Communication pitfalls of traditional history and physical write-up documentation

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¹Department of Pediatrics, New York Medical College, ²Departments of Pediatrics and Psychiatry, Weill Cornell Medical College, NY, USA **Background:** An unofficial standardized "write-up" outline is commonly used for documenting history and physical examinations, giving oral presentations, and teaching clinical skills. Despite general acceptance, there is an apparent discrepancy between the way clinical encounters are conducted and how they are documented.

Methods: Fifteen medical school websites were randomly selected from search-engine generated lists. One example of a history and physical write-up from each of six sites, one teaching outline from each of nine additional sites, and recommendations for documentation made in two commonly used textbooks were compared for similarities and differences.

Results: Except for minor variations in documenting background information, all sampled materials utilized the same standardized format. When the examiners' early perceptions of the patients' degree of illness or level of distress were described, they were categorized as "general appearance" within the physical findings. Contrary to clinical practice, none of the examples or recommendations documented these early perceptions before chief concerns and history were presented.

Discussion: An examiner's initial perceptions of a patient's affect, degree of illness, and level of distress can influence the content of the history, triage decisions, and prioritization of likely diagnoses. When chief concerns and history are shared without benefit of this information, erroneous assumptions and miscommunications can result.

Conclusion: This survey confirms common use of a standardized outline for documenting, communicating, and teaching history-taking and physical examination protocol. The present outline shares early observations out of clinical sequence and may provide inadequate context for accurate interpretation of chief concerns and history. Corrective actions include modifying the documentation sequence to conform to clinical practice and teaching contextual methodology for sharing patient information.

Keywords: documentation, medical errors, medical history, medical decisions, initial assessment, write-up, physical examination, communication, context, communication

Introduction

Accurate documentation for sharing patient information is essential for good medical management. By convention, an unofficial standardized history and physical (H and P) "write-up" outline is used to document patient encounters.^{1,2} It is also referenced for giving oral presentations and teaching history-taking and physical examination protocol. Despite decades of use and general acceptance, there is an apparent discrepancy between the way patient encounters are conducted and how they are documented: Early observations about the patient's degree of illness and level of distress that guide

Correspondence: Jeffrey L Brown 10 Walnut Court, White Plains, NY 10605, USA Tel +1 914 552 5013 Email jeffrey brown@nymc.edu an examiner through the clinical interview are not described at the beginning of the documentation – they are communicated after the patient's concerns and history have already been presented. The potential for miscommunication and the advantages of correcting this disparity have not previously received academic attention.

Methods

Fifteen medical school websites that posted history and physical examples or recommendations for write-up documentation were selected at random from search-engine generated lists (PubMed, Medscape, Google, and Bing). When multiples were posted on the same site, only one example from each of six sites (Table 1) and one recommended outline from each of another nine sites (Table 2) were chosen. The recommendations for documentation made in two commonly used textbooks were also reviewed. The textbook recommendations, medical school recommendations, and clinical examples were compared for similarities and differences in their labeling and sequencing of history and physical information.

Results

The textbook recommendations, medical school recommendations, and clinical examples demonstrated general agreement on a preferred outline for documentation. The "standard" outline sequence listed the patient's chief concerns; the present-, past-, family-, and social histories; and a review of systems. These were followed by the patient's vital

signs and physical examination findings. Minor variations in sequence and labeling were found with regard to background identifying information. These included prefacing the H and P with a separate section for background information (e.g., age, gender, occupation, cultural identification, and historian reliability), combining elements of the background information with chief concerns (e.g., This is a 45-year-old Hispanic male who states that...), and adding background information to the history of present illness (e.g., The patient was referred because his primary care physician noted that...). None of the sampled materials described the examiner's initial perceptions of the patient's degree of illness and physical or emotional distress before the chief concerns and history were presented. When these initial observations were documented (e.g., well-developed well-nourished Caucasian male in no acute distress), they were categorized as "general appearance" within the physical findings. It is understood that the selection of a single write-up posted on a medical school's website may not be representative of all departments or affiliated institutions.

Composite clinical cases

Two composite clinical cases that demonstrate the use of the "standard" H and P format were created based on the author's observations in a private office setting, a community hospital emergency department (ED), and during teaching rounds at a university hospital.

