

Supplemental Table 2. Focus Group Moderator Guide: interview questions mapped from the Consolidated Framework in Implementational Research

CFIR constructs	Construct Characteristics	Some interview questions to explore behavior change
Individual	Knowledge	What is considered CVC malposition?
		Can you describe how POCUS is used for PTX detection
		Have you seen or performed POCUS confirmation of CVC placement?
		If yes to above question: Do you know how a catheter malposition would appear on ultrasound?
	Beliefs about capabilities (self-efficacy)	What problems have you encountered when trying to practice POCUS guided CVC confirmation?
		What would help you to increase your comfort with POCUS guided CVC confirmation?
	Belief about intervention	Do you think that POCUS can correctly confirm CVC position?
		Do you believe that using POCUS for CVC position confirmation is feasible in your practice?
		Do you believe that using POCUS for CVC position confirmation would benefit your practice?
		Do you foresee a negative consequence of using POCUS for CVC position confirmation?
Inner Setting	Tension for change	Are there any internal pressures to increase or decrease your use of POCUS for CVC position confirmation?
	Learning climate	Are there opportunities available for you to increase your competence of POCUS for CVC position confirmation?
	Readiness for implementation	Does POCUS guided CVC confirmation fit with your current workflow?
Process	Planning	Whose buy-in are needed to implement POCUS guided CVC confirmation?
		What do you think will happen if POCUS missed a CVC position malposition in terms of patient outcomes? Staff outcomes?
	Engaging opinion leaders	Whose work is affected by using POCUS instead of CXR for CVC confirmation?
Reflecting and evaluating	Can you think of times where you might not perform POCUS for CVC position confirmation? such as competing tasks or time constraints?	
Outer Setting	External incentives	Are there incentives to use POCUS for CVC position confirmation? If so, what are they?
	Needs & resources	What initial steps need to be taken to improve POCUS for CVC position confirmation compliance on an organizational level?
	External policy/incentive	How long are you typically waiting for CXR for confirmation of CVC positioning?
		Do you think necessary resources are available for staff to increase POCUS for CVC position confirmation?
	Needs & resources	Do you know what your hospital/national guideline for CVC position confirmation is?
	Patient needs/resources	Do you foresee any positive or negative patient outcomes of using POCUS for CVC position assessment?
Intervention	Adaptability	To what extent do social influences facilitate or hinder performing POCUS for CVC position confirmation? Others?
	Quality & packaging	What initial steps need to be taken to improve POCUS for CVC position confirmation compliance on an individual level?
	Evidence strength & quality	Do you believe that POCUS for CVC position confirmation will enhance patient care performance?

CFIR, Consolidated Framework in Implementational Research; CVC, central venous catheter; POCUS, point of care ultrasound; PTX, pneumothorax; CXR, chest radiograph