

Supplementary Material 2. 2019 POCUS course survey

POINT-OF-CARE-ULTRASOUND (POCUS) PRE-COURSE QUESTIONNAIRE

This questionnaire will be used for quality improvement and/or research purposes to improve point-of-care-ultrasound education. The questionnaire will be administered today, with an electronic follow-up questionnaire and at 3 months, 6 months, and 12 months time periods. It will take approximately 3-5 minutes to complete this questionnaire and less time for follow-up questionnaires. All responses will be kept confidential. You will not be identified in any related reports or publications. It is important that you complete all questions. Thank you for your participation.

Questions below ask about your **CONFIDENCE USING POCUS IN PATIENT MANAGEMENT**. A Likert Scale is used, with **1** representing 'Not at all confident', **2** 'Not confident', **3** 'Neither confident nor not confident', **4** 'Confident', and **5** 'Very confident'.

Please circle the number that best corresponds to your response:

	Not confident at all	Not confident	Neither	Confident	Very confident
1. Adjusting 'gain and depth' of image?	1	2	3	4	5
2. Choosing the correct probe for body habits & exam type?	1	2	3	4	5
3. Obtaining vascular access?	1	2	3	4	5
4. Performing a FAST or EFAST exam?	1	2	3	4	5
5. Recognizing pericardial effusion?	1	2	3	4	5
6. Diagnosing tamponade?	1	2	3	4	5
7. Diagnosing pneumothorax?	1	2	3	4	5
8. Recognizing free fluid in the peritoneum?	1	2	3	4	5
9. Obtaining diagnostic cardiac views?	1	2	3	4	5
10. Assessment of LV function?	1	2	3	4	5
11. Recognizing hemothorax?	1	2	3	4	5
12. Ability to use POCUS on neonatal patients?	1	2	3	4	5

13. Evaluating RV function and volume overload?	1	2	3	4	5
14. Evaluating volume responsiveness?	1	2	3	4	5
15. Differentiating hemodynamic shock from volume loss?	1	2	3	4	5
16. Ability to acquire and interpret images to clinically integrate into a diagnosis?	1	2	3	4	5

Please circle the answer that best corresponds to your response:

1. Approximately how many patients have you scanned in the last month:
 - a. 0
 - b. 1-2
 - c. 3-4
 - d. >4

2. Approximately how many patients have you scanned in the last 3 months:
 - a. 0
 - b. 1-3
 - c. 4-7
 - d. >7

3. Approximately how many patients have you scanned in the last 6 months:
 - a. 0
 - b. 1-4
 - c. 5-8
 - d. 9-12
 - e. >12

4. Approximately how many patients have you scanned in the last 12 months:
 - a. 0
 - b. 1-5
 - c. 6-10
 - d. 11-15
 - e. >15

5. What scans do you typically perform?
 - a. E-FAST
 - b. Focused cardiac
 - c. IVC volume assessment

- d. Lung
- e. Soft Tissue
- f. Procedural
- g. Other (specify): _____

6. What are the barriers that inhibit you or your colleagues from using POCUS?
(Select all that apply)

- a. No machine
- b. No ultrasound medical director
- c. No POCUS curriculum
- d. No quality assurance/improvement program
- e. No institutional credentialing pathway
- f. Inadequate institutional support
- g. No time
- h. Not enough personal interest
- i. Lack of confidence in ability to obtain/interpret images
- j. No method to confirm image interpretation (such as QA program)
- k. Confusion about national guidelines for credentialing
- l. No experts for hands-on training and/or maintenance education
- m. Potential interdisciplinary conflicts over POCUS
- n. Other: _____

7. What could be done to maximize your use of POCUS?

8. What could be done to maximize the use POCUS by your colleagues?

Please provide some information about yourself.

The information you provide is strictly confidential. You will in no way be identified in study-related reports or publications.

1. Specialty or location of work?
- a. PICU
 - b. NICU
 - c. PEM
 - d. Other (specify): _____

2. Role:
- a. MD, DO
 - b. RN
 - c. PA
 - d. NP
 - e. Other (specify): _____

3. Years in practice: _____
4. Hospital or clinic where you currently practice: _____
5. On average, how many patients do you care for in a week?
- a. <10
 - b. 11-20
 - c. 21-30
 - d. ≥ 31
 - e. Other:
6. What prior training do you have with Point of care ultrasound (POCUS)?
(Select all that apply)
- a. Medical school
 - b. Residency
 - c. Fellowship
 - d. Conference: _____
 - e. Simulation lab: _____
 - f. Online course: _____
 - g. Other: _____
7. How many years of experience do you have in performing POCUS? _____
8. POCUS education in which areas would you like to improve on diagnostic confidence in your practice?
(Select all that apply)
- a. E-FAST
 - b. Focused cardiac
 - c. IVC volume assessment
 - d. Lung
 - e. Soft Tissue
 - f. Procedural
 - g. Other (specify):

9. What could be done to help you personally use POCUS?

10. What suggestions or feedback do you have to help you or your colleagues use POCUS?

POINT-OF-CARE-ULTRASOUND (POCUS) POST-COURSE
EVALUATION

Questions below ask about your **CONFIDENCE USING POCUS IN PATIENT MANAGEMENT**. A Likert Scale is used, with **1** representing 'Not at all confident', **2** 'Not confident', **3** 'Neither confident nor not confident', **4** 'Confident', and **5** 'Very confident'.