Case 1: An ED triage nurse telephoned the doctor on call. She described a 3-year-old female walk-in patient who had

Table I Examples of history and physical examination write-ups posted on medical school websites, accessed December 20, 2016

- I. Columbia University Physicians and Surgeons http://www.columbia.edu/itc/hs/medical/physicalDiagnosis/06-07/SampleWriteUp.pdf
- 2. Drexel University College of Medicine https://webcampus.drexelmed.edu/skills/oral presentation/assets/sample written H and P.pdf
- 3. Loyola University, Stritch School of Medicine http://www.meddean.luc.edu/lumen/meded/elective/pulmonary/copd/120699/c1 f.htm
- 4. Michigan State University, College of Human Medicine http://learn.chm.msu.edu/clinicalhpcases/content/pediatrics/Pediatrics HP.pdf
- 5. University of North Carolina School of Medicine http://www.med.unc.edu/medselect/resources/sample-notes/sample-write-up-1\
- 6. University of Texas Houston Medical School http://www.utmb.edu/psychiatry/Education/Undergraduate/SampleH&P.pdf

Table 2 Examples of history and physical examination write-up recommendations posted on medical school websites, accessed December 20, 2016

- 1. Boston University College of Medicine http://www.bumc.bu.edu/im-residency/files/2010/10/History-and-Physical-Exam-Guidelines.doc
- 2. Case Western Reserve University School of Medicine http://medicine.case.edu/medical-student-programs/clerkship-program/education/write-up
- 3. Louisiana State Health Sciences Center http://www.medschool.lsuhsc.edu/medical_education/undergraduate/spm/SPM_100/documents/ HistoryandPhysical 000.pdf
- 4. Tulane University School of Medicine http://tulane.edu/counsel/upco/upload/Part-2-Doc-a-Hx-RevQuiz.pdf
- 5. University of California San Diego Health https://meded.ucsd.edu/clinicalmed/write.htm
- 6. University of Florida College of Medicine http://clerkship.medicine.ufl.edu/portfolio/patient-care/write-ups/instructions-for-write-ups/
- 7. Upstate Medical University, State University of New York http://www.upstate.edu/medicine/education/clerkship/objectives/sample-writeup.php
- 8. University of Tennessee Health Science Center http://www.uthsc.edu/pediatrics/clerkship/docs/H&P%20CARD.pdf
- University of Wisconsin School of Medicine and Public Health http://www.fammed.wisc.edu/files/webfm-uploads/documents/med-student/pcc/pds-example-documentation-hx-pe.pdf

a rectal temperature of 104.8°F after treatment with acetaminophen. When asked, "How sick does the patient look?" the nurse expressed concern about the "very high fever" but was reluctant to categorize the child's overall appearance. Before driving to the ED, diagnostic tests were ordered over the phone. On arrival, the doctor observed a cooperative child whose face was flushed with fever, but she was alert, bright-eyed, and socially interactive. The patient had not been seen previously by this physician. After questioning the mother and examining the child, the visit was documented by responding to prompts generated by the ED's health record software. They followed the traditional outline the doctor had learned in medical school 35 years earlier. "Fever" was listed as the chief concern followed by an abbreviated assessment of the patient's present-, past-, family-, and social histories, and a review of systems. The physical findings were entered next beginning with her description of the child's general appearance: "Febrile, alert, social, in no acute distress." She noted the absence of localized abnormal physical findings, and the diagnostic test results were in a normal range. The presumptive diagnosis was, "Probable viral syndrome." An antipyretic was prescribed if needed for comfort; written and verbal follow-up instructions were given; and the child was discharged to the care of her mother.

Case 2: A resident physician presented his recently admitted patient at teaching rounds by reading from the medical record. The presentation followed the same traditional outline used in Case 1. This 20-year-old male patient's chief concern was "Passed out three times during the previous week." This patient reported decreased appetite, difficulty concentrating, abdominal discomfort, muscle aches, feeling "feverish," and moderately severe headaches that began 2 months prior to the first fainting episode. He described feeling "dizzy" when standing from sitting and an occasional "fluttering" sensation over his heart while at rest. He described himself as a full-time college student with "fair to poor" grades who lived at home with parents who argued constantly. He believed their pending divorce made his future uncertain. He admitted to the "occasional" use of recreational drugs. A first cousin was said to have a history of seizures. The remainder of the past-, social-, and family histories and the review of systems were noncontributory. The attendees created an exhaustive list of potential diagnoses based on this complex multisystem history. The physical findings were presented next. The resident described the patient as "an extremely anxious-appearing 20-year-old well-developed, well-nourished Caucasian male who did not appear ill and exhibited no obvious signs of physical distress." The anachronistic phrase, "well-developed well-nourished,"

was presumed to mean "in generally good health." His vital signs were normal and no abnormal cardiac, neurologic, or other localized findings were observed on examination. After learning the physical findings, the attendees shortened and reprioritized their list of diagnoses to emphasize those most likely to be associated with extreme anxiety, well appearance, and 2-month history of multiple symptoms. A plan for evaluation and management was then formulated based on this added information.

