2020 Clarion Interprofessional Case Competition
Finding the Root Cause - UIC Individual Pre-Selection
4:30pm to 6:30pm, Friday, February 21
School of Public Health (Room B34 - basement), 1601 West Taylor

Goal: This is the first phase of our selection process to identify the team that will represent UIC at the 2020 Clarion Interprofessional Case Competition (for more on Clarion please see: https://www.chip.umn.edu/clarion/case-competition/national-case-competition). This phase of the selection process will identify UIC health professions students who can advance to the next selection phases, based on their demonstration of the skills and competencies, detailed below, during a lightning round of individual presentations.

Student Eligibility: All participants must be full-time UIC students enrolled in any of the academic programs within UIC's seven health sciences colleges:

- ✓ Healthcare Administration
- ✓ Medicine
- ✓ Nursing
- ✓ Pharmacy
- ✓ Dentistry
- ✓ Public Health
- ✓ Physical Therapy
- ✓ Occupational Therapy
- ✓ Social Work
- ✓ Nutrition
- ✓ Health Informatics
- ✓ Health Information Management

- Full-time students who are also employed in professional leadership positions are not eligible to compete.
- If you have a prior health professional degree, you are able to participate but only as a representative of your current UIC's health science program. (e.g., A nurse completing a Master of Public Health would represent Public Health, not nursing)
- While the selection process is open to health science students from all UIC campuses, please note that participation in subsequent phases will require significant physical presence on the Chicago campus.
- Participants may only compete once in Clarion (both locally and nationally).
- UIC can send only one team to the national Clarion competition.
- UIC's Clarion competition team must represent at least two different health professions and no more than 2 of the same professions. UIC's goal, given the professional diversity of our campus, is to have a final team representing three of more professions.

UIC Individual Pre-Selection Criteria: This phase of the selection process assesses the following skills and competencies during a lightning round of individual presentations:

- **Analytical and Strategic Thinking Skills:** Ability to identify and prepare information, understand and analyze complex problems, draw meaningful conclusions, and think strategically about which conclusions to prioritize.
- **Project Management:** Ability to manage time, use individual strengths, and develop and implement a realistic plan to deliver on a project.
- **Presentation skills:** Ability to present clearly and professionally, engage in question and answer, and perform under the pressure of a public presentation.

Selection Process: Every student who demonstrates the above skills and competencies will have the opportunity to move forward in the selection process. The next phase of the selection process will depend on the number of students advancing to the next stage:

- If only four students advance, assuming this group meets Clarion eligibility criteria, they will become the UIC team that will participate in the National Clarion Case Competition (Friday, April 17 – Sunday, April 19), and we will spend the remaining time before the national competition preparing our case presentation.
- If more than four students advance we will create teams of equal numbers of students (or as close as possible) to compete in a UIC Team Selection Competition (4;30pm-6;30pm, Friday, February 21). The UIC Clarion coach(es) will select this final team that will participate in the National Clarion Case Competition (Friday, April 17 – Sunday, April 19), based on a combination of individual and team performance metrics, combined with our goal of maximizing the professional diversity of the UIC team.

UIC Individual Pre-Selection Instructions: Using root cause methodology, explained in the guide, *"5 Whys: Finding the Root Cause"* (available on the *"UIC 2020 CLARION Interprofessional Case Competition"* Website) prepare a 4 slide PowerPoint presentation, that you will present in 5 minutes or less, that provides a root cause analysis, and recommendation to address the issues described under *"The Event"* (see below starting on page 3 of this guide). Your presentation must include all four of the elements from the IHI *"5 Whys: Finding the Root Cause"* guide:

- EVENT
- PATTERN
- STRUCTURE
- ACTION

Submitting your Powerpoint Slides: You must submit your Powerpoint slides via the *"UIC 2020 CLARION Interprofessional Case Competition"* Website, using the *"UIC Individual Pre-Selection"* assignment link **by 11:59pm, Thursday, February 20**. **Note:** Late submissions will not be accepted and will result in immediate elimination.

Individual Presentations: Once you have signed up for participation in the UIC 2020 CLARION Interprofessional Case Competition you will be assigned a 5 minute presentation slot between 4:30pm to 6:30pm, Friday, February 21.

The Event[1]

On Monday morning, while walking her children to the school bus stop, AB began to feel dizzy and nauseated. After her kids were on the bus, she decided that even though she did not feel well, she needed to get to the restaurant for a new staff interview. When she arrived, a server noticed that AB looked like she might be ill and encouraged her to sit down. While she made her way to take a seat, she passed out. The server called 911. By the time the paramedics arrived, she was conscious, and they took her to a nearby hospital. Upon her arrival at the Emergency Department, providers took her vital signs, medical history, and completed routine lab work including a complete blood count (CBC), comprehensive metabolic panel (CMP), pregnancy test, and a drug screen. During the event, the restaurant staff called her husband, who was running errands for the restaurant. CB arrived at the hospital 15 minutes after AB.

Upon admission to the Emergency Department, AB's vital signs were: heart rate 90 beats per minute, blood pressure 138/90 mmHg, and respirations 20 breaths per minute. An EKG taken in the ambulance on the way to the emergency room did not show any ischemic changes. The emergency room practitioners suspected that her fainting spell was the result of dehydration, and she was administered fluids while laboratory tests were pending. Her laboratory tests revealed that the fainting spell was not the result of dehydration. Her tests also revealed that AB was pregnant. To rule out an ectopic pregnancy, an ultrasound was performed. The fetus was properly placed in the uterus and measured 6 weeks and 2 days. AB was surprised that she was pregnant and pleased to learn the news. It had not occurred to her that she could be pregnant, as her menstrual cycle was not predictable lately. She was advised to follow up with her obstetrician the following week.