Please circle the number that best corresponds to your response:

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2. Choosing the correct probe for body habits & exam type?	1	2	3	4	5
3. Obtaining vascular access?	1	2	3	4	5
4. Performing a FAST or EFAST exam?	1	2	3	4	5
5. Recognizing pericardial effusion?	1	2	3	4	5
6. Diagnosing tamponade?	1	2	3	4	5
7. Diagnosing pneumothorax?	1	2	3	4	5
8. Recognizing free fluid in the peritoneum?	1	2	3	4	5
9. Obtaining diagnostic cardiac views?	1	2	3	4	5
10. Assessment of LV function?	1	2	3	4	5
11. Recognizing hemothorax?	1	2	3	4	5
12. Ability to use POCUS on neonatal patients?	1	2	3	4	5
13. Evaluating RV function and volume overload?	1	2	3	4	5
14. Evaluating volume responsiveness?	1	2	3	4	5
15. Differentiating hemodynamic shock from volume loss?	1	2	3	4	5

16. Ability to acquire and interpret images to clinically integrate into a diagnosis?	1	2	3	4	5
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Please circle the number that best characterizes your response:

	Strongly Dissatisfied	Dissatisfied	Neutral	Satisfied	Strongly satisfied
1. I was satisfied with the course didactics	1	2	3	4	5
2. I was satisfied with the hands-on learning modules	1	2	3	4	5
3. In general, I was satisfied with the course instructors	1	2	3	4	5

4. Please rate your satisfaction with the course instructors:

	Strongly Dissatisfied	Dissatisfied	Neutral	Satisfied	Strongly satisfied
Belinda Chan	1	2	3	4	5
Ellie Hirshberg	1	2	3	4	5
Regan Giesinger	1	2	3	4	5
Sasha Gordon	1	2	3	4	5
Sydney Ryan	1	2	3	4	5
Matthew Steimle	1	2	3	4	5
Matthew Szadkowski	1	2	3	4	5

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5. The course was effective in achieving my learning objectives	1	2	3	4	5
6. The course content was relevant to my field of practice	1	2	3	4	5
7. I plan to incorporate the content I learned into my practice	1	2	3	4	5

8. What could be improved with the didactics?

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9. What could be improved with the hands-on learning modules?

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POINT-OF-CARE-ULTRASOUND (POCUS) FOLLOW-UP COURSE QUESTIONNAIRE

3 Month Follow-up

This is follow-up from the Point-of-Care Ultrasound (POCUS) course you recently attended:

Questions below ask about your **CONFIDENCE USING POCUS IN PATIENT MANAGEMENT**. A Likert Scale is used, with **1** representing 'Not at all confident', **2** 'Not confident', **3** 'Neither confident nor not confident', **4** 'Confident', and **5** 'Very confident'.

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14. Evaluating volume responsiveness?	1	2	3	4	5

15. Differentiating hemodynamic shock from volume loss?	1	2	3	4	5
16. Ability to acquire and interpret images to clinically integrate into a diagnosis?	1	2	3	4	5

Please circle the answer that best corresponds to your response:

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2. Approximately how many patients have you scanned in the last 3 months:
 - a. 0
 - b. 1-3
 - c. 4-7
 - d. >7

3. Approximately how many patients have you scanned in the last 6 months:
 - a. 0
 - b. 1-4
 - c. 5-8
 - d. 9-12
 - e. >12

4. Approximately how many patients have you scanned in the last 12 months:
 - a. 0
 - b. 1-5
 - c. 6-10
 - d. 11-15
 - e. >15

5. What scans do you typically perform?
 - a. E-FAST
 - b. Focused cardiac
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 - d. Lung
 - e. Soft Tissue
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 - g. Other (specify): _____

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(Select all that apply)

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- p. No POCUS ultrasound medical director
- q. No POCUS curriculum
- r. No quality assurance/improvement program
- s. No institutional credentialing pathway
- t. Inadequate institutional support
- u. No time
- v. Not enough personal interest
- w. Lack of confidence in ability to obtain/interpret images
- x. No method to confirm image interpretation
- y. Confusion about national guidelines for credentialing
- z. No experts for hands-on training and/or maintenance education
- aa. Potential interdisciplinary conflicts over POCUS
- bb. Other: _____

7. What could be done to maximize your use of POCUS?

8. What could be done to maximize the use POCUS by your colleagues?
