Escape Room Guide



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Welcome

Welcome to the Escape Room. Our goal was to provide a new learning experience for nurse residents and to determine if previous teaching strategies were beneficial. The room was tested by experienced nurses prior to implementing it in our nurse residency program. Overall, the experience was well-received by all the nurses. Throughout this guide, you will find all the information you need to replicate this Escape Room and tools to help you build your own.

Overview of the Escape Room

Picture this: a group of six to eight people wants to experience this Escape Room. They gather outside the room and receive rules and a scenario to get them started. The beginning scenario gives them a clue to find nine puzzle pieces hidden throughout the room. The group has 45 minutes to solve all the puzzles and escape the room. The team is provided three free clues during the experience. Additional clues cost one minute and are added to the final time.

Intro scenario

Mr. G is a 57-year-old male with a history of HTN, DM II and COPD. This is day three of admission for a COPD exacerbation. He had one episode of nausea around 9 p.m. Overnight, he has been a real PUZZLE to deal with for the nursing staff as he has been getting up frequently and forgetting to ask for help. Good luck in PIECING together information in this room.

Flow of the Escape Room

Once the puzzle pieces are found and the puzzle is assembled, the group will see a medication calculation word problem written on the puzzle. They will use a calculator and dry-erase marker found in the room to solve the medication calculation which will give them the code 1111.

Code 1111 opens the green lock on the code cart. Once the group opens the code cart, they will look through the drawers one-by-one to uncover important items. The items they will find include a USB drive, ultraviolet black light flashlight, clue card No. 1, and decoy items such as gloves, a stethoscope, alcohol wipes, 4x4s etc.

The group will plug the USB drive into the computer and see a list of hospital policies and procedures, and a password-protected file.

They must determine the flashlight is an ultraviolet black light flashlight and turn off the lights. They will search high and low for their next clue until they run across a blank glucometer sign hung on a wall. They will shine the light on the sign and uncover a message and the code 2109.

Code 2109 will unlock the lock on the makeup bag. The lock opens the makeup bag. When they open the makeup bag they will find an insulin pen, clue card No. 2 and a decoder card tucked in the pocket. They will identify a label with half-missing information on the insulin pen and search for the other missing half. They will find the other half on the patient's wristband. Once they combine the insulin pen and wristband, they will see four symbols. They will decode the symbols using the decoder card and determine the next code, 6479.

Code 6479 will unlock the blue lock on the tackle box. Inside the tackle box, the group will find four pictures of pressure ulcers with descriptions, a maze, clue card No. 3, and decoy items (barrier cream, dressing, etc.).

Several members will start solving the maze, while the others will start working on staging the pressure ulcers. The group notices A-B-C-D written on the back of the photos and puts the pressure ulcers in A-B-C-D order. Once they are in the correct order, the group determines the correct stage of each pressure ulcer leading them to their next code, 2123.

Code 2123 opens the lock on the backpack. The group will find two yellow fall-risk socks, fall-risk wristband, fall-risk sign and a gait belt. They will notice that each item has a letter on it. When they unscramble the letters, they will find the word CAUTI. In the front pocket of the backpack, they will discover clue card No. 4.

Meanwhile, the members working on the maze will soon discover it's just a decoy.

CAUTI is the password to unlock the file on the USB drive. This will open a urinary catheter removal protocol. They will scroll down and see important information determining the patient does not need their urinary catheter. If they continue to scroll down, they will see a large box that states "The next code you need is 9328."

