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INTRODUCTION

Topic: Improve use of Point of Care Ultrasound (PoCUS) at the bedside in a rural emergency department to identify shoulder dislocation with use of a musculoskeletal educational intervention.

Problem: Lack of knowledge and confidence using PoCUS at the bedside to manage shoulder dislocation

Aim:

• Improve PoCUS knowledge and confidence regarding identification of shoulder dislocation with a musculoskeletal education intervention

Objectives:

- Needs assessment
- Literature review
- Develop a musculoskeletal educational intervention
- Email Power Point educational intervention and invite for survey participation
- Assess knowledge, confidence, and use before and after intervention with Evaluation Tool for Ultrasound Skills Development and Education

METHODS

Design: Prospective observational quality improvement study utilizing a focused musculoskeletal educational tool

Act: Adopt PoCUS for shoulder dislocation management

Plan: Email intervention and invite all ED providers (N=5) to participate in surveys gathering self reported use, knowledge, and confidence using PoCUS

Study: Survey data analyzed via descriptive statistics

Do: Utilize a professional survey platform to create, organize, maintain anonymity, collect, and analyze individual responses.

RESULTS

- Participation achieved a 60% (N=3) response rate.
- 66% of respondents reported somewhat confident in using PoCUS for musculoskeletal complaints
- 2 of the 3 respondents report improved confidence diagnosing shoulder dislocation after the musculoskeletal intervention
- 66% of respondents reported barriers to use of PoCUS in the ED are attributed to lack of training/education
- Limitations of this study include small sample size.



Table 1

Provider Demographics

Participants	Provider	Experience	EM Board Certified	US Certified	US Training
1	PA	6-10 yrs	No	No	None
2	PA	11-15 yrs	No	No	Academic
3	MD	11-15 yrs	No	No	Academic

Figure 2

Confidence Using PoCUS for Musculoskeletal (MSK) Complaints

Participants	Confidence Utilizing PoCUS for MSK Complaints	Confidence Diagnosising Shoulder Dislocation with PoCUS
1	Somewhat	Not
2	Somewhat	Somewhat
3	Generally	Very
	Ability to Identify	Ability to Identify
	Shoulder Dislocaiton	Shoulder Dislocation
	with PoCUS Before	with PoCUS After
Participants	Intervention	Intervention
1	Not	Somewhat
2	Somewhat	Somewhat
3	Generally	Very

IMPLICATIONS FOR PRACTICE

- Improve time to reduction by 30 minutes.
- Intervention demonstrates improved confidence and knowledge in novice sonographers
- Training using PoCUS at the bedside aids in reducing barriers to use, improves confidence, and knowledge,
- Empowers ED providers with new knowledge and skills
- Apply education to other body systems to improve knowledge and confidence
- Larger study