

## Supplemental Digital Appendix 1

### An Entrustable Professional Activity (EPA) Mapped to Competencies Critical to Making an Entrustment Decision and the Integration of the Milestones at Each Performance Level into Clinical Vignettes

#### EPA: Manage patients with acute, common single system diagnoses in an ambulatory, emergency, or inpatient setting

Domain: competency	Developmental progression of milestones				
	Level 1	Level 2	Level 3	Level 4	Level 5
Patient Care (PC): Gather essential and accurate information about the patient	Relies on a template to gather information that is not based on the patient's chief complaint, often either gathering too little or too much information in the process. Recalls clinical information in the order elicited, with the ability to gather, filter, prioritize, and connect pieces of information being limited by and dependent upon analytic reasoning through basic pathophysiology alone.	Relies primarily on analytic reasoning through basic pathophysiology to gather information, but the ability to link current findings to prior clinical encounters allows information to be filtered, prioritized, and synthesized into pertinent positives and negatives as well as broad diagnostic categories.	Gathers information while it is simultaneously filtered, prioritized, and synthesized into specific diagnostic considerations (using advanced development of pattern recognition that leads to creation of illness scripts to accomplish this). Data gathering is driven by real-time development of a differential diagnosis early in the information-gathering process.	Gathers essential and accurate information to reach precise diagnoses with ease and efficiency when presented with most pediatric problems (using well-developed illness scripts to accomplish this), but still relies on analytic reasoning through basic pathophysiology to gather information when presented with complex or uncommon problems.	Demonstrates effortless gathering of essential and accurate information in a targeted and efficient manner when presented with all but the most complex or rare clinical problems (using robust illness and instance scripts to accomplish this - instance scripts add specific details of individual patients to illness scripts). Able to discriminate among diagnoses with subtle distinguishing features.
PC: Perform complete and accurate physical examinations ( <i>psychomotor performance of the physical examination</i> )	Performs and elicits physical examination maneuvers without the correct technique	Performs basic physical examination maneuvers correctly (e.g., auscultation of the lung fields) but does not regularly elicit, recognize, or interpret abnormal findings (e.g., recognition of wheezing and crackles).	Performs basic physical examination maneuvers correctly and recognizes and correctly interprets abnormal findings.	Performs, elicits, recognizes, and interprets the findings of basic and more advanced physical examination maneuvers correctly. (e.g., Rovsing, psoas, and obturator signs for appendicitis)	Performs, elicits, recognizes, and interprets the findings of special testing physical examination maneuvers correctly (e.g., stork test for spondylolysis).

PC: Perform complete and accurate physical examinations ( <i>approach to the pediatric physical examination</i> )	Uses a head-to-toe approach to the physical examination rather than a developmental approach.	Uses a developmentally appropriate approach to the physical examination without consistency.	Uses a developmentally appropriate approach when examining children with consistency; facilitates the engagement of the child as well as the caregiver in the physical examination.	Uses a fluid approach and is agile in performing the physical examination in a way that maximizes cooperation of the child; facilitates the engagement of the child as well as the caregiver in the physical examination.	Current literature does not distinguish between behaviors of proficient and expert practitioners.
PC: Perform complete and accurate physical examinations ( <i>approach to the focused physical examination</i> )	Applies a rote head-to-toe approach to the physical examination of the patient rather than an exam guided by pertinent positive or negative findings (diagnostic hypothesis testing).	Conducts examination looking for a myriad of potential positive and negative physical findings for multiple diagnostic considerations (based on a broad list of diagnostic hypotheses). Using this broad and general approach, misses important physical findings that are present, misinterprets physical findings, and/or attributes importance and meaning to findings that are not relevant/important.	Conducts examination looking for specific positive or negative physical findings of only the most relevant diagnostic considerations (based on a narrow list of diagnostic hypotheses); performs a survey physical examination to elicit unexpected abnormalities but may not recognize these as important when it is difficult to integrate these findings into the working differential diagnosis.	Conducts examination looking for key specific physical findings that discriminate between competing similar diagnoses (in a narrow list of diagnostic hypotheses); uses surprises that result from a survey physical examination to rethink and retest diagnostic hypotheses; actively looks for physical exam findings that disconfirm the working diagnosis or rule in or out rare but high-risk alternative diagnoses.	Current literature does not distinguish between behaviors of proficient and expert practitioners.
PC: Make informed diagnostic and therapeutic decisions that result in optimal clinical judgment	Presents history and physical examination in the order they were elicited without filtering, reorganization, or synthesis. Presents a list of all diagnoses considered rather than a focused set of working diagnostic hypotheses.	Focuses on features of the clinical presentation, making a unifying diagnosis elusive and leading to a continual search for new diagnostic possibilities. Presents several tests and therapies rather than a focused set of working	Uses semantic qualifiers (such as paired opposites that are used to describe clinical information [e.g., acute and chronic]) to compare and contrast diagnoses being considered. Presents a	Demonstrates the ability to initiate and articulate early directed hypothesis testing and confirm these hypotheses with subsequent history, physical examination, and diagnostic tests. Identifies discriminating features between similar patients to	Current literature does not distinguish between behaviors of proficient and expert practitioners.

