Simulation Design Template

Mia Jones – Simulation #1

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| **Date:**  **Discipline:** Nursing  **Expected Simulation Run Time:** 20 min  **Location:** pediatric outpatient clinic  **Today’s Date:** | **File Name:**  **Student Level:** Pediatrics course  **Guided Reflection Time:** Twice the amount of time that the simulation runs.  **Location for Reflection:** |

Brief Description of Patient

**Name:** Mia Jones **Pronouns:** she/her

**Date of Birth:** 05-31-YYYY (reflect age 4) **Age:** 4

**Sex Assigned at Birth**: Female

**Weight**: 30 lbs **Height**: 37 inches

**Racial Group**: Faculty can select **Language:** English **Religion**: Faculty can select

**Support Person:** Parents:Katrina Roberts and Mike Jones. Grandparents: George and Sarah Roberts

**Support Phone:** Parent’s home: 555-567-9876

**Allergies:** No known allergies **Immunizations:** Up to date

**Attending Provider/Team:** Joanne Martin, DNP, APRN, ACNP-BC

**Past Medical History:** Mia was born at Community Hospital at term, normal spontaneous vaginal delivery; weight 7 lbs, Apgar 8-9. She has no known health problems.

**History of Present Illness:** Healthy

**Social History:** Mia is an only child. Parents (Katrina age 23 and Michael age 25) are not married but have been living together for 5 years. They live in a rented inner-city apartment. Katrina works at a local coffee shop and Mike is a maintenance man at a local store. Katrina’s parents live close by and care for Mia when both parents are at work. The family does not have health insurance from their employers and rely on government-assisted health care.

**Primary Medical Diagnosis:** Healthy child

**Surgeries/Procedures & Dates:** None

Psychomotor Skills Required of Participants Prior to Simulation

* + Developmentally appropriate oral health assessment

Cognitive Activities Required of Participants Prior to Simulation

Use textbook and other faculty-directed resources to review:

* + Developmentally appropriate pediatric assessment strategies
  + Communication techniques with a preschool child

Complete the followingtwo courses in“Smiles for Life: A National Oral Health Curriculum” <http://smilesforlifeoralhealth.org>

* Course 6: [Caries Risk Assessment, Fluoride Varnish and Counseling](https://www.smilesforlifeoralhealth.org/teach-curriculum/course-6-caries-risk-assessment-flouride-varnish-counseling/)
* Course 7: [The Oral Exam](https://www.smilesforlifeoralhealth.org/teach-curriculum/course-7-the-oral-exam/), Slides 1 to 23

Read the following:

* Oral Health Assessment

<https://www.smilesforlifeoralhealth.org/wp-content/uploads/2020/06/Oral_Health_Assessment_Tool-1.pdf>

* Smart snacking for healthy teeth

<https://www.chrichmond.org/blog/smart-snacking-for-healthy-teeth>

* Taking Care of Your Child’s Teeth

<https://health.gov/myhealthfinder/doctor-visits/regular-checkups/take-care-your-childs-teeth>

* Family Engagement Activities

<http://cavityfreekids.org/family-engagement/information-bites/>

Simulation Learning Objectives

General Objectives (Note: The objectives listed below are general in nature and once learners have been exposed to the content, they are expected to maintain competency in these areas. Not every simulation will include all of the objectives listed.)

1. Practice standard precautions.
2. Employ strategies to reduce risk of harm to the patient.
3. Conduct assessments appropriate for care of patient in an organized and systematic manner.
4. Perform priority nursing actions based on assessment and clinical data*.*
5. Reassess/monitor patient status following nursing interventions.
6. Communicate with patient and family in a manner that illustrates caring, reflects cultural awareness, and addresses psychosocial needs.
7. Communicate appropriately with other health care team members in a timely, organized, patient-specific manner.
8. Make clinical judgments and decisions that are evidence-based.
9. Practice within nursing scope of practice.
10. Demonstrate knowledge of legal and ethical obligations.

