PARTICIPANT ID (this unanimous identifier was used in the previous survey):

Last two characters of your first name (e.g. Sally would be LY)		2 digits of the numerical day of your birth (e.g. born Dec 4th would be 04)		Last two characters of the city in which you were born (e.g. Born in Atlanta would be TA)	

PLEASE RATE YOUR CONFIDENCE IN THE FOLLOWING CVC INSERTION PROCEDURES

	Not at all confident				Extremely confident
Obtaining a clear image of the target vessel using the ultrasound machine	☐	☐	☐	☐	☐
Locating the needle on the ultrasound image	☐	☐	☐	☐	☐
Identifying the correct site of insertion on the skin for the introducer needle	☐	☐	☐	☐	☐
Using *tactile feedback* (sense of feel) during placement of the line	☐	☐	☐	☐	☐
Using the *ultrasound image/transducer*, identifying the correct vessel for puncture	☐	☐	☐	☐	☐
Using *tactile feedback*, identifying the correct vessel for puncture	☐	☐	☐	☐	☐
Advancing and retracting the introducer needle slowly and steadily	☐	☐	☐	☐	☐
Modifying the needle trajectory based *on ultrasound feedback*	☐	☐	☐	☐	☐
Identifying when the introducer needle is in the correct location	☐	☐	☐	☐	☐
Using *tactile feedback* to help guide the introducer needle	☐	☐	☐	☐	☐
Placing the introducer needle at the center of the vein in one attempt	☐	☐	☐	☐	☐
Placing the introducer needle at the center of the vein in multiple attempts	☐	☐	☐	☐	☐
Conducting the entire procedure without any mistakes	☐	☐	☐	☐	☐
Conducting the entire procedure on a CVC simulator (mannequin)	☐	☐	☐	☐	☐

Please provide rationale for your ratings

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PLEASE RATE YOUR LEVEL OF AGREEMENT ON THE MANNEQUIN TRAINING YOU RECEIVED TODAY

The Mannequin Training:	Completely Disagree				Completely Agree
… made me sensitive to how patient anatomy impacts the force required to advance needles in the human body	☐	☐	☐	☐	☐
… made me sensitive to patient anatomies' impact on vessel location in the body	☐	☐	☐	☐	☐
… helped me understand how to *modify* CVC insertion procedures based on patient anatomy	☐	☐	☐	☐	☐
… helped me learn where to insert the introducer needle during the procedure	☐	☐	☐	☐	☐
… helped me learn to distinguish the vein from the artery on the ultrasound image	☐	☐	☐	☐	☐
… helped me learn how and when to modify my needle's trajectory during the insertion	☐	☐	☐	☐	☐
…helped me correctly identify when I had successfully inserted the needle	☐	☐	☐	☐	☐
…helped me understand how to use *tactile feedback* (sense of feel) during placement of the line	☐	☐	☐	☐	☐
… was an effective method for learning the CVC process	☐	☐	☐	☐	☐
The Patient Profiles made me think differently about how variations in patient anatomy impacts CVC placement	☐	☐	☐	☐	☐

Please provide rationale for your ratings *please do not leave blank*

PLEASE RATE YOUR LEVEL OF AGREEMENT ON THE HAPTIC ROBOTIC TRAINING YOU RECEIVED TODAY

The Haptic Robotic Training:	Completely Disagree				Completely Agree
… made me sensitive to how patient anatomy impacts the force required to advance needles in the human body	☐	☐	☐	☐	☐
… made me sensitive to patient anatomies' impact on vessel location in the body	☐	☐	☐	☐	☐
… helped me understand how to *modify* CVC insertion procedures based on patient anatomy	☐	☐	☐	☐	☐
… helped me learn where to insert the introducer needle during the procedure	☐	☐	☐	☐	☐
… helped me learn to distinguish the vein from the artery on the ultrasound image	☐	☐	☐	☐	☐
… helped me learn how and when to modify my needle's trajectory during the insertion	☐	☐	☐	☐	☐
…helped me correctly identify when I had successfully inserted the needle	☐	☐	☐	☐	☐
…helped me understand how to use *tactile feedback* (sense of feel) during placement of the line	☐	☐	☐	☐	☐
… was an effective method for learning the CVC process	☐	☐	☐	☐	☐

Please provide rationale for your ratings *please do not leave blank*

PARTICIPANT ID (this unanimous identifier was used in the previous survey):

Last two characters of your first name (e.g. Sally would be LY)		2 digits of the numerical day of your birth (e.g. born Dec 4th would be 04)		Last two characters of the city in which you were born (e.g. Born in Atlanta would be TA)	