	Limited development of a diagnostic and therapeutic plan.	diagnostic hypotheses. Develops a diagnostic and therapeutic plan that is not clear, organized, and/or well aligned with a prioritized differential diagnosis.	focused set of working diagnostic hypotheses. Develops diagnostic and therapeutic plans that are well-synthesized and organized around a focused differential diagnosis.	avoid premature closure. Presentations focus on tailored therapies based on a unifying diagnosis. Develops diagnostic and therapeutic plans focused on an effective and efficient diagnostic work-up tailored to address individual patients.	
PC: Develop and carry out management plans	Develops and carries out management plans based on directives from others, either from the health care organization or the supervising physician. Unable to adjust plans based on individual patient differences or preferences. Communication about the plan is unidirectional from the practitioner to the patient and family.	Develops and carries out management plans based on one's theoretical knowledge and/or directives from others. Can adapt plans to the individual patient, but only within the framework of one's own theoretical knowledge. Unable to focus on key information, so conclusions are often from arbitrary, poorly prioritized, and time-limited information gathering. Management plans are based on the framework of one's own assumptions and values.	Develops and carries out management plans based on both theoretical knowledge and some experience, especially in managing common problems. Follows health care institution directives as a matter of habit and good practice rather than as an externally imposed sanction. Focuses on key information, but still may be limited by time and convenience. Plans begin to incorporate patients' assumptions and values through more bidirectional communication.	Develops and carries out management plans based most often on experience. Efficiently focuses on key information to arrive at a plan. Incorporates patients' assumptions and values through bidirectional communication with little interference from personal biases.	Develops and carries out management plans, even for complicated or rare situations, based primarily on experience that puts theoretical knowledge into context. Rapidly focuses on key information to arrive at the plan and augments that with available information or seeks new information as needed. Has insight into one's own assumptions and values that allow one to filter them out and focus on the patient/family values in a bidirectional conversation about the management plan.
Medical Knowledge (MK): Locate, appraise, and assimilate	Explains basic principles of Evidence-Based Medicine (EBM), but relevance is limited (e.g.,	Recognizes the importance of using current information to care for patients and	Identifies knowledge gaps as learning opportunities. Makes an effort to ask	Formulates answerable questions regularly seemingly due to demonstrated increasing	Teaches critical appraisal of topics to others. Strives for change at the