Simulation Scenario Objectives

1. Complete an oral health risk assessment
2. Perform a developmentally appropriate oral assessment.
3. Identify various stages of early childhood caries.
4. Teach oral health preventative strategies to a preschool child and family.

Faculty Reference

[Smiles for Life: A National Oral Health Curriculum](http://smilesforlifeoralhealth.org/buildcontent.aspx?tut=555&pagekey=62948&cbreceipt=0" \t "_blank) - <http://smilesforlifeoralhealth.org>

* Course 2: [Child Oral Health](https://www.smilesforlifeoralhealth.org/teach-curriculum/course-2-child-oral-health/)
* Course 6: [Caries Risk Assessment, Fluoride Varnish & Counseling](https://www.smilesforlifeoralhealth.org/teach-curriculum/course-6-caries-risk-assessment-flouride-varnish-counseling/)
* Course 7: [The Oral Exam](https://www.smilesforlifeoralhealth.org/teach-curriculum/course-7-the-oral-exam/)
* Smiles for Life App for mobile device: <https://www.smilesforlifeoralhealth.org/resources/android-ios-apps/>

Oral Health Risk Assessment

<https://www.smilesforlifeoralhealth.org/wp-content/uploads/2020/06/Oral_Health_Assessment_Tool-1.pdf>

Patient friendly resources available at Cavity Free Kids

[www.cavityfreekids.org](http://www.cavityfreekids.org)

Background resources:

* [Haber](http://ajph.aphapublications.org/author/Haber%2C+Judith), J., [Hartnett](http://ajph.aphapublications.org/author/Hartnett%2C+Erin), E., [Allen](http://ajph.aphapublications.org/author/Allen%2C+Kenneth), K., [Hallas](http://ajph.aphapublications.org/author/Hallas%2C+Donna), D., [Dorsen](http://ajph.aphapublications.org/author/Dorsen%2C+Caroline), C, Lange-Kessler, J..….. [Wholihan](http://ajph.aphapublications.org/author/Wholihan%2C+Dorothy), D. (2015). Putting the mouth back in the head: HEENT to HEENOT. *American Journal of Public Health,* 105(3), 437–441. Available at <http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2014.302495>

Oral Health in America: A report of the general surgeon.

<https://www.nidcr.nih.gov/sites/default/files/2017-10/hck1ocv.%40www.surgeon.fullrpt.pdf>

* IOM Reports:
  + [Advancing Oral Health in America](http://www.nationalacademies.org/hmd/Reports/2011/Advancing-Oral-Health-in-America.aspx)

<https://nap.nationalacademies.org/catalog/13086/advancing-oral-health-in-america>

* + [Improving Access to Oral Health Care for Vulnerable and Underserved Populations](http://www.nationalacademies.org/hmd/Reports/2011/Improving-Access-to-Oral-Health-Care-for-Vulnerable-and-Underserved-Populations.aspx)

<http://www.nationalacademies.org/hmd/Reports/2011/Improving-Access-to-Oral-Health-Care-for-Vulnerable-and-Underserved-Populations.aspx>

* + [Oral Health Literacy](http://www.nationalacademies.org/hmd/Reports/2013/Oral-Health-Literacy.aspx)

<https://www.nationalacademies.org/our-work/improving-oral-health-literacy-a-workshop>

The Healthcare Simulation Standards of Best Practice™

<https://www.inacsl.org/healthcare-simulation-standards>

Setting/Environment

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| Emergency Department  Medical-Surgical Unit  Pediatric Unit  Maternity Unit  Behavioral Health Unit | ICU  OR / PACU  Rehabilitation Unit  Home  Outpatient Clinic  Other: |

