

Could Echo be Closer to the Heart of Training?

Point of care echocardiography training in Scotland: A survey of intensive care trainees

A Rocke, D Hall, R Baruah

Department of Critical Care, Western General Hospital, Edinburgh



POINT OF CARE ECHOCARDIOGRAPHY

Echo is quick, non-invasive and quickly facilitates the acquisition of critical clinical information where most required. Clinicians increasingly perform echo examinations to inform decision making. Provision of point of care ultrasound in critical care is a key recommendation of GPICS¹.

Training and accreditation in the provision of focused echo examination is delivered as FUSIC Heart (Focused Ultrasound in Intensive Care); formerly FICE (Focused Intensive Care Echocardiography).

Despite increasing expectations of gaining accreditation pre-CCT, echo competencies do not form part of the intensive care medicine (ICM) training curriculum. Trainees have competing time pressures and variable access to resources enabling achievement of these skills.

OUR AIMS

- 1 Gather national data on echo training experience and accreditation status
- 2 Identify demographics, challenges and barriers to accreditation
- 3 Advise future decision making on the provision of training

METHODS

An online survey was sent to all ICM trainees in Scotland during the 2019/20 training year (pre-pandemic). Questions addressed areas of interest including trainee demographics, echocardiography accreditation status, perceived challenges to the accreditation process, availability of mentors and dedicated training time. Survey designed and analysed using Google Forms.



Demographics		Accredited	
Gender	Male	50%	10/20
	Female	21%	3/14
LTFT	FT	42%	13/31
	LTFT	0%	0/3
Specialty	ICM single	25%	1/4
	Anaesthetics	25%	6/24
	EM	100%	2/2
	AM	100%	2/2
	Respiratory	100%	2/2
Region	West	31%	4/13
	South East	55%	6/11
	East	50%	2/4
	North	17%	1/6

RESULTS

Of the 66 ICM trainees 34 replied giving a response rate of 52%. 13 (38%) respondents had achieved formal accreditation in echocardiography, 21 (62%) had not.

Accredited trainees

12 of the 13 accredited trainees had FICE and 46% had achieved this before starting ICM training. None were allocated dedicated time in their rota to perform scans. Most (85%) came into the ICU on days off (between 1-6 hours/week). Perceived challenges to accreditation included 'time available to scan' (85%), 'access to mentors' (46%) and the local 'availability of FICE course' (23%).

Unaccredited trainees

13 of the 21 unaccredited trainees (62%) were working towards accreditation. The majority (92%) had no dedicated time in their rota to perform scans. About half (54%) were coming into the ICU on days off. Perceived challenges to completing accreditation included 'time available to scan' (95%), 'access to mentors' (38%) and 'funding a course' (33%).

8 trainees did not have echo accreditation nor were they working towards one (24% of all respondents); of these 4 previously 'timed out'. Exam pressures, regional availability of mentors and training block time constraints were listed as barriers to completion.

Demographics

Demographic disparities were identified as potential barriers to accreditation rates. Dual anaesthetic training (25%), being a female trainee (21%), and training LTFT (0%) were associated with not being accredited. Regional disparities existed however stage of training was unrelated.

CONCLUSIONS

- 1 Most ICM trainees in Scotland are not echo accredited despite the recognised importance in the provision of critical care services.
- 2 Trainees achieving and working towards accreditation are constrained by time and training resources.
- 3 Training programme, female gender, LTFT training and training region were associated with lower accreditation rates.

RECOMMENDATIONS

- 1 To address clinical demand for the provision of point of care echo intensive care trainees must achieve accreditation.
- 2 Formal adoption of echo training into the ICM curriculum could be considered.
- 3 Specific demographic disparities exist which should be explored further.

References

1 The Faculty of Intensive Care Medicine. (2019). Guidelines for the Provision of Intensive Care Services (GPICS). Intensive Care Society. 2(4.7), 138-141.

Images 123 sonography. (2019). Echo. Available: 123sonography.com. Last accessed 24th November 2021.