evidence from scientific studies related to their patients' health problems	by little clinical exposure).	responds to external prompts to do so. Able to formulate questions with significant effort and time; on-line search efficiency is minimal. (e.g., may require multiple search strategies). Knows how to read and interpret the literature but requires guidance for application.	answerable questions on a regular basis and is becoming increasingly able to do so. Understands varying levels of evidence and can utilize advanced search methods. Able to critically appraise a topic by analyzing the major outcome but may need guidance in understanding the subtleties of the evidence. Begins to seek and apply evidence when needed, not just when assigned to do so.	self-motivation to learn more. Incorporates use of clinical evidence in rounds and teaches fellow learners. Quite capable with advanced searching. Able to critically appraise topics and does so regularly. Shares findings with others to try to improve their abilities. Practices EBM because of the benefit to the patient and the desire to learn more rather than in response to external prompts.	organizational level as dictated by best current information. Able to easily formulate answerable clinical questions and does so with majority of patients as a habit. Able to effectively and efficiently search and access the literature. Seen by others as a role model for practicing EBM.
Interpersonal and Communication Skills (ICS): Communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds	Uses standard medical interview template to prompt all questions without varying the approach based on a patient's unique physical, cultural, socioeconomic, or situational needs. May be tentative or avoid asking personal questions of patients.	Uses the medical interview to establish rapport and focus on information exchange relevant to a patient's or family's primary concerns. Identifies physical, cultural, psychological, and social barriers to communication, but often has difficulty managing them. Begins to use nonjudgmental questioning scripts in response to sensitive situations.	Uses the interview to effectively establish rapport. Able to mitigate physical, cultural, psychological, and social barriers in most situations. Verbal and nonverbal communication skills promote trust, respect, and understanding. Develops scripts to approach most difficult communication scenarios.	Uses communication to establish and maintain a therapeutic alliance. Sees beyond stereotypes and works to tailor communication to the individual. Has developed scripts for the gamut of difficult communication scenarios. Able to adjust scripts ad hoc for specific encounters.	Interacts with patients and families in an authentic manner that fosters a trusting and loyal relationship. Effectively educates patients, families, and the public as part of all communication. Models how to manage the gamut of difficult communication scenarios with grace and humility.
ICS: Maintain comprehensive, timely, and	Commits both errors of omission and errors of commission in	Includes all appropriate data sections in documentation; though	Accurately documents the patient's story and the service provided,	Tailors documentation to the specific care situation without loss of	Demonstrates behaviors in milestone immediately above. In

legible medical records	documentation. In the former case, documentation is often incomplete; critical data sections (e.g., past medical history [PMH]) and critical data (e.g., specific diagnoses in the PMH) may be missing and may not document what was actually said and done. In the latter case, documentation is subject to errors of inclusion of unnecessary information or detail. Documentation is often not available for other providers to review in time for their use in the patient's care. Handwritten documentation may be illegible, abbreviations are often used, and date/time/signature may be omitted.	some information may be missing from some sections or presented in a sequence that confuses the reader (evolution of symptoms is not documented chronologically). Documentation may be overly lengthy and detailed. It may contain erroneous information carried forward from review of the past medical record. However, the practitioner at this stage begins to go beyond documentation of specific encounters and may update the patient-specific databases (e.g., problem list and diabetes care flow sheet) where applicable. Documentation is often in the medical record in a timely manner, but may need subsequent amendment to be considered complete. Handwritten documentation is usually legible, timed, dated, and signed.	yet is not overly long and detailed. Begins to tailor the documentation to the specific situation. All important data are verified or the source is stated. Identified errors in the medical record are reported and appropriate measures initiated to correct them. Key patient-specific databases are maintained and updated where applicable. Documentation is completed and available for others to review within an appropriate time frame for it to aid in their care of the patient. Handwritten documentation is always legible, prohibited abbreviations are avoided, and all documentation has a time, date, and signature.	comprehensiveness. Synthesizes key information in a succinct manner. Begins to develop standard templates or tools for ensuring that documentation includes all appropriate quality markers, supports accurate billing and coding, meets legal and community care standards, enables identification of patients for disease registries, and supports chart audits. Regularly participates in chart audits for quality of documentation and acts on the results for self-improvement.	addition, uses her expertise to improve documentation systems to drive better patient care outcomes and works to disseminate best practices.
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### **Behaviors of an Early Learner (Level 1):**

#### Expected Elements (from table above):

The learners' approach to the child is rote. During the physical exam, the learner moves from head to toe rather than adjusting the flow of the examination to accommodate the patient's state of alertness or distress. The same level of attention is given to all parts of the examination without emphasis on features that should be areas of focus (e.g., neurologic examination in a patient with meningitis). The learner is unclear about how to perform physical maneuvers that are important in the patient (e.g., Kernig's and Brudzinski's maneuvers in a patient with meningitis).