After her Emergency Department visit, AB spent a great deal of time on the phone searching for an appointment that fit her schedule within the health system and office she usually visits. To her dismay, AB had to schedule her eight-week appointment in a different healthcare system in the suburbs, 30 minutes away from her home and restaurant. AB's regular obstetrician switched to Fridays, which is not a good day for her.

At her eight-week obstetrician appointment, vital signs, blood tests, and an ultrasound were performed. It was noted that her blood pressure was 138/83. In response to her blood pressure questions, and after showing her home monitoring results to the obstetrician, they responded, "Well, if you're worried, just make sure to eat healthy, be active--although, don't overdo it, stay off your feet at work, and make sure to sleep."

Over the next several months, AB was able to switch to the clinic closer to her home and continued to attend her monthly appointments. At each appointment, she saw a different provider because the clinic has a team-based care model. Sometimes she was seen by an obstetrician, other times a midwife, sometimes the ultrasound technician, and other times a nurse educator. AB's blood pressure remained elevated in the high 130s/80s throughout her pregnancy, and at each appointment, she asked if she should be concerned. The response from providers consistently was to "just keep her stress and anxiety levels low." She left her

[1] *A Great Difference - Racial Disparities in Infant and Maternal Mortality and Morbidity*, 2020 CLARION Interprofessional Case Competition Case, Justine Mishek and Donald Uden, January 2020 © 2020 University of Minnesota Board of Regents.

appointments discouraged, as she was not confident she could lower her stress or activity with the restaurant responsibilities as well as caring for her mother and children.

At 30 weeks and 5 days gestation, while working at the restaurant, AB developed a headache that would not go away. She tried drinking water, taking acetaminophen, and even taking a nap in the break room, but experienced no relief. Worried that her symptoms may be related to or may impact her pregnancy, she called her obstetrician who advised her to go to OB-triage at the hospital.

When she arrived at OB-triage, on the labor and delivery unit, her blood pressure was 142/90 and her laboratory results showed no changes.

An obstetrics and gynecology (OB-GYN) intern assessed her and decided that given her age and medical history, they would monitor her for a few hours and give her intravenous fluids. During their team afternoon rounds, a health professional student on the team asked about AB's blood pressure. The response from the intern was that there was "no concern at this time" and that the patient was "just experiencing anxiety."

Over the next few hours, AB's headache continued as she watched her blood pressure rise. With each set of vitals, she persistently asked about the numbers. Again, she expressed her worry as her mother recently had a stroke, and she had read that sometimes pregnant women with high blood pressure could have strokes. CB also expressed his concern. The nurses called the intern who dismissed CB's concerns and told him that, "there was probably an error with the blood pressure cuff and that it could be changed," and that AB should "take a few deep breaths" and that they "would check again in 10 minutes." AB noticed on the monitor that her blood pressure continued to rise and experienced no headache relief. She was also seeing spots and had blurry vision. AB started to recognize that the provider team seemed to be ignoring her abnormal vital signs and called the nurse multiple times. However, each time, she was told again "not to worry."

The night shift nurse noticed the trend in AB's blood pressure and asked the obstetric attending physician to examine her for chronic hypertension with superimposed preeclampsia. The obstetrician obtained a urine test showing protein confirming the diagnosis and proceeded to prescribe steroids for fetal lung development and magnesium sulfate for neuroprotection. AB was then admitted to labor and delivery for treatment and monitoring.

Over the next few days, the medical team was unable to control AB's blood pressure and decided that the best course of action was to deliver the baby by emergency cesarean section. After an uncomplicated delivery, their baby boy was born and was transferred to the Neonatal Intensive Care Unit. AB and CB's baby was 31 weeks of gestation, and weighed 1,600 grams, making him intrauterine growth restricted. He was intubated at delivery for lack of respiratory effort, placed on a ventilator, administered intravenous nutrition therapy, and given antibiotics.

Despite successfully delivering the baby, the medical team was still having trouble controlling AB's blood pressure. A few hours post-delivery, she developed sudden weakness in the right side of her face, her mouth began to droop, and she had trouble speaking. Her husband did not understand what she was saying and noticed that she was very confused. He alerted the team who suspected that a stroke might be occurring. They responded immediately by getting

an emergent head CT, which showed an ischemic stroke. They administered thrombolytics as soon as possible and halted what they believed could have been a severe stroke.

At 24 hours, the baby's admission blood culture results were positive for a bacterial infection. Despite the Neonatal Intensive Care Unit team's efforts to stabilize him, he developed overwhelming sepsis. After two full code resuscitation attempts, the team was unable to revive him, and AB and CB's baby died at four days of life.

While she was able to avoid severe effects of the stroke, AB has some residual right arm weakness and balance problems, which is especially problematic since she is right-handed. She requires ongoing occupational, physical, and emotional therapy. The medical team is very hopeful that she will have a complete recovery, but it may take months for that to occur. AB has a family to think about and care for and a business to operate.

She often asks herself, "Why didn't anyone do anything about my blood pressure? I told them it was high. How will we manage? No one listened to me along the way, and now I have lost my beautiful child."