

Questions for Online survey

1. Gender
 - a. Male
 - b. Female

2. Are you a full time trainee (FT) or less than full time trainee (LTFT)? (If LTFT, what percentage of hours?)
 - a. Full time
 - b. Less than full time

3. What stage of training are you?
 - a. ST3
 - b. ST4
 - c. ST5
 - d. ST6
 - e. ST7
 - f. ST8
 - g. Other _____

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4. What is your specialty?
 - a. Cardiology
 - b. Renal
 - c. Gastroenterology
 - d. Geriatrics
 - e. Respiratory
 - f. Infectious diseases/microbiology
 - g. Diabetes and endocrinology
 - h. Rheumatology
 - i. Acute Internal Medicine
 - j. Other _____

5. Are you confident in performing the following procedures unsupervised and dealing with any potential complications? (Yes/No)
 - a. Abdominal paracentesis
 - b. DC cardioversion
 - c. Knee aspiration
 - d. Chest drain insertion for pneumothorax
 - e. CVC insertion (internal jugular, subclavian or femoral approach)
 - f. Chest drain insertion for pleural effusion (USS guided)

Comments (if any) _____

6. Do you feel the following procedures are essential to running a safe acute take/ dealing with ward emergencies on GIM on calls? (Yes/No)
 - a. Abdominal paracentesis
 - b. DC cardioversion
 - c. Knee aspiration

- d. Chest drain insertion for pneumothorax
- e. CVC insertion (internal jugular, subclavian or femoral approach)
- f. Chest drain insertion pleural effusion (USS guided)

Comments (if any) _____

7. How many of the following procedures have you **performed** (on patients) in the last year?
- a. Abdominal paracentesis
 - b. DC cardioversion
 - c. Knee aspiration
 - d. Chest drain insertion for pneumothorax
 - e. CVC insertion (internal jugular, subclavian or femoral approach)
 - f. Chest drain insertion for pleural effusion (USS guided)

None <=5 6-10 11-15 >15

Comments (if any) _____

8. How often in the past 12 months do you feel a procedure (as listed above) has been **delayed** due to your lack of confidence in performing it?

Never <5 times 5-10 times >10 times

Comments (if any)

9. In the last 12 months, have you sought out **additional opportunities** to improve your procedural skills, where lacking (e.g. attending elective lists, courses)? (Yes/No)

If so, what? _____ -

If not, why is this the case? _____

10. How useful is current GIM training in gaining/ maintaining competence in the essential GIM procedural skills? (1: Not at all useful, 5: very useful)

11. Do you think Simulation-based training will be useful in improving your confidence with the essential GIM procedural skills? (Yes/No)

12. What is your experience of simulation-based training?

- a. No experience
- b. Minimal experience
- c. Some experience
- d. Lots of experience

13. Do you think the following scenarios would be useful for Simulation -based training for GIM Registrars? (Yes/No)

- a. Cardio-respiratory arrest
- b. Arrhythmias

- c. Unconscious patient
- d. Shocked patient
- e. Anaphylaxis
- f. External pacing
- g. Non- technical factors e.g. communication skills
- h. Other _____

14. What factors would improve the Simulation training experience for you, personally? (e.g. location, duration, group size, frequency etc)

15. Do you have any other comments or suggestions?

Thank you for taking the time to complete this survey.

Thematic analysis of free text answers (Online survey)

Themes	Codes	Supporting quotes from online survey
Factors affecting confidence	Frequency of performing procedure	<p>“Competent in all of the above but confidence only comes with experience and we generally don't do these procedures anymore.”</p> <p>“It is rare in general medicine that I perform some of these procedures and therefore having regular SIM/skills labs training to keep my knowledge up-to-date would be invaluable.”</p>
	Time out of training	<p>“I had a several years break between CMT and registrar training. During this time my confidence at these procedures decreased.”</p> <p>“Somewhat confident in the majority but I feel a bit de-skilled as I have not performed them in a few years (due to OOPR time).”</p>
	Exposure due to base specialty	<p>“As a renal reg I feel confident with ultrasound and seldinger technique so these procedures will always feel less difficult; I do hundreds of CVCs. I've been fortunate in my SHO jobs to get significant exposure to these techniques in CMT.”</p> <p>“I am lucky as a respiratory trainee as I have had time working in the intensive care unit and on pleural procedural lists as part of my normal clinical training in the last twelve months”</p>
Impact of inadequate procedure training on patients	Patient comfort	“There have been cases where I would have preferred to feel confident to insert a chest drain into patients on an acute take to relieve respiratory distress.”
	Patient safety	“I feel that most medics perform so few CVC insertions, and therefore that it would be dangerous for a general medic to do this on a medical take unless it was an absolute emergency”
Impact of inadequate procedure training on doctors	Medico-legal	“In the increasingly sub-specialised, and litigious, profession in which we work I think it is indefensible to be performing some of these procedures if there is someone better qualified available in the hospital.”

		<p>“just because you are signed off and maybe did the procedure once a few years ago I do not feel makes you competent - especially if something went wrong and you had to defend that in the coroners court.”</p>
	Sign-offs	<p>“Although happy to perform procedures it is difficult to get signed off when performing as I am often the most senior person available so not helpful for e-portfolio”</p>
Barriers to seeking procedure training during on calls	Busy nature of on calls	<p>“Often I am being stretched in several directions and I do not feel confident that I would have enough time to complete these procedures safely.”</p>
	Supervision	<p>“extreme lack of time to perform procedures supervised due to lack of staff”</p> <p>“It can be difficult to get the procedures signed off in your registrar training as the procedures are being performed in out of hours or when there is no senior around to observe you to get signed off or the senior has not performed the procedure for years.”</p>
	Delegation to another specialty	<p>“I have sought the help of another SpR”</p> <p>“There is always someone more qualified to do the procedure during an acute take e.g. anaesthetist, ITU reg, A&E reg etc”</p>
Barriers to seeking other procedure training opportunities (other than on calls)	Lack of time	<p>“I am afraid to say it is lack of time. Ward rounds, seeing referrals and clinics means that there is absolutely no time spare within working hours to do this.”</p> <p>“Difficulty obtaining time away from prior commitments (clinics, endoscopy etc)”</p>
	Attitude of doctor	<p>“Not high on list of priorities”</p> <p>“If they are not cropping up in training - are they really that important?”</p>
	Lack of space	<p>“Everyone needs to get to these lists so they are difficult to book onto.”</p> <p>“I specifically sought time on a training list for chest drain insertion under ultrasound guidance but this was prioritised for respiratory trainees and I was told that it would not be possible for me to attend.”</p>

Factors determining a good simulation session	Group size	“Small groups so not too intimidating”
	Trainer/facilitators	“Approachable teachers” “Consultant-led”
	Environment	“Positive supportive learning environment - very conscious that these are skills we are "supposed" to have and many of us feel that we nonetheless lack them, it's important that we feel empowered to do better not criticised for lacking them.” “Open atmosphere with a 'no blame' culture” “Realistic, enjoyable, safe learning environment”
	Protected time	“Full day set aside so that attendees do not feel pressure to return back to clinical work/are late arriving due to clinical work.” “Bleep free”
	Scenarios	“Wide range of actual clinical scenarios faced on the take” “Recreate complex and challenging cases frequently encountered in clinical practice”
	Frequency of sessions	“Good number of sessions - one session once a year is not adequate” “Frequent sessions - once every 6 months”
	Feedback	“The opportunity to practice a wide range of scenarios in a controlled environment with constructive feedback on performance.” “Good feedback”