The presentation of the findings gathered during the medical encounter generally involves a detailed description of what was said and done without prioritizing the information and without logical flow. The diagnostic possibilities are based on analytic reasoning without attenuation by past clinical experience and are so diverse that the development of a targeted plan for diagnosis and management is not possible. With limited knowledge and experience, the early learner depends on advice from colleagues to put a plan into effect. The medical record documentation reflects the same approach as the verbal presentation, with many errors of both omission and commission. The requirements for acceptable abbreviations and signature, attention to dates and times as well as timeliness of completion may not be met.

Communication with the family is typically learner driven so as not to deviate from the structured approach based on the learner's inability to adapt the interview or examination. The approach and content does not typically take into account the family's socio-demographic and cultural background. Lack of experience in dealing with sensitive issues may create instances where communication becomes awkward for the learner and/or the family.

#### Clinical Vignette:

A learner is asked to admit a 2 year old with wheezing and respiratory distress. During the history, mom seems distracted by her child's breathing, but the learner is focused on asking all of the questions on the history and physical examination (H&P) template and does not recognize her concern. The learner takes the history and begins with the head, ears, eyes, nose and throat (HEENT) exam, asking the mom to place the patient in the crib. The patient begins to cry rendering the rest of the exam, including the lung exam, difficult. The learner does not look for clubbing, cyanosis, or eczema, not recognizing their potential pertinence to the chief complaint.

The supervisor and learner emerge from the room. The supervisor asks the learner for a brief presentation and for his impressions and plans. The learner proceeds with a 10 minute recounting of the history and physical obtained from the H&P template. For the differential diagnosis, the learner suggests asthma, tuberculosis, and aspergillosis are equally likely, and does not suggest a foreign body aspiration as the potential history was neither considered nor elicited. For the plan, the learner recommends a bronchodilator as treatment for the wheezing, but looks to the supervisor for any more formal plan. The supervisor notes that asthma is the most likely diagnosis given the patient's history, and asks if the family is compliant with the patient's medications. This prompts the learner to recall that the mother did note running out of medications, but when asked the reason, he reports he was uncomfortable asking about money or suggesting non-compliance.

When the learner's supervisor reviews the chart, he finds a lengthy history and physical that is replete with errors of commission but missing critical information such as the medication list and a reasoned assessment. The H&P is not dated or timed, and the learner repeatedly uses "qd" instead of "daily."

### **Behaviors of a More Advanced Learner (Level 2):**

#### Expected Elements (from table above):

The learner tries to approach the physical examination with attention to the developmental and emotional state of the child by altering the flow to attend to those areas causing most distress towards the end, with some lapses due to: a) inexperience with specific examination maneuvers, b) strict adherence to an examination template for fear of errors of omission, and c) inexperience in judging triggers for distress based on

developmental age. The learner may have difficulty interpreting normal variations (e.g., innocent heart murmur) from abnormal findings (e.g., ventricular septal defect murmur). Each element of the examination is approached with the same degree of focus based on a myriad of diagnostic possibilities that have not been prioritized.

The presentation of the findings demonstrates an ability to filter and prioritize information and thus focus on some of the more relevant aspects of the history and physical examination. Synthesis is still difficult making it a challenge to generate a unifying differential diagnosis that incorporates the essential findings of the clinical encounter. In addition to basic science knowledge, the learner has some basic discipline-specific knowledge but limited clinical experience makes knowledge application difficult. Analytic reasoning prevails resulting in an overly broad differential diagnosis, work-up, and management plan, absent directives from faculty. The medical record documentation tips towards errors of commission rather than omission. There may still be some missing or erroneous information, the latter primarily carried forth from previous records. The flow of the documentation may leave the reader confused. The requirements for legible writing and signature, attention to dates and times as well as timeliness of completion are usually met. Unapproved abbreviations are often used.

Establishes rapport with patients and families, and has progressed beyond the learner driven communication to address the family's concerns but does not see them as part of the management team. Although capable of identifying socio-cultural barriers still has difficulty mitigating them.