PLEASE RATE YOUR CONFIDENCE IN THE FOLLOWING CVC INSERTION PROCEDURES

	Not at all confident				Extremely confident
Obtaining a clear image of the target vessel using the ultrasound machine	☐	☐	☐	☐	☐
Locating the needle on the ultrasound image	☐	☐	☐	☐	☐
Identifying the correct site of insertion on the skin for the introducer needle	☐	☐	☐	☐	☐
Using *tactile feedback* (sense of feel) during placement of the line	☐	☐	☐	☐	☐
Using the *ultrasound image/transducer*, identifying the correct vessel for puncture	☐	☐	☐	☐	☐
Using *tactile feedback*, identifying the correct vessel for puncture	☐	☐	☐	☐	☐
Advancing and retracting the introducer needle slowly and steadily	☐	☐	☐	☐	☐
Modifying the needle trajectory based *on ultrasound feedback*	☐	☐	☐	☐	☐
Identifying when the introducer needle is in the correct location	☐	☐	☐	☐	☐
Using *tactile feedback* to help guide the introducer needle	☐	☐	☐	☐	☐
Placing the introducer needle at the center of the vein in one attempt	☐	☐	☐	☐	☐
Placing the introducer needle at the center of the vein in multiple attempts	☐	☐	☐	☐	☐
Conducting the entire procedure without any mistakes	☐	☐	☐	☐	☐
Conducting the entire procedure on a CVC simulator (mannequin)	☐	☐	☐	☐	☐

Please provide rationale for your ratings

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PLEASE RATE YOUR LEVEL OF AGREEMENT ON THE MANNEQUIN TRAINING YOU RECEIVED TODAY

The Mannequin Training:	Completely Disagree				Completely Agree
… made me sensitive to how patient anatomy impacts the force required to advance needles in the human body	☐	☐	☐	☐	☐
… made me sensitive to patient anatomies' impact on vessel location in the body	☐	☐	☐	☐	☐
… helped me understand how to *modify* CVC insertion procedures based on patient anatomy	☐	☐	☐	☐	☐
… helped me learn where to insert the introducer needle during the procedure	☐	☐	☐	☐	☐
… helped me learn to distinguish the vein from the artery on the ultrasound image	☐	☐	☐	☐	☐
… helped me learn how and when to modify my needle's trajectory during the insertion	☐	☐	☐	☐	☐
…helped me correctly identify when I had successfully inserted the needle	☐	☐	☐	☐	☐
…helped me understand how to use *tactile feedback* (sense of feel) during placement of the line	☐	☐	☐	☐	☐
… was an effective method for learning the CVC process	☐	☐	☐	☐	☐
The Patient Profiles made me think differently about how variations in patient anatomy impacts CVC placement	☐	☐	☐	☐	☐

Please provide rationale for your ratings *please do not leave blank*

PARTICIPANT ID (this unanimous identifier was used in the previous survey):

Last two characters of your first name (e.g. Sally would be LY)		2 digits of the numerical day of your birth (e.g. born Dec 4th would be 04)		Last two characters of the city in which you were born (e.g. Born in Atlanta would be TA)	

PLEASE RATE YOUR CONFIDENCE IN THE FOLLOWING CVC INSERTION PROCEDURES

	Not at all confident				Extremely confident
Obtaining a clear image of the target vessel using the ultrasound machine	☐	☐	☐	☐	☐
Locating the needle on the ultrasound image	☐	☐	☐	☐	☐
Identifying the correct site of insertion on the skin for the introducer needle	☐	☐	☐	☐	☐
Using *tactile feedback* (sense of feel) during placement of the line	☐	☐	☐	☐	☐
Using the *ultrasound image/transducer*, identifying the correct vessel for puncture	☐	☐	☐	☐	☐
Using *tactile feedback*, identifying the correct vessel for puncture	☐	☐	☐	☐	☐
Advancing and retracting the introducer needle slowly and steadily	☐	☐	☐	☐	☐
Modifying the needle trajectory based *on ultrasound feedback*	☐	☐	☐	☐	☐
Identifying when the introducer needle is in the correct location	☐	☐	☐	☐	☐
Using *tactile feedback* to help guide the introducer needle	☐	☐	☐	☐	☐
Placing the introducer needle at the center of the vein in one attempt	☐	☐	☐	☐	☐
Placing the introducer needle at the center of the vein in multiple attempts	☐	☐	☐	☐	☐
Conducting the entire procedure without any mistakes	☐	☐	☐	☐	☐
Conducting the entire procedure on a CVC simulator (mannequin)	☐	☐	☐	☐	☐

Please provide rationale for your ratings

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PLEASE RATE YOUR LEVEL OF AGREEMENT ON THE HAPTIC ROBOTIC TRAINING YOU RECEIVED TODAY

The Haptic Robotic Training:	Completely Disagree				Completely Agree
… made me sensitive to how patient anatomy impacts the force required to advance needles in the human body	☐	☐	☐	☐	☐
… made me sensitive to patient anatomies' impact on vessel location in the body	☐	☐	☐	☐	☐
… helped me understand how to *modify* CVC insertion procedures based on patient anatomy	☐	☐	☐	☐	☐
… helped me learn where to insert the introducer needle during the procedure	☐	☐	☐	☐	☐
… helped me learn to distinguish the vein from the artery on the ultrasound image	☐	☐	☐	☐	☐
… helped me learn how and when to modify my needle's trajectory during the insertion	☐	☐	☐	☐	☐
…helped me correctly identify when I had successfully inserted the needle	☐	☐	☐	☐	☐
…helped me understand how to use *tactile feedback* (sense of feel) during placement of the line	☐	☐	☐	☐	☐
… was an effective method for learning the CVC process	☐	☐	☐	☐	☐
The Patient Profiles made me think differently about how variations in patient anatomy impacts CVC placement	☐	☐	☐	☐	☐

Please provide rationale for your ratings *please do not leave blank*