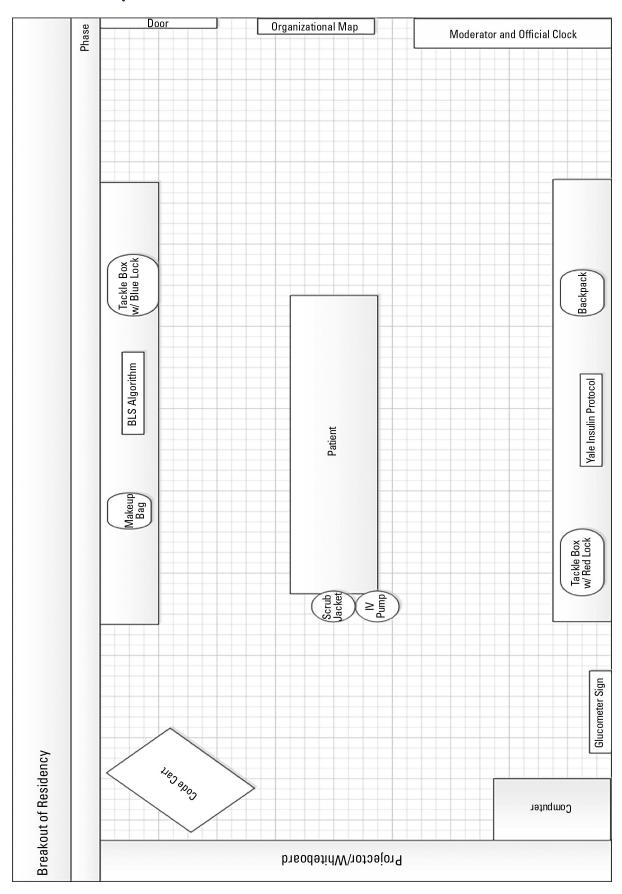
They will try this code on the remainder of the locks throughout the room. It will open the lock on the ice pack, which is holding an empty 10mL syringe. The group members will use this 10mL syringe to remove the urinary catheter. Once they remove the catheter, they will find the code 8157 on the tip of the catheter.

Code 8157 opens a lock box. Inside they will find clue card No. 5 and a CLABSI formula card. The group will need to know how long to scrub the hub, the CHG dry time, the CHG scrub time and the date of the next dressing change. The group could use the USB to review the policies and procedures to identify the correct answers. They will also assess their patient's central line dressing to determine the last dressing change. They will add seven days to the last date to come up with the next dressing change date. Once they identify all the answers on the formula card, they will add them together to equal 1085, which is their next code.

Code 1085 opens the red lock located on the tackle box. Inside the tackle box, they find clue card No. 6 and a hasp with six locks on it.

The group will use the clue cards found throughout the room to identify the clues to open the six locks. Once they remove all the locks from the hasp, they will open the hasp and find the message, "Congratulations! You ESCAPED."

Room layout



Equipment needed

You can do an online search to find these items. We purchased our items from Amazon.

Quantity	Description	Where to find
1	9-piece blank puzzle, 24 puzzles per package (9" x 5.5," white)	Amazon or craft store
3	4-digit resettable combination lock We suggest you buy three different colors (3.25" x 1.7" x 0.7")	Amazon
1	4-pack resettable combination luggage locks (0.4" x 1.3" x 2.5")	Amazon
1	4-pack assortment of resettable combination locks (3- or 4-digit combinations)	Amazon
2	Vertical word-number resettable lock	Amazon
3	5-dial word-number combination resettable lock	Amazon
1	USB drive	Amazon You might be able to find one less expensive or use one you already have
2	Ultraviolet black light flashlight	Amazon
1	Invisible black light ink markers – set of three	Amazon
1	Makeup bag with two-way zipper	Amazon
1	Secure-a-key resettable lock box	Amazon
2	Tackle box with tray (19")	Amazon
1	Brain-teasing maze for cash or gift cards	Amazon
1	Backpack with two-way zipper	Amazon
1	Hasp	Amazon
1	Blank glucometer sign	Included in tool kit You can use a picture of a glucometer in your organization (make sure it has a blank screen)
1	Empty 10mL syringe	In-house
1	Hospital grade ice pack	In-house
1	Urinary catheter with bag	In-house
1	Central line dressing with PICC line	In-house
1	Fall-risk wristband	In-house
1	Fall-risk sign	In-house
1	Two yellow fall-risk socks	In-house
1	Gait belt	In-house
1	Dry-erase marker	In-house
1	Empty code cart with AED/defibrillator on top	In-house
1	Calculator	In-house

1	Blank 3x5 index card	In-house
1	Insulin pen	In-house
1	Scrub jacket	In-house
1	IV pump	In-house
	Offices supplies: scotch tape, scissors, packing tape, label maker, highlighter, colored paper, white paper, hole punch and black Sharpie marker	In-house or office supply store
1	Pack of AA batteries (for ultraviolet black light flashlight)	In-house or big box store
1	Twine or thin string to wrap around the code cart	Craft or tool store
2	Plastic stand-alone picture/document holders	Big box store
1	Blank patient identification wristband	In-house
1	Blank patient identification label (sticker)	In-house
	Decoy items: gloves, a stethoscope, 4x4s, barrier cream, bandages/dressing	In-house
1	Laminator	In-house
1	Computer	In-house
	PDF files of organization documents (policies, procedures, maps, algorithms, etc.)	In-house

Building the room

Puzzle pieces

Equipment needed

- Blank 9-piece puzzle
- Black Sharpie marker
- Dry-erase marker
- Calculator

Instructions

- Select a medication calculation word problem and write it on the blank puzzle pieces.
- Make sure the result of the problem is a 4-digit code.
- Strategically cover all nine pieces of the puzzle with words. The group will have to find all nine puzzle pieces to solve this clue!