Equipment/Supplies

**Simulated Patient/Manikin(s) Needed:** SP to play mother**;** child manikin

**Recommended Mode for Simulation:** Manual, as no vital sign changes are needed in this scenario.

**Other Props & Moulage:**

* Manikin dressed in street clothes.
* Mia’s doll (preferably one that shows teeth)
* Toothbrush and toothpaste
* Age-appropriate distraction items (e.g., bubbles, video, books, stickers).
* If no available child manikin that simulates vital signs, provide Mia’s vital signs on piece of paper. (Mother will provide to learners during simulation.)
* Smiles for Life (SFL) has granted permission for faculty to print out slides from the SFL National Oral Health Curriculum Courses for use during the simulation if the slides have the SFL logo and are largely unaltered. The following slide from Smiles for Life – Child Oral Health – [Course 2](https://www.smilesforlifeoralhealth.org/teach-curriculum/course-2-child-oral-health/) will help you moulage the manikin’s teeth. Or print out pictures for the students to use when assessing Mia’s teeth.
* Slide 5 & 6 (ECC)
* Slide 11 (healthy teeth)
* Slide 12 (white spots)
* Slide 13 (brown cavitations) – tooth #C in Mia’s mouth
* Slide 14 (early aggressive ECC) – teeth #B and #S in Mia’s mouth
* Slide 15 (advanced ECC) – Teeth #E and #F in Mia’s mouth
* Slide 16 (caries progression)
* **Check with manikin manufacturer prior to applying any moulage to your manikin’s teeth. Some materials may be difficult to remove or may cause permanent damage.**

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| **Equipment Attached to Manikin/Simulated Patient:**  ID band  IV tubing with primary line fluids running at \_\_ mL/hr  Secondary IV line running at \_ mL/hr  IVPB with \_\_ running at mL/hr  IV pump  PCA pump  Foley catheter with \_\_ mL output  02  Monitor attached  Other:  **Other Essential Equipment:**  **Medications and Fluids:**  Oral Meds:  IV Fluids:  IVPB:  IV Push:  IM or SC: | **Equipment Available in Room:**  Bedpan/Urinal  02 delivery device (type)  Foley kit  Straight catheter kit  Incentive spirometer  Fluids  IV start kit  IV tubing  IVPB tubing  IV pump  Feeding pump  Crash cart with airway devices and emergency medications  Defibrillator/Pacer  Suction  Other: |

Roles

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| Nurse 1  Nurse 2  Nurse 3  Provider (physician/advanced practice nurse)  Other health care professionals:  (pharmacist, respiratory therapist, etc.,) | Observer(s) Any number of observers  Recorder(s)  Family Member #1 – SP for Mother, Katrina  Family Member #2  Clergy  Unlicensed Assistive Personnel  Other: |

Guidelines/Information Related to Roles

Learners in role of nurse should determine which assessments and interventions each will be responsible for, or facilitator can assign nurse 1 and nurse 2 roles with related responsibilities.

Information on behaviors, emotional tone, and what cues are permitted should be clearly communicated for each role. A script may be created from Scenario Progression Outline.

Pre-briefing/Briefing

Prior to report, participants will need pre-briefing/briefing. During this time, faculty/facilitators should establish a safe container for learning, discuss the fiction contract and confidentiality, and orient participants to the environment, roles, time allotment, and objectives.

For a comprehensive checklist and information on its development, go to <http://www.nln.org/sirc/sirc-resources/sirc-tools-and-tips#simtemplate>.

Report Students Will Receive Before Simulation

**Time:** 0930

**Person providing report:** Clinic Secretary

**Situation:** Mia Jones, a 4-year-old girl, is here with her mother for her well-child check-up and immunizations.

**Background:** Mia has had no previous illnesses and her immunizations are up to date.

**Assessment:** Mia’s mother Katrina mentioned to me that she is really concerned about Mia’s mouth. She says that she can’t afford to go to the dentist right now, but Mia is starting to look really thin and is starting to refuse any foods that she needs to chew. She knows Mia is due for her immunizations, but really wants someone to look in Mia’s mouth before anything else is done.

