocardiography lab situated (beside outpatients, separate part building)?

Is the paediatric echocardiography lab standalone or part of adult cardiology set up?

How many echo rooms?

How many echo machines in the lab?

Is sedated echocardiography provided in your centre?

Is sedated echocardiography in a dedicated room?

Is there a protocol for sedation in echocardiography?

Is there a separate 3D echo machine?

Is there a foetal echocardiography room?

Does a new echocardiogram (first study) take at least one hour?

How much time does a new echocardiogram (first study) usually take?

Does a return echocardiogram (repeat follow-up study) take at least 30 minutes?

How much time does a a return echocardiogram (repeat follow-up study) usually take?

Are echo studies assigned specific slots in the day (with specific time slots)?

Is echocardiography for children only performed in the echocardiography lab or do cardiologists echo in other locations e.g. the Intensive Care Unit etc.?

How many transthoracic echocardiograms performed per year?

How many cardiopulmonary bypass procedures per year?

**Staff**

Are there dedicated cardiac imaging physiologists?

How many cardiac imaging physiologists?

Are there specialised imaging paediatric cardiologists?

Are all physiologists EACVI exam certified? or other type of certifications/official training program

Are all cardiologists working in the echo laboratory EACVI exam certified?

Do all cardiologists report on echocardiograms?

Where are echocardiograms reported?

Is there a dedicated time for reporting or report its’ done immediately at the end of each examination?

Is the reporting station in the echo laboratory?

Do cardiologists report from their own office?

Details about paramedical staff:

Are there dedicated echo nurses? Do they prepare the patient and stay during exam?

Are there imaging/echo sonographers ?

Do they perform all/some of the echo examinations?

**Teaching and Training for Trainees Fellows**

Is a cross-sectional echocardiography course required before starting echo training? Y N

Do cardiology fellows undertake a morphology course

1. Before training in echocardiography Y N
2. During training echocardiography Y N
3. Not mandatory to undertake morphology course Y N

Is there an organised structure to training in echocardiography, e.g. start with normal scans before increasing complexity Y N

Is there an echo training camp at start of training?

Do you have high fidelity simulation material?

Do trainees follow segmental analysis approach to echocardiography?

Are trainees supported in doing undifferentiated echocardiograms on call by the cardiologist on call?

Are trainees evaluated on undifferentiated echocardiograms they complete on call by the cardiologist the day after on call?

Who provides most of the teaching in your echocardiography lab/department?

Is there a specific period of time before trainees are allowed to image on their own or is it only when they have reached competency?

How long before trainees image on call?

How often do trainees receive feedback from cardiologists on quality of their echocardiogram?

Are there sufficient undifferentiated (new cases) echocardiograms for trainees to learn transfer of training?

What factors do you believe most important in teaching trainees echocardiogram (rate 1-8, 1 most important)?

 Aptitude

 Motivation

 Personality

 Training Design

Work environment

Equipment

 Level of supervision

 Feedback (live during scanning or afterwards

**Technical Issues**

Are fellows trained in how to set up the machine before training echocardiography?

 Y N

Are fellows trained in how to optimise image acquisition (frame rate, zone of interest, Doppler, Nyquist limit) prior to training in echocardiography? Y N

Is there a period of dedicated time supervised in echo lab by technician or cardiologist?

 Y N

**Interpretation and Reporting**

Do trainees complete a preliminary report?

Do trainees receive feedback on their report?

Are you encouraged to take the EACVI echocardiogram exam in your centre?

**Quality Improvement**

Is there a near miss conference to review near misses?

Is there an morbidity and mortality conference on echocardiogram errors and potential impact on the patient?

What are the strengths of your echo laboratory?

What are the areas which could be improved in your training in echocardiography?

Are there quality improvement initiatives?

How many QI projects per annum at your centre?

**Research**

Is research actively performed in your echocardiography department?

Are there specific research projects?

Has your department published echo/imaging research in the last year?

Is research funded in your department?