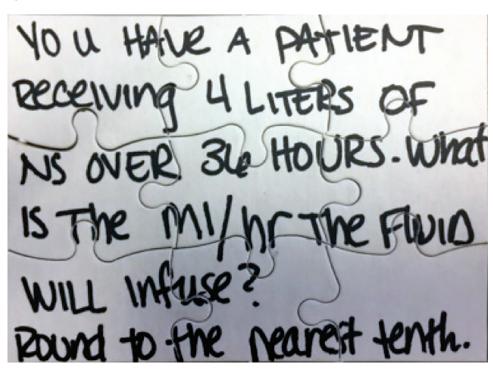
Example word problem

You have a patient receiving 4 Liters of NS over 36 hours. What is the ml/hr the fluid will infuse? Round to the nearest tenth.

Answer: 111.1 ml/hr

Rationale: 4L = 4000 ml / 36 hrs = 111.1 when rounded to the nearest tenth.

Finished product



USB drive

Equipment needed

- USB drive
- Computer
- Organization documents (policies, procedures, maps, algorithms, etc.)

Instructions

- Select policies and procedures that will be utilized throughout the room. Use approximately ten. For example: if the group gets stuck on staging pressure ulcers, they can pull up that procedure for guidance. The idea is they must locate and use their resources!
- Create a locked document (instructions on next page).

Example policies and procedures

- Blood and Blood Products Administration
- BSL Healthcare Provider Adult Cardiac Arrest
- Central Venous Access Catheter Care and Dressing Change
- Central Venous Catheter Policy
- Critical Results
- High Alert Medication Double Check
- Hypoglycemia Management of Adult Patients
- Patient Assessment High Fall Risk
- Urinary Catheter Removal Protocol (this is the password-protected document)
- Wound Assessment