**Recommendation:** Oral health risk assessment and oral exam.

Scenario Progression Outline

**Patient Name:** Mia Jones **Date of Birth:** 05-31-YYYY (reflect age 4)

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| **Timing (approx.)** | **Manikin/SP Actions** | **Expected Interventions** | **May Use the Following Cues** |
| **0-10 min** | **Mia’s behavior**  Waits for her mother to answer questions. Can respond with yes or no.  **Vital signs:** RR - 24, HR - 90, Temp – 99F, BP – 90/50  (Mom can handlearner a card if manikin cannot produce vital signs.)  **Katrina**: “I’m really worried about Mia’s mouth. Could you take a look before you do anything else?”  **Katrina responses to risk factor questions:**   * Mother or primary caregiver had active decay in the past 12 months Yes   + Does Mother or primary caregiver have a dentist No   **Katrina:** “I have had a lot of cavities and teeth removed. I had a tooth pulled two months ago. I don’t have a regular dentist, so I wait until things get really bad before getting them checked. In the past, the pain would sometimes go away when I would rub garlic on the tooth, so I always try that first. I only go to see someone if the pain is so bad that I can’t eat anything hard for a month. Do you know how expensive dental visits are?”  **Katrina:** “Why are you asking about my teeth? What does it have to do with Mia?”  **Katrina responses to risk factor questions:**   * Continual bottle/sippy cup use with fluid other than water No * Frequent snacking Yes * Special health care needs No * Medicaid eligible Yes   **Katrina:** “I think Mia’s teeth hurt. She is starting to look really thin. She has always been a picky eater, but she is getting even more picky. She will only eat a small amount at a time and then absolutely refuses to take more. We are just so happy when she eats, so we let her get away with this. She really likes sweets so if she won’t eat healthy food we offer her something sugary … just to get something into her. We don’t know what else to do. And her grandparents give her treats as a reward. My parents can’t afford much and the candy store across the street from where they live always has candies for sale.” | **Learners should begin by:**   * Performing hand hygiene * Introducing selves * Confirming patient ID * Taking vital signs   **Learners are expected to:**   * Ask risk factor questions on Oral Health Risk Assessment Tool * Provide information on the link between parent oral health and child oral health while being sensitive to the parent’s feelings * Provide education about snacking and oral health. | **Role member providing cue:** Mia  **Cue:** If learners try to look in Mia’s mouth prior to completing the risk assessment she will not let them.  **Cue:** Cries when learners try to take vital signs unless learners use appropriate strategies to get Mia to cooperate.  **Cue:** If learners use terminology that is not developmentally appropriate Mia should ask her Mom or the learner what the word means.  **Role member providing cue: Katrina**  **Cue:** If learners are not sensitive, Katrina should ask, “Is it my fault that her mouth hurts?”  **Role member providing cue:** Katrina  **Cue:** If learners do not provide some teaching about snacking and oral health, Katrina asks, “Is snacking OK?” |
|  | **Katrina responses to protective factor questions:**   * Existing dental home No * Drinks fluoridated water or takes fluoride supplements Yes * Fluoride varnish in the last 6 months No * Has teeth brushed twice daily No   **Katrina:** “What is a dental home? Why would I need a one?”  **Katrina:** “What is fluoride varnish?”  **Katrina:** “Mia does not brush her teeth. We aren’t too worried because the little ones will fall out and we hope she will start to like brushing her teeth when the big ones come in. She just hates brushing her teeth … always has. Even when she was a baby she never liked it when we touched her mouth.” | **Learners are expected to:**   * Ask protective factor questions on Oral Health Risk Assessment Tool * Explain benefits of a dental home * Explain fluoride varnish and how it is applied |  |