Discussion

A dynamic interaction between a clinician and patient begins when the examiner forms an initial impression of the patient as a person. This process may start before words are spoken, and the clinician's perceptions may change as the visit progresses. ⁴⁻⁶ In an acute care setting where triage and presumptive diagnosis are especially important, the most significant initial observations are the degree to which the patient appears to be suffering from physical or emotional distress and whether the patient appears acutely ill, chronically ill, neither, or both. ⁷⁻⁹ Other observations that might affect the doctor–patient interaction and accuracy of the history include whether the patient seems alert or confused, cooperative or oppositional, and if grooming seems appropriate for the circumstance. ^{1,5}

In both clinical examples, contrary to the way the clinical encounters were conducted, the examiners' initial impressions of their patients were not described at the beginning of the written documentation and oral presentation - they were described as "general appearance" - the first item in the physical findings. This most likely reflects the good and accepted practice of beginning every physical examination with an overall visual inspection of the patient, 10 but it is out of clinical sequence because it ignores the impact these observations can have on doctor-patient interaction and the history-taking process. Similar to background information that includes age, gender, and cultural identity, they create context for guiding the examiner through the interview and examination. If, for example, these patients had exhibited obvious signs of physical pain, dyspnea, or depression, the examiner might have changed or limited the questions that were asked, the way they were asked, and how responses were interpreted. Communicating these initial impressions to others in a timely manner (i.e., at the beginning of the written documentation or oral presentation) is important: In addition to affecting the comprehensiveness and reliability of the physical examination, the content of the history may also be affected by what the patient (or surrogate) is willing or able to share with the examiner.11

A patient's stand-alone chief concern is often a generic symptom with limited diagnostic or clinical value until it is qualified with additional information: Three patients with the same chief concern, "I saw blood in my urine," will be evaluated differently and with different levels of urgency if the examiner perceives the individual as a well-appearing patient who reports that..., an acutely ill-appearing patient who reports that..., or a patient with severe flank pain who reports that he saw blood in his urine. Without immediate knowledge of the examiner's first impressions, erroneous assumptions might be made in the interim before they are eventually communicated – if they are communicated with the physical findings. In our clinical cases, the trip to the ED and panel of tests ordered by the physician in Case 1 was based on the verbal report of a stand-alone unqualified symptom ("high fever"), which created an impression that the patient was seriously ill; and the overly inclusive list of probable diagnoses in Case 2 resulted from hearing a complex history without having awareness of the patient's appearance. Greater clarity could be achieved by describing these patients as "a well-appearing three-year-old whose mother reports sudden onset of high fever" and as "an extremely anxious but otherwise well-appearing 20-year-old who says he passed out three times."

The need for communicating appearance as context for clinical information extends past the H and P write-up; it is important for sharing information regardless of the clinical setting. Receiving a telephoned or verbal hand-off report that "Electrolyte values have returned to normal" might create an erroneous impression of clinical improvement if it is not qualified with, "...but, the patient seems more irritable and confused." Being aware of initial observations can also alert clinicians to proceed with caution when the observations are discordant with the patient's history, e.g., well-appearing patients who say they feel sicker than they ever felt before or ill-appearing patients who say they have never felt better.

To avoid confusion when distinguishing between background information, patient concerns, and examiner perceptions that are presented together, training should stress the importance of using clarifying statements to differentiate one from the other. These include "The patient reports that..." and "The patient appeared to be...". For ease of implementation, write-up modifications that document initial observations before patient history should attempt to maintain compatibility with electronic health record software. The chief concern category can be expanded from a stand-alone

statement to one that is qualified by background information and initial observations. Alternatively, early observations can be added to the background category, if one is already present.

Conclusion

This survey of medical school websites and textbooks confirms common use of a standardized outline for documenting, communicating, and teaching history-taking and physical examination protocol. In its present form, the outline shares early observations out of clinical sequence and may provide inadequate context for proper interpretation of chief concerns and history. Corrective actions include modifying the documentation sequence to conform to clinical practice and teaching the importance of reporting contextual observations when sharing patient information.

Disclosure

The author reports no conflicts of interest in this work.

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