#### Clinical Vignette:

The learner is asked to admit a 2 year old with wheezing and respiratory distress. During the history, mom seems distracted by her child's breathing, and the learner recognizes her concern and tells her he will make sure and mention it to his supervisor. He asks mom to hold the child for the physical exam, but begins with the HEENT exam. The patient begins to cry rendering the rest of the exam, including the lung exam, difficult. Mom manages to calm the child, allowing the exam to resume, but the learner is unnecessarily concerned about upper airway etiologies for the wheezing and plunges back in to the HEENT exam to examine the airway, again upsetting the patient. The learner is able to complete a physical exam, but with many fits and starts due to the patient squirming and crying. The learner's continuing apologies to the mom and explanations of his need to be complete assuage her frustrations.

The supervisor and learner emerge from the room. The supervisor asks the learner for a brief presentation and for his impressions and plans. He proceeds by presenting the myriad of findings, both pertinent and not, focusing on the symptoms and physical examination findings without prioritization. As a result of the lack of synthesis, the learner wants a battery of evaluation studies that may or may not be indicated (electrolytes, blood sugar, blood gasses, a chest x-ray, nasal swab for Respiratory Syncytial Virus and other viruses, and lateral neck film). He is unable to focus on a differential and as a result is more focused on continued evaluation due to the many potential diagnoses he is considering (including asthma, tuberculosis, aspergillosis, epiglottitis, pneumonia, foreign body aspiration, and croup). For the plan, he recommends a bronchodilator as treatment for the wheezing, but looks to the supervisor for any more formal plan. The supervisor notes that asthma is the most likely diagnosis given the patient's history, and asks if the family is compliant with their medications. This prompts the learner to recall that the mother did note running out of medications due to recent job (and therefore insurance) loss, but the learner did not pursue the conversation as he didn't want to "upset her." When the learner's supervisor reviews the chart, he finds a lengthy history and physical examination that is legible, timed and dated. There are many errors of commission but minimal errors of omission. However, the supervisor needs to comb the write-up carefully to obtain the needed information as the document is not well organized.

### **Behaviors of a Competent Learner (Level 3):**

#### Expected Elements (from table above):

Consistently and successfully uses a developmental approach when examining patients and performs and elicits the findings of basic physical examination maneuvers correctly. Focuses most attention during the examination on pertinent positives and negatives, but includes a survey so as not to miss unexpected findings. However, the learner may not attend to these unexpected findings if they are not consistent with his diagnostic hypotheses.

In a clinical encounter the learner is able to draw on past experience and use recognized patterns of illness to generate and prioritize a differential diagnosis to drive data gathering. He is able to synthesize information and present a cogent story with a focused differential diagnosis based on both knowledge and experience. Medical record documentation is comprehensive, accurately captures the patient's story, and may be tailored to meet the situation-specific needs (i.e., more thorough documentation of birth history in a 2 month old presenting with fever). The learner verifies secondary source data and maintains and updates key sources of patient information. The requirements for legible writing and signature, attention to dates and times as well as timeliness of completion are met and use of unacceptable medical abbreviations is avoided.

The learner establishes rapport with the patient and family based on respect for and understanding of socio-cultural issues. For the majority of patients, except the most challenging, the learner can engage in bi-directional communication that incorporates the patient and family values without superimposing his own biases.

#### Clinical Vignette:

A learner is asked to admit a 2 year old with wheezing and respiratory distress. During the history, mom seems distracted by her child's breathing, and the learner acknowledges her concern, affirms that he understands the child is having some respiratory distress, but reassures her that he has been monitoring the child's oxygen level and he is getting plenty of air to his lungs. He asks mom to hold the child for the physical exam, and begins with those maneuvers that require the patient's cooperation. Because his differential diagnosis includes foreign body aspiration, based on past clinical experience he focuses the lung exam on differential breath sounds, in addition to the wheezing and work of breathing. The learner performs a complete physical exam, allowing him at the completion of the H&P to have a clear working diagnosis of asthma exacerbation with status. He incidentally notes pallor during the exam.

