

SAMPLE CASE STUDIES

Case Study-Adult Medicine

Maria, a 28-year-old female, presents to your office approximately 5 weeks pregnant. Her first language is Spanish and she speaks only broken English. Her cousin came with her to translate. This is her first pregnancy. She believes she is current on her shots but has no vaccine or previous health records. She is living with a cousin and has good extended family support, but limited financial support and no transportation or phone. She is excited about the pregnancy and the prospect of being a mother. She reports having a few sexual partners with intermittent use of protection. Maria did mention that her previous doctor had her watching her diet and trying not to eat a lot of sugar but she is unclear as to why.

Vital signs: BP 124/82, Pulse 84, Resp Rate 12, Height 63", Weight 190 pounds. Blood sugar done in office was 174

- 1) Identify primary health concerns for Maria.
(Pregnancy; potential STDs; elevated blood sugar-potential diabetes...)
- 2) What tests do you anticipate being ordered?
(HCG, fasting blood sugar, hemoglobin A1C, CBC, Chem panel, STD screening including HIV; varicella titer, rubella titer, Hep B antibodies)
- 3) Identify Maria's barriers to receiving medical care.
(Health literacy challenges; language barrier; lack of transportation; limited income; limited communication means i.e.-no phone)
- 4) Identify teaching needs.
(Pregnancy; expectations, s/s of concern-when to seek care/call office, visit intervals, need for prenatal vitamins, when to repeat blood work, weight gain expectations, medications to avoid, etc.; blood sugar management – possible meds, diet, checking blood sugars at home; safe sex practices)
- 5) Develop a teaching plan, including: consideration of learning barriers, time allotted for each teaching point, learning activities, and how to measure teaching success/retention.

Case Study – Staff Education Need

It has come to the attention of the office that there are inconsistencies in how blood pressures are being taken by all the medical staff. Cuff size, not taking BP on bare arm, using alternative extremity, and inability to perform proper orthostatic blood pressures are all items of concern. You have 25 medical assistants to educate, from very new to 18 years in practice. Two of the medical assistants have already stated they are not concerned with changing anything as they feel what they are doing is working.

You have a 30-minute slot at the staff meeting later this week to perform this education.

- 1) How will you prepare for this? (Printed materials, supplies, etc.).
- 2) How will you manage the resistance?
- 3) How will you organize your teaching? (Time breakdown, learning station, lecture, demo, etc.)
- 4) How will you assess effectiveness of education?

Case Study – Adolescent Medicine

Sam is a healthy 16-year-old athlete. He is having increasing reactions to bee stings including significant site swelling, site itching, and facial swelling with his most recent bee sting. Sam is being referred to an Allergist for workup and possible allergy shots for bee sting allergy. At his visit today, the PCP just prescribed an EpiPen 2-Pack to carry at all times. You have been given the job of educating Sam and his father about the EpiPen. Sam and his father are in a hurry to get back to school for practice and seem pre-occupied.

- 1) What information does Sam need to hear before he leaves the office?(How to recognize signs and symptoms of anaphylaxis; when to use EpiPen; how to use EpiPen)
- 2) What teaching tools could be used?
- 3) How will you measure the success of your teaching?

Case Study- Pediatric Medicine

Scenario #1

Call received from mother of 3-year-old child, stating that she is being “so bad”. When asked what behavior the child was showing, mother stated that she was having little urinary accidents in her panties for the last week and was not getting to the bathroom in time to void. Was also having night time accidents. Child had been completely trained (day and night) for over 6 months without accidents. Child was only having urinary accidents and no trouble with bowel movements, was also complaining of “tummy pain”.

- 1) What additional questions would be appropriate to ask mother regarding her concern?
- 2) What would be your considerations for the differential diagnosis for this patient?
Mother was encouraged to make appointment to rule out urinary tract infection as children in this age group have atypical presentation, often with urinary accidents and tummy pain. On evaluation, urinalysis showed 4+ glucose as well as bacteria. Blood glucose found child’s blood sugar to be 389. Child was immediately admitted to the hospital with the diagnosis of Type I diabetes.
- 3) Upon learning that her child would be admitted to the hospital, what information about the need for hospitalization would be important for the mother to have?
- 4) What emotions might the mother be experiencing upon learning the diagnosis and what an appropriate strategy is for the ambulatory care nurse.
- 5) What information could be provided to mother regarding expected toddler behavior vs. illness symptoms?

Scenario #2

Call from mother who reports that 15-month-old child had been seen in Urgent Care three nights previously for “bad cough”. Was told there were no abnormal findings on examination at that time and he had a viral illness. Mother calls because she thinks “cough is getting worse”.

- 1) What assessment questions would be important to ask to determine if this child is currently in any respiratory distress? (length of illness, fever, description of cough, s/s of increased work of breathing, color, level of activity, counted respiratory rate while on phone with Advice Nurse)

Component V: Education

Module A: Patient Education

Topic 1: Teaching and Learning Principles and Methods

Objective: 5

- 2) What additional information would be important to know about the child's medical history? (any concurrent medical diagnoses, immunization status)

Child is reported by mother to be having nasal flaring and substernal retractions. Mother was able to provide a counted respiratory rate of 60. Child had been having fever 103-104 degrees for past 24 – 48 hrs. Poor feeding, only one wet diaper in last 24 hrs. Mother advised to take child to nearest Emergency Room. Child in ER had O2 saturation of 88%, respiratory rate of 64, mild dehydration, chest x-ray showing bilateral pneumonia. Started on nebulizer treatment, IV antibiotics and admitted for evaluation. Discharged home after 72 hours improved and stable.

- 3) What education to mother would have been important regarding follow-up for continued concerns after initial evaluation in Urgent Care? What parameters could be given to mother to evaluate worsening condition?