

## Health, Assistance and Nursing Sims Urinary Catherization

# URINARY CATHETERIZATION

**Target group:** Nursing students **Recommended number of participants:** 1-2 learners  
**Simulation time:** ~~±~~20 minutes **Debriefing time:** ~~±~~30 minutes

### CURRICULAR INFORMATION

#### LEARNING OBJECTIVES

At the completion of the simulation and debriefing session, learners will be able to:

- Perform a focused urinary system assessment of the patient
- Recognize the need for urinary catheterization
- Explain procedures to the patient using an appropriate communication framework
- Perform the correct steps for urinary catheterization using sterile technique
- Perform appropriate documentation
- Administer oral medication
- Perform the PQRST and gather appropriate data on pain
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#### SCENARIO OUTLINE

In this scenario, a 39-year-old female is in the surgical unit, one day post-operative after having undergone an abdominal hysterectomy. A urinary catheter was placed for surgery. It was removed this morning, and the patient has been receiving oral fluids to promote urination. She has just been to the bathroom, trying to void, but was unable to do so.

The learners should perform a focused assessment of the patient, recognize urinary retention and the need for intermittent catheterization, explain the procedure to the patient using an appropriate communication framework, follow the local protocol for performing the procedure, and perform the correct steps of an intermittent urinary catheterization, including keeping a sterile field.

#### DEBRIEFING

When the simulation is over, ~~it is recommended that~~ a facilitator-led debriefing ~~be~~will be completed to discuss topics related to the learning objectives. ~~The Event Log in Session Viewer provides suggested debriefing questions.~~ Central discussion points ~~could be~~will be:

- Performing a focused assessment of the urinary system
- Keeping a sterile field
- Communication with the patient
- Hygiene, safety, and decorum

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### SETUP AND PREPARATION

Ercole FE, Macieira TGR, Wenceslau LCC, et al. *Integrative Review: Evidences On The Practice Of Intermittent/Indwelling Urinary Catheterization*. Rev. Latino Am. Enfermagem 2013 Jan. Feb.;21(1):459-68. Retrieved from <http://www.scielo.br/pdf/rlae/v21n1/v21n1a23.pdf>

Geller EJ. *Prevention and management of postoperative urinary retention after urogynecologic surgery*. Int J Womens Health. 6: 829-838. 2014. doi: 10.2147/IJWH.S55383

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### SETUP AND PREPARATION

#### EQUIPMENT

- ~~Bedpan~~
- Blood pressure cuff
- Dressing for saline lock and surgical site
- ~~Fluid impermeable pad~~
- IV saline lock (smaller than 22 g)
- Patient gown
- Patient ID bracelet with name and date of birth
- ~~Patient monitor~~
- ~~Phone to call provider~~
- ~~Ultrasound device for bladder scan~~
- Urethral catheterization tray ~~and- per local standards (Fr 14 catheter size is recommended)~~
- Simulated clear yellow urine, 500 mL (cc)
- SpO<sub>2</sub> probe
- Hand hygiene station
- Stethoscope
- Universal precautions equipment
- Water jug and glass

#### PREPARATION BEFORE SIMULATION

##### 1 week before SIMS

- Inform the students of upcoming SIMS using TEAMS.
- Guide the students to the preparatory folder.

##### 1 day before the SIMS

- Fill the simulator's bladder reservoir with the 500 mL of simulated urine.
- Place a dressing on stomach to indicate a vertical incision site. The dressing should be about 13 cm/~~5 inches~~ long and be placed approximately 15 cm/~~6 inches~~ below the belly button (approximately over the "bikini line").
- Place the simulator in a hospital bed, in Fowler's position.
- Insert a saline lock in one of the simulator's arms.
- Place a half-full water jug and empty glass at the bedside.
- Attach a patient ID bracelet with name and date of birth.
- Print the patient chart, MAR, and checklist.
- Prepare video and recording material.

##### The day of the SIMS

- Do the pre-quiz
- ~~from page 4 and hand it out to the learners after reading the learner brief to them. If you use an electronic patient chart, you can transfer the information to this system.~~
- Assign roles to the students.

##### Post SIMS

- Include link to the post SIMS quiz in Teams SIMS urinary catherization post-quiz (Forms)
- Post in Teams the video recording via Stream

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## Health, Assistance and Nursing Sims Urinary Catherization

[Recording SIMS scenario 1 urinary catherization](#)

[Recording SIMS scenario 2 urinary catherization](#)

### Learner Brief

*The learner brief should be read out loud to the learners before the simulation starts.*

**Situation:** You are a [SLPN](#) in a surgical unit and the time is now 12:00. You are caring for Anne Simson, a 39-year-old female who is one day post-operative after having undergone an abdominal hysterectomy.