The supervisor and learner emerge from the room. The supervisor asks the learner for a brief presentation and for his impressions and plans. He proceeds by presenting a focused history and physical, including the asthma history, allergies and atopy history, the chronic asthma classification, the absence of accompanying infectious symptoms and the absence of a history of foreign body aspiration. He concludes this is most likely an asthma exacerbation, with the main differential including foreign body aspiration and allergic reaction. He reasons that the absence of a foreign body aspiration history does not rule out the diagnosis, but it is less likely due to the lung findings. For the plan, he recommends a bronchodilator and corticosteroid for the acute management, and the development of a Home Management Plan of Care that is commensurate with his asthma severity rating and consistent with the patient's mother's wishes and health literacy (e.g., using a nebulizer rather than a MDI at her request as she reports difficulty using the latter). He also notes the finding of mild pallor to the supervisor, but passes it off as non-significant because there is no FH of anemia and mom also "looks pale." The learner additionally notes that he instituted a social work consult for a Medicaid application due to the recent loss of insurance.

When the learner's supervisor reviews the chart, he finds clear and accurate documentation that captures the story he heard from the mother. While the learner does not routinely document insurance status, he does so in this case as a result of mom's desire for help. His history and physical are legible, timed and dated. The note is on the chart in time for the social worker to review before seeing the mother.



#### **Behaviors of a Proficient Learner (Level 4):**

##### Expected Elements (from table above):

Consistently and successfully uses a developmental approach when examining patients and performs most physical exam maneuvers correctly, including some special maneuvers. The physical exam is driven by a narrow and accurate differential diagnosis, resulting in the ability to focus on pertinent positives and negatives.

In a clinical encounter, the learner is able to draw on a breadth of experience that includes common and uncommon problems and pattern recognition in diagnostic reasoning, resulting in early directed hypothesis testing in the encounter. He is able to synthesize and analyze findings to develop management plans most often based on experience; however, when facing complex problems or those beyond the scope of experience, will revert to analytic reasoning. Chart documentation is effective and efficient, being comprehensive yet concise. It includes quality markers, supports billing and coding, meets care and legal standards. He voluntarily participates in chart audits in an effort to learn from and continually improve documentation.

Flow of communication is bi-directional, even with more challenging families. The learner at this stage views the patient and family as the central members of the health care team with overall care plans that reflect their values.

##### Clinical Vignette:

A learner is asked to admit a 2 year old with wheezing and respiratory distress. During the history, mom seems distracted by her child's breathing, and the learner acknowledges her concern, affirms that he understands the child is having some respiratory distress, but reassures her that he has been monitoring his oxygen level and he is getting plenty of air to his lungs. He asks mom to hold the child for the physical exam, and begins with those maneuvers that require the patient's cooperation. Because his differential diagnosis includes foreign body aspiration, he focuses the lung exam on differential breath sounds, in addition to the wheezing and work of breathing. The learner performs a complete physical exam, allowing him to emerge from the H&P with a clear working diagnosis of asthma exacerbation with status. He incidentally notes pallor on the examination.

The supervisor and learner emerge from the room. The supervisor asks the learner for a brief presentation and for his impressions and plans. He proceeds by presenting a focused history and physical, including the asthma history, allergies and atopy history, the chronic asthma classification, the absence of accompanying infectious symptoms and the absence of a history of foreign body aspiration. He concludes this is most likely an asthma exacerbation, with the main differential including foreign body aspiration and allergic reaction. He reasons that the absence of a foreign body aspiration history does not rule out the diagnosis, but it is less likely due to the absence of differential breath sounds. For the plan, he recommends a bronchodilator and corticosteroid for the acute management, and the development of a Home Management Plan of Care that is commensurate with his asthma severity rating and consistent with the patient's mother's wishes and health literacy (e.g., using a nebulizer rather than a MDI at her request as she reports difficulty using the latter). The learner also notes that he instituted a social work consult for a Medicaid application due to the recent loss of insurance.

When the learner's supervisor reviews the chart, he finds clear and accurate documentation that captures the story he heard from the mother. While the learner does not routinely document insurance status, he does so in this case as a result of mom's desire for help. His history and physical are legible, timed and dated. He has the Home Management Plan of Care completed and on the chart, including all of the required elements from The Joint Commission. The note is on the chart in time for the social worker to review before seeing the mother. His documentation supports the billing for the practice.

