CLINICAL CARE CONUNDRUMS
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CLINICAL CARE CONUNDRUMS
Challenging Diagnoses in Hospital Medicine

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Seven-plus years ago, as planning for the nascent *Journal of Hospital Medicine* was well underway, the journal’s inaugural editor-in-chief, Dr. Mark Williams, challenged us to create a feature in which an enigmatic clinical case would be presented in a stepwise manner—in his words, “similar to morning report.” With the ultimate diagnosis masked until the end of the case, the Clinical Care Conundrum (CCC) format would allow readers to generate their own hypotheses and differential diagnoses and to compare their thoughts to comments of an expert discussant unfamiliar with the case. Following the unveiling of the diagnosis, a concise discussion would review the key features of the case. We enthusiastically accepted this charge, and over the ensuing years have spent far more hours involved in the endeavor than any of us anticipated at the outset. The bulk of our effort has involved developing relationships with authors and helping them nurture their manuscripts through the review process. Along the way we have found opportunities to coauthor submissions to the feature ourselves. The series has featured manuscripts authored by highly seasoned, senior authors, and we have also had the privilege of working with novice authors and shared their pride in seeing their work in print.

We are proud of the series and consider it a privilege to compile the best of the CCC manuscripts into this book, along with an introductory chapter on clinical reasoning and cognitive error by three experts, Drs. Etchells, Shojania, and Redelmeier. We believe that all the cases in the book will challenge and enhance your diagnostic reasoning skills, and we invite you to use these cases as teaching cases at your institutions.

Building the feature has been a labor of love. We are grateful to a number of individuals, without whose support the series would certainly have been less successful, and in the cases of some, would never have seen the light of publication. First and foremost, we would like to acknowledge Mark Williams, whose vision, good humor, and unfailing support over a number of years were critical to the success of the series. We would also like to thank the *Journal of Hospital Medicine*’s managing editor extraordinaire, Phaedra Cress, whose myriad contributions have been nothing less than remarkable, as well as the journal’