**Background:** The patient had recurrent and increasing episodes of vaginal bleeding and pain due to uterine fibroids over the last 5 months.

**Assessment:** Vital signs were assessed 1 hour ago, and all were within normal range. The patient rated pain at 7 out of 10 and was given oxycodone 5 mg orally, also 1 hour ago. She has not been able to urinate since her catheter was removed 4 hours ago, although she has been offered oral fluids to promote this.

**Recommendation:** A few minutes ago, you assisted her to the toilet, but she was unable to void. However, the patient still feels the urge to urinate. Please take a few minutes to review her chart (hand out chart to learners) and then go see the patient.

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### CUSTOMIZATION OF THE SCENARIO

#### Customized scenarios (variants)

For inspiration, here are some suggestions on how this scenario can be customized scenarios (variants)

New Learning Objectives	Changes to the Scenario
Include learning objectives about using therapeutic communication skills to calm an anxious patient.	<p>Have the patient express concerns when the nurse explains that catherization is needed. For example, she could be afraid that something went wrong during surgery or afraid of having the procedure done.</p> <p>The patient should <del>continue to</del> respond with anxious remarks until the learners have demonstrated appropriate communication skills and calmed her down.</p>
Include learning objectives about using therapeutic communication skills and recognizing the need for pain relief for catheterization.	<p>Have the patient express that the procedure is very painful as soon as the catheter starts being inserted.</p> <p>The patient should continue to express pain until the catheter is removed, and not allow reinsertion of a catheter until the learners have demonstrated appropriate communication skills by calming her and offering a solution for pain relief.</p>
Include learning objectives about recognizing contamination of the sterile field and taking appropriate actions.	<p>Make a tear in the catheterization tray wrapping so that it is no longer sterile.</p> <p>If the learners do not respond appropriately to this contamination, it should be addressed in the debriefing.</p>
Include learning objectives about recognizing abnormal findings upon inspection of the urine and taking appropriate actions.	<p>Make the simulated urine red, amber or cloudy to indicate blood in the urine (for example, due to the procedure), dehydration, or a urinary tract infection.</p> <p>If the learners do not respond appropriately to the findings, the patient could begin to express concern and ask worried questions about the abnormal appearance of the urine.</p>

## PATIENT CHART

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**Patient name:** Anne Simson **Gender:** Female **Allergies:** No known allergies **DOB:** 24/04-XXXX

**Age:** 39 years **Height:** 165 cm (65 in.) **Weight:** 62 kg (136 lb.) **MRN:** 38390056

**Diagnosis:** Uterine fibroids **Adm date:** Yesterday

**Facility:** Surgical unit **Advance directive:** No **Isolation precautions:** None

**Past Medical History**

Recurrent and increasing episodes of vaginal bleeding and pain due to uterine fibroids over the last 5 months. One day post-operative after having undergone an abdominal hysterectomy.

**Notes****Date/Time**

Yesterday Patient transferred to unit from PACU. Vital signs obtained. /RN

Today, 07:00 Patient rates pain 5. Ibuprofen 400 mg administered orally. Urinary catheter removed. IV fluids discontinued. Juice and water given to patient and she was encouraged to drink. /RN

Today, 11:00 Patient rates pain 7. Oxycodone/~~acetaminophen~~ 5/~~325~~ mg administered orally. Vital signs obtained. Patient has not yet needed to void. / RN

Today, 11:55 Patient rates pain 4. Patient assisted to toilet but was not able to void. /RN

**Provider Orders**

Activity: Up with assistance

Diet: Advance to normal diet as tolerated

Ibuprofen 400 mg orally for mild pain, prn every 8 hours

Oxycodone/~~acetaminophen~~ 5/~~325~~ mg orally for moderate to severe pain, prn every 6 hours

Vital signs every 4 hours

Assess and document patient ability to void after surgery and follow local protocol

**Medical Administration Record****Date/Time**

Today, 07:00 Ibuprofen, 400 mg orally

Today, 11:00 Oxycodone/~~acetaminophen~~ 5/~~325~~ mg orally

**Vital Signs****Date/Time**

Today, 07:00 **BP:** 123/70 mmHg **HR:** 79/min **RR:** 12/min **SpO<sub>2</sub>:** 97% **Temp:** 37.0°C (98.6°F)

Today, 11:00 **BP:** 125/73 mmHg **HR:** 82/min **RR:** 14/min **SpO<sub>2</sub>:** 97% **Temp:** 37.0°C (98.6°F)

**BP:** **HR:** **RR:** **SpO<sub>2</sub>:** **Temp:**