### **Behaviors of an Expert Learner on the Road to Mastery (Level 5):**

#### Expected Elements (from table above):

The learner at this stage demonstrates the ability to engage both parent and child in a way that allays anxiety and maximizes cooperation. Patient and family engagement and skilled examination maneuvers ensure that the examination is efficient and effective. The efficiency and efficacy are enhanced by the focused attention on pertinent positives and negatives, special physical examination maneuvers (e.g., palpating for a pulsus paradoxus) as well as the practitioner's ability to integrate unexpected findings in a way that helps rather than hinders discrimination among competing diagnostic possibilities.

Breadth of clinical experience provides a repertoire of illness scripts and along with astute pattern recognition leads to early directed hypothesis testing during the encounter. Extensive knowledge coupled with clinical insight into how subtle discriminating features of the history and physical examination affect the prioritization of the differential diagnosis avoids premature closure. As a result diagnostic and therapeutic intervention is patient specific and based on a unifying diagnosis that fosters efficient and high quality, safe care. Chart documentation is comprehensive and concise. It includes quality markers, supports billing and coding, and meets care and legal standards. This learner recognizes the potential systemic impact of documentation and works on improving practices to increase efficiency for the practitioner, or effectiveness for the patient population.

Broad experience, with reflection for the intent of improvement, allows the practitioner to anticipate the needs of patients and families, thus establishing a therapeutic alliance even with the most challenging. The ability to see the care delivery model through the socio-cultural lens of the patient and family informs the approach to the interaction and ensures that the patient and family values are central to the care plan. The learner's documentation supports the billing for the practice.

#### Clinical Vignette:

A learner is asked to admit a 2 year old with wheezing and respiratory distress. During the history, mom seems distracted by her child's breathing, and the learner acknowledges her concern, stops the history to palpate for a pulsus paradoxus and auscultate the lungs, and affirms that the child is having some respiratory distress; however, he reassures her that his current exam findings and the patient's oxygen level show he is getting plenty of air to his lungs. He asks mom to hold the child for the physical exam, and begins with those maneuvers that require the patient's cooperation. Because his differential diagnosis includes foreign body aspiration, he focuses the lung exam on differential breath sounds, in addition to the wheezing and work of breathing. The learner performs a complete physical exam, allowing him to emerge from the H&P with a clear working diagnosis of asthma exacerbation with status. He notes pallor and goes back to question the mom about diet and milk intake. She explains that she has had recent financial difficulties resulting in both the inability to refill the patient's prescriptions and an over-reliance on whole milk in the diet.

The supervisor and learner emerge from the room. The supervisor asks the learner for a brief presentation and for his impressions and plans. He proceeds by presenting a focused history and physical, including the asthma history, allergies and atopy history, the chronic asthma classification, the absence of accompanying infectious symptoms and the absence of a history of foreign body aspiration. He is able to add the discriminating findings for children with atopy, such as allergic shiners, nasal crease, and pharyngeal cobblestoning. He concludes this is most likely an asthma exacerbation, with the main differential including foreign body aspiration and allergic reaction. He reasons that the absence of a foreign body aspiration history does not rule out the diagnosis, but makes it less likely on his differential due to the absence of differential breath sounds. For the plan, he recommends a bronchodilator and corticosteroid for the acute management, and the development of a Home Management Plan of Care that is commensurate with his asthma severity rating and consistent with the patient's mother's wishes and health literacy (e.g., using a

nebulizer rather than a MDI at her request as she reports difficulty using the latter). The learner also notes the mom's report of the recent loss of insurance and reports that he offered her a social work consult to initiate a Medicaid referral which the mother accepted appreciatively. He calls the social worker himself to ensure proper hand-over of information and respond to the urgent nature of mom's needs.

When the learner's supervisor reviews the chart, he finds clear and accurate documentation that captures the story he heard from the mother. While the learner does not routinely document insurance status, he does so in this case as a result of mom's desire for help. His history and physical are legible, timed and dated. He has the Home Management Plan of Care completed and on the chart, including all of the required elements from The Joint Commission. The note is on the chart in time for the social worker to review before seeing the mother.

The following day the learner notes that in reviewing the Home Management Plan of Care, the template does not have a clear prompt to document asthma trigger teaching for the family, and this is a requirement of the Joint Commission. He communicates the concern to the Chair of the Performance Improvement Committee of the hospital.