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| **10-20 min** | If not able to apply moulage to manikin’s teeth, Katrina will hand a picture of Mia’s mouth slides to learners. | **Learners are expected to:**   * Discuss benefits of brushing teeth * Demonstrate proper tooth brushing on Mia’s doll. Reinforce that 4 year olds have limited dexterity and will need help brushing teeth * Use appropriate strategies to coax Mia to open her mouth. * Examine mouth or pictures to answer clinical findings questions on Oral Health Risk Assessment Tool * Discuss a dental consult with the mother and the need for follow-up care based on the clinical presentation of the child’s teeth. | **Role member providing cue:** Katrina  **Cue**: If learners do not discuss benefits of brushing teeth. Katrina should ask why it is important to brush Mia’s teeth  **Cue:** If learners don’t demonstrate how to brush teeth. Katrina says: “I have no idea how to brush Mia’s teeth.” Throughout demo Katrina can ask questions if learners are not clear.  **Cue:** If learners do not discuss dental consult, Katrina should ask what she needs to do about Mia’s teeth. |

Debriefing/Guided Reflection

Note to Faculty

We recognize that faculty will implement the materials we have provided in many ways and venues. Some may use them exactly as written and others will adapt and modify extensively. Some may choose to implement materials and initiate relevant discussions around this content in the classroom or clinical setting in addition to providing a simulation experience. We have designed this scenario to provide an enriching experiential learning encounter that will allow learners to accomplish the listed objectives and spark rich discussion during debriefing. There are a few main themes that we hope learners will bring up during debriefing, but if they do not, we encourage you to introduce them.

**Themes for this scenario:**

* Importance of oral health
* Developmentally appropriate communication strategies with a preschool child
* Discussing financial situation and costs of dental care with a low-income family

We do not expect you to introduce all of the questions listed below. The questions are presented only to suggest topics that may inspire the learning conversation. Learner actions and responses observed by the debriefer should be specifically addressed using a theory-based debriefing methodology (e.g., Debriefing with Good Judgment, Debriefing for Meaningful Learning, PEARLS). The debriefing questions for consideration are organized into the phases of debriefing, as recommended by the Healthcare Simulation Standard of Best Practice™ The Debriefing Process. The following phases are included below: Reactions/Defuse, Analysis/Discovery and Summary/Application. Remember to also identify important concepts or curricular threads that are specific to your program.

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| **Debriefing Phase** | **Debriefing Questions for Consideration** |
| Reactions/ Defuse | How did you feel throughout the simulation experience? |
| Give a brief summary of this patient and what happened in the simulation. |
| What were the main problems that you identified? |
| Analysis/ Discovery | Discuss the knowledge guiding your thinking surrounding these main problems. |
| What were the key assessment and interventions for this patient? |
| Discuss how you identified these key assessments and interventions. |
| Discuss the information resources you used to assess this patient. How did this guide your care planning? |
| Discuss the clinical manifestations evidenced during your assessment. How would you explain these manifestations? |
| Explain the nursing management considerations for this patient. Discuss the knowledge guiding your thinking. |
| What information and information management tools did you use to monitor this patient’s outcomes? Explain your thinking. |
| How did you communicate with the patient? |
| What specific issues would you want to take into consideration to provide for this patient’s unique care needs? |
| Discuss the safety issues you considered when implementing care for this patient. |
| What measures did you implement to ensure safe patient care? |
| What other members of the care team should you consider important to achieving good care outcomes? |
| How would you assess the quality of care provided? |
| What could you do improve the quality of care for this patient? |
| Summary/ Application | If you were able to do this again, how would you handle the situation differently? |
| What did you learn from this experience? |
| How will you apply what you learned today to your clinical practice? |
| Is there anything else you would like to discuss? |

Guided Debriefing Tool

The NLN created a Guided Debriefing Tool to provide structure from which facilitator observations can make objective notes of learner behaviors in simulation in direct relationship to the learning outcomes. [Download the NLN Guided Debriefing Tool](https://www.nln.org/docs/default-source/uploadedfiles/professional-development-programs/sirc/guided-debriefing-tool.docx?sfvrsn=f659d27e_3).