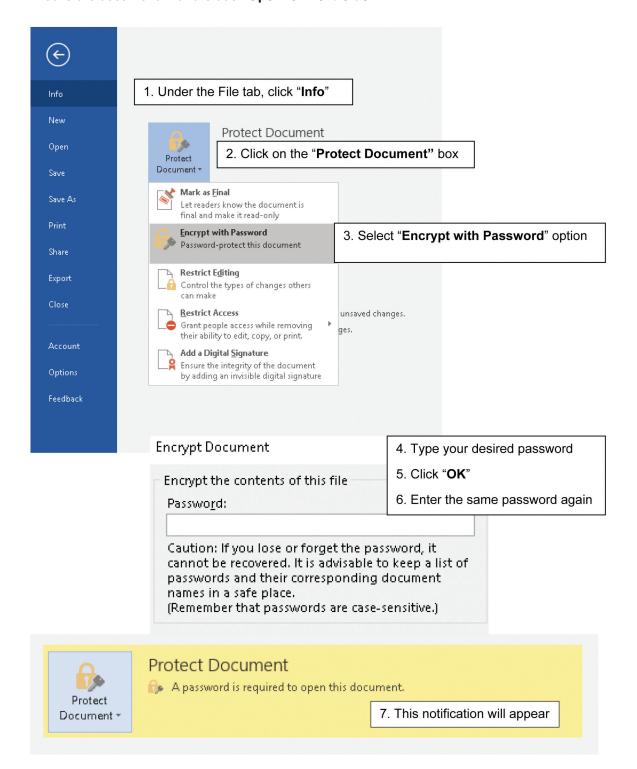
Finished product

lame	Date modified	Type	Size
A Password Required	3/29/2017 12:05 PM	File folder	
🛂 Blood and Blood Products Administration	3/29/2017 9:39 AM	Adobe Acrobat D	160 KE
🛂 BLS Healthcare Provider-Adult Cardiac A	3/29/2017 9:03 AM	Adobe Acrobat D	1,184 KE
🛂 Central venous access catheter flushing a	3/29/2017 9:21 AM	Adobe Acrobat D	4,450 KE
🔁 Central venous and Midline access devic	3/29/2017 9:26 AM	Adobe Acrobat D	3,673 KE
🔁 Central Venous Catheter Policy_7days	3/29/2017 8:50 AM	Adobe Acrobat D	157 KE
🔁 Critical Results	3/29/2017 10:58 AM	Adobe Acrobat D	125 KE
🛂 High Alert Medication Double Check	3/29/2017 8:53 AM	Adobe Acrobat D	145 KE
🛂 Hypoglycemia Management of Adult Pat	3/29/2017 10:57 AM	Adobe Acrobat D	157 KE
🔁 Patient Assessment - High Fall Risk	3/29/2017 8:53 AM	Adobe Acrobat D	117 KE
Wound Assessment	3/29/2017 9:10 AM	Adobe Acrobat D	6,742 KE

Create a password-protected document

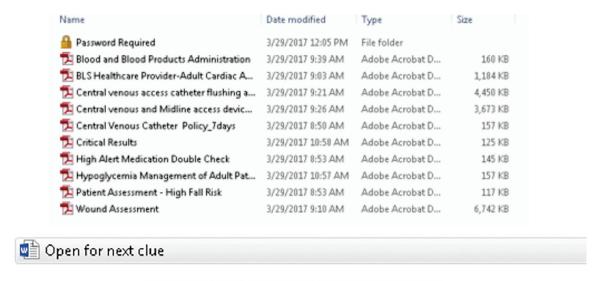
Instructions

- Cut and paste your selected policy/procedure over to a word document.
- Save the document with the title "Open for Next Clue."



Password-protected document – Example

- The locked document used was the Urinary Catheter Removal Protocol.
- The password required to open the locked document is CAUTI.
- The document is saved on the USB drive.





Special document

For the special document, we moved our Urinary Catheter Removal Protocol over to a word document.

We highlighted the important information that would lead the team to remove the catheter.

A text box was added at the bottom of the document that had the next code inside.

The next code you need is 9328

Glucometer sign

Equipment needed

- Blank glucometer sign (located under additional resources)
- Invisible black light ink marker
- Ultraviolet black light flashlight

Instructions

- Use an invisible black light ink marker to write a blood sugar reading on the screen and write the physician order on the bottom of the sign.
- Underline the numbers you want your next code to be.
- Example:
 - o MD Orders: Give <u>2</u> units of insulin. Recheck in <u>1</u> hour, if >20<u>0</u> call MD @ 917-5290
 - o Next code: 2109
- We suggest you laminate the picture.

Finished product



Decoder card

Equipment needed

- 3x5 index card
- Black Sharpie marker

Instructions

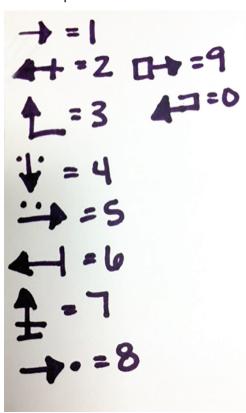
- Vertically on the left side, write the numbers 0-9 on the card.
- Next to each number draw a different symbol.*

*Hint: you want to use symbols that look alike. It will make it harder for the participants to crack the code without all the pieces.

Example

- 1 = 4
- 2 = 📤
- 3 = ★
- $4 = \spadesuit$
- 5 =
- 6 = **V**
- 7 =
- 8 = 1
- 9 = 🔺

Finished product



Insulin pen and decoder wristband

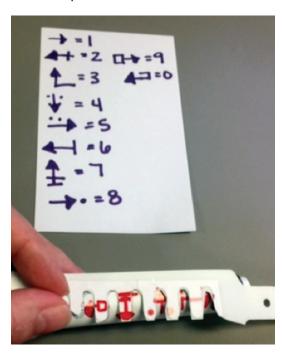
Equipment needed

- Insulin pen
- Blank patient-identification label (sticker)
- Black Sharpie marker
- Blank patient identification wristband
- Makeup bag

Instructions

- Pick four numbers from your decoder card.
- Draw symbols on the blank patient identification label (sticker). Do not remove sticker from backing.
- Cut a design down the center of the sticker so half of the symbol is on one side and the other half is on the other side.
- Place one half of the sticker on the insulin pen.
- Place the other half on the blank patient identification wristband.
- Once you place the sticker on the wristband, cut around the sticker so the wristband mimics the shape of the sticker.

Finished product







Pressure ulcer pictures

Equipment needed

- Pictures and descriptions
- Black Sharpie marker

Instructions

- Print and cut out each pressure ulcer picture and description below.
- Write A, B, C, D on the back of the pictures.

A)



Assessment: ruptured blister on thoracic spine

Stage ____ pressure ulcer

C)



Assessment: superficial skin loss

Stage ____ pressure ulcer

B)



Assessment: intact reddened skin on sacrum that doesn't lose color when palpated

Stage ____ pressure ulcer

D)



Assessment: exposed granulation tissue and adipose; however, no structures are visible

Stage ____ pressure ulcer

Falls bundle

Equipment needed

- Fall-risk wristband
- Two yellow fall-risk socks
- Fall-risk sign
- Gait belt
- Black Sharpie marker
- Backpack

Instructions

- Write a letter on each item.
- Example: CAUTI
 - o Write C on one of the socks.
 - o Underline the A on the fall-risk band.
 - o Write U on the other sock.
 - o Write T on the gait belt.
 - o Circle the I on the fall-risk sign.

Finished product



Maze – Decoy

Equipment needed

- Maze
- Colored paper
- Highlighter

Instructions

- Write "Sorry, no clue in here" on the colored paper with the highlighter.
- Check to make sure you cannot read the words through the maze.
- Fold the paper and place it inside the maze.



Urinary catheter/CAUTIEquipment needed

- Urinary catheter with bag
- Packing or scotch tape
- Label maker or use a sheet of paper and write the numbers with a pen

Instructions

- Print the code 8157 using the label maker or write on a piece of paper. Use the smallest font.
- Cut out each number and tape the code vertically on the urinary catheter tip.



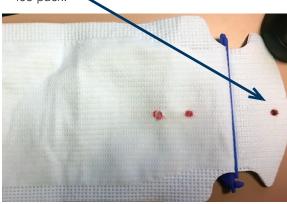
Ice pack

Equipment needed

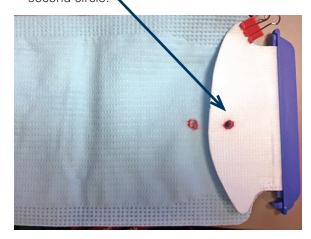
- Hospital grade ice pack
- Hole punch/scissors
- Black Sharpie marker
- Empty 10 mL syringe

Instructions

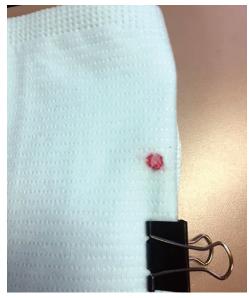
• Draw a circle in the center on the flap of the ice pack.



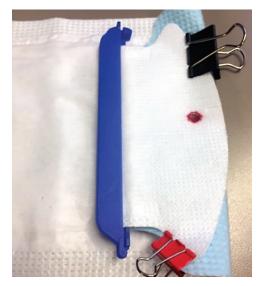
- Use the hole punch/scissors to cut out the hole.
- Fold the flap over and create the second circle by coloring in the first; cut out the second circle.



- The first two circles should align when folded.
- Fold the flap backward to create the third hole.



- Color in the circle to create your mark.
- Cut out the third hole.



All three holes should line up. Insert the
 10 mL syringe. Place a lock through the holes.

CLABSI formula card

Equipment needed

- Piece of paper
- Black Sharpie marker, or computer and printer
- Laminator (optional)

Instructions

- Create a formula card using your organization's CLABSI policies and procedures.
- Cut out formula card.
- Laminate if desired.

Example

A. Scrub the hub for at least _____ seconds

B. CHG dry time: _____ seconds

C. CHG scrub time: _____ seconds

D. Date of the next dressing change: __ _ _ (mm/dd)

$$A + B + C + D = \underline{\hspace{1cm}} \underline{\hspace{1cm}} \underline{\hspace{1cm}} \underline{\hspace{1cm}}$$

Answers

Scrub the hub: **5** seconds CHG dry time: **30** seconds CHG scrub time: **30** seconds

Date of the next dressing change: 10/20 (dressing date on mannequin is 10/13)

$$5 + 30 + 30 + 1020 = 1085$$

Clue cards

Equipment needed

- Colored paper
- Black Sharpie marker, or computer and printer
- Laminator (optional)

Instructions

• Create six clue cards with organizational information.

Example

CLUE CARD 1

What is the number you call to initiate a rapid response or code blue?

CLUE CARD 2

What is the number you call to reach security?

CLUE CARD 3

What is the acronym for operating a fire extinguisher?

CLUE CARD 4

Code _____ is when a child is abducted or goes missing inside the organization.

CLUE CARD 5

The ratio of compressions to breaths for BLS (one person responder).

CLUE CARD 6

Never leave your patient _____ in the bathroom if they are a high fall risk.

Hasp

Equipment needed

- Hasp
- Label maker

Instructions

- Print out "Congratulations! You ESCAPED." on a label.
- Open hasp and place label on the inside.

Locks and codes

Lock	Code	Where will lock be placed?
Color 4-digit lock	1111	Code cart
4-digit lock	2109	Makeup bag
Color 4-digit lock	6479	HAPI tackle box
4-digit lock	2123	Backpack
4-digit lock	9328	Ice pack
Secure-a-key resettable lock box	8157	N/A
Color 4-digit lock	1085	Final clue tackle box

Lock	Code	Where will lock be placed?
Vertical word-combo lock	PASS	
(resettable)	(Got code from clue card)	
5-dial word-number	ALONE	
combination lock (resettable)	(Got code from clue card)	
Vertical word-combo lock	PINK	
(resettable)	(Got code from clue card)	Place all the locks
5-dial word-number	85656	on the hasp
combination lock (resettable)	(Got code from clue card)	
5-dial word-number	85030	
combination lock (resettable)	(Got code from clue card)	
3-digit lock	302	
	(Got code from clue card)	

Additional resources

Rules of the room

Welcome to the Escape Room! Please keep the following information in mind:

- 1. You have 45 minutes to escape.
- 2. If you need to exit at any time, feel free to. However, the clock will not stop.
- 3. When you unlock an item, please place the lock in the designated bucket.
- 4. There will be a moderator present. This moderator will not talk. They will only communicate with you by writing.
- 5. You can ask your moderator for three free clues. Every clue you ask for after the three will cost one additional minute added to the final time.
- 6. Please do not force open items. If you try to force things, you will break them.
- 7. Remember to be efficient but accurate.
- 8. Ask yourself, "How fast can I complete the room by following all the appropriate steps?" Do not skip over steps to break out faster.
- 9. Everything you need, you will find in the room.
- 10. No cell phones!
- 11. Good luck and have fun!

Room reset guidelines

Mannequin

Patient ID wristband (left arm)

Insulin pen wristband (right arm)

DNAR (left arm) (optional)

Gown

Blanket

Pillow

Urinary catheter inserted with balloon inflated

Central line dressing with PICC line

Sticker on dressing with date 10/13

Puzzle pieces

Alertis (on top)

Under computer keyboard

Under the patient

Under the code cart

Back of the BLS sign

Under the tackle box

Under the AED/defibrillator

In the scrub jacket

IV pump under the handle

Code cart

Green lock (code: 1111)

Ultraviolet black light flashlight

USB drive

Dry-erase marker (on top of cart)

Clue card No. 1

Calculator (on top of cart)

Ice pack with lock

Decoy items (gloves, a stethoscope, 4x4s,

barrier cream, dressings, etc.)

Signs

Glucometer sign (hanging on wall)

Campus map (hanging on wall)

5-Star symposium flier (in sign holder)

Yale insulin protocol (hanging on wall)

BLS (in sign holder)

Makeup bag

Lock (code: 2109)

Insulin pen

Decoder card

Clue card No. 2

HAPI tackle box

Blue lock (code: 6479)

Pressure ulcer pictures (four: A, B, C and D)

Clue card No. 3

Maze decoy - clue inside

Decoy items (barrier cream, dressings, etc.)

Falls backpack

Lock (code: 2123)

Two vellow fall-risk socks

Gait belt

Fall-risk sign

Clue card No. 4 (in front pocket)

Fall-risk wristband

Ice pack

Lock (code: 9328)

Empty 10 mL syringe

CLABSI lock box

Lock (code: 8157)

Clue card No. 5

CLABSI formula card

Final clue tackle box

Red lock (code: 1085)

Clue card No. 6

Hasp

4-letter word lock (code: pass) (on hasp)

4-letter word lock (code: pink) (on hasp)

5-letter word lock (code: alone) (on hasp)

5-digit lock (code: 85656) (on hasp)

e digit look (oode: ooooo, (on haop)

5-digit lock (code: 85030) (on hasp)

3-digit lock (code: 302) (on hasp)

Glucometer sign – Blank



Supplemental videosHere are two videos to help you understand the room a little better.

Video 1: youtu.be/3nagkNJ2LwA

Video 2: youtu.be/ZuQkUd6x6Cc

FAQs

How much time was given to complete the escape room?

In the beginning, we gave groups 60 minutes to complete. However, that was too long. We now give each group 45 minutes to complete.

Can we buy any kind of lock?

Yes, you can buy any kind of lock. Make sure it can withstand multiple uses and will not break.

Are the colored locks necessary?

No, but we loved the colored locks. It made it very easy to reset the room in less than seven minutes for the next group. On all locks that were not colored, we added a label so we would know exactly where they needed to go.

How many clues did you give each group?

The number of clues each group needs depends on the group. We give three free clues. Any additional clues add one minute to their final time.

What was the most asked for clue?

The clue we had to give the most was to use the ultraviolet black light flashlight on the glucometer sign.

How can we keep the cost down?

We got creative to keep the cost down. For example, we were originally going to use safes. When we looked at the cost of a good quality safe, it ranged from \$60-\$100. We researched other items you could lock and came up with the tackle box, makeup bag and backpack. We could have traded the tackle boxes out for another backpack or makeup bag, but we chose the tackle box so we would have somewhere to store our equipment. Another way to keep the cost down would be to use expired supplies or ask for supplies from your vendors.

When all else fails, make your own. We needed a small storage container for our 10mL syringe. We used the ice pack, cut holes in it, added a lock and voila! We had another storage container with a lock.

How long does it take to reset the room?

We got this down to a science and could reset the room in less than seven minutes. We made the reset room tool, laminated it, and checked off the items with a dry-erase marker. This helped us reset it the same way every time.

What is the ideal group size?

The ideal group size is six to eight participants. Our nurse resident groups were large and our group size was between 10 to 12 people. This was too large.

What barriers did you run into?

- Space. Finding a room big enough but not too big, and then making sure it was available was a challenge.
- 2. Staff. Once you have the room built, it only takes two people to run it. You could really do it with one, but the reset might take a little while.

Did you anticipate any problems? If so, what did you do to mitigate them?

Yes, we tried to plan for every scenario. We brought a bag with extras (signs, batteries, locks, etc.). We never had to use anything, but we were prepared if we did.

What was your favorite clue?

Our favorite clue was the maze. We originally wanted this to be a clue in the game. When we received the maze, no one on our team could open it. After two weeks of trying, we decided to make it a decoy. It was interesting watching groups try to get it open! Only a few groups have opened the maze.

Tools to build your own escape room

How to build your own

Step 1:

Decide if you want to focus on multiple competencies or one theme.

- 1. Make a list of all the "hot topics" within your organization.
- 2. Review patient safety events to determine themes.
- 3. What annual competencies do you review?
- 4. Speak to the nurse residents. What obstacles are they encountering?
- 5. Speak to the facilitators and preceptors. What do they notice the nurse residents are struggling with (delegation, time management, etc.)?
- 6. Look at charting. What is getting done? What isn't?
- 7. Review scorecards and quality data.

Step 2:

Once you come up with a list, narrow it down to the ten most important items.

Prioritize your top ten list. Do you want the participants to assess the patient first or hang blood first?

Step 3:

Things you want to keep in mind:

- Flow: Does the room flow? Does it make sense? It probably wouldn't make sense to jump back and forth between the inpatient and outpatient world.
- Dream Big: What is your ideal escape room?

Step 4:

 Cost: Could I make this on my own? How can I keep the cost down? Can I partner with vendors or with other departments to share supplies? Instead of using a locked safe, find a cheap container that can hold a lock.

Remember: This is only one escape room. You can do multiple rooms in the future and reuse the equipment in different ways.

Escape room flowchart

Item type	Standard/ subject issue	Purpose	What will they find?	Where will it lead?	Code
Pressure ulcers	Staging pressure ulcers	Test knowledge on correct staging	Four pressure ulcers to stage	The correct order of staging will give the next code	2123

Equipment list

Equipment needed	Buy/have	Qty	Price	Purchase
Puzzle pieces	Buy	1	12.99	

Contact information

Vickie Adams, MSN, RN-BC

Education Specialist The University of Kansas Health System escaperoom@kumc.edu

