Service needs and innovations to extend clinical capacity for sonographer education: An on-line survey

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1. Introduction

- Sonography is a shortage occupation.[1]
- Vacancy rates have been quoted between 5 to 25%.[2]
- Ultrasound education is undergoing fundamental changes to meet demands. [2, 3, 4, 5]
- Health Education England (HEE) have working groups looking at different aspects of the sonographer workforce challenges[4]. This survey is part of the work of one of these groups, namely the sonography training group (STG).
- One of the biggest challenges in expanding the sonographer workforce is clinical placement capacity.[5,6]

The aim: of this study was **t**o ascertain current and estimated sonographer shortages and explore innovations to increase clinical training capacity.

2. Method

- On-line SurveyMonkey® questionnaire sent to 196 imaging department managers on the Society and College of Radiographers (SCoR) database and 23 SCoR reps.
- It was also disseminated in SCoR 'Synergy News' and social media; Facebook and Twitter.
- E-mail contact was made with ultrasound education providers (HEIs) in England.

- Five questions were asked:
  - two about sonographer staffing levels
  - three relating to clinical capacity
- Free text space was available for comments and information about innovations to improve capacity for sonographer clinical education.
- Follow-up emails and phone calls elicited further information from some respondents.
- Email contact was made with Radiology Academy leads

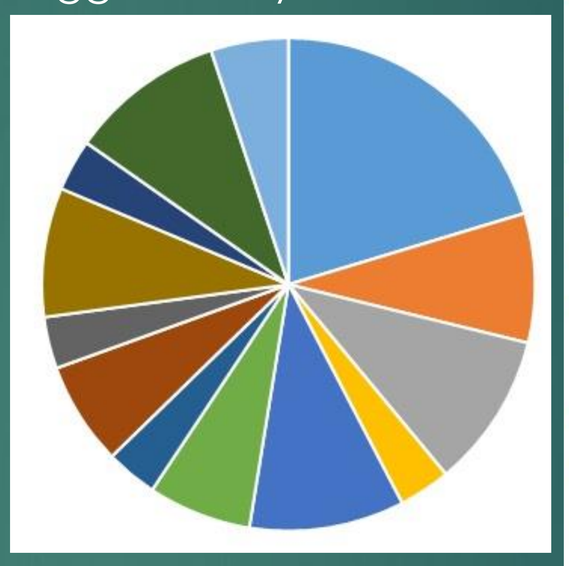
3. Results

- 72 useful responses to the questionnaire
- All 15 HEIs responded to email questions
- Current staffing and clinical capacity for teaching are demonstrated on Figure 1.
- 30 (42%) departments had additional capacity, with a total extra capacity to teach 45 more students.
- Many challenges were suggested by clinical departments, including financial constraints, workload, intense nature of ultrasound teaching, staff shortages and competing demands e.g. need to teach other health care professionals.
- Innovations and solutions suggested by HEIs (Figure 2) and clinical staff were similar.

Figure 1: Questionnaire results

Question	Mean	Min	Max
No. additional sonographers needed for current service	2.65	0	10
Additional sonographers predicted for service in 5yrs	4.6	0	20
Number of sonographers in training	2	0	8
Number of others in training	2	0	24
How many sonographers could be trained annually	2.26	0.2	5

Figure 2: Innovations suggested by HEIs



4. Discussion

- Many departments are teaching sonographers and plan to continue this.
- Challenges to educating sonographers are similar to those reported by the CfWI report.[2] With staff shortages and funding commonly reported.
- Average numbers of sonographers training is slightly higher than reported in 2015.[2]
- There is capacity, within departments surveyed, to take 45 additional students. This could be exploited, with suitable funding and sharing of education across regions.
- There is a need to change to meet demand. Ultrasound education is evolving, with direct entry routes available which need additional placement capacity.
- Academy style clinical centres (in NHS or HEI settings) combined with peripatetic educators could help reduce the burden on overstretched clinical departments. The model could be similar to radiology academies or the 'spoke and hub' models for reporting radiographers.[7]
- Combining with radiology academies has the potential to increase capacity but also inter-professional learning.
- Simulation is also being used by many HEIs and some clinical departments. This has the potential for expansion, although some respondents said this was only useful in the early stages of learning.

Figure 3: A clinical skills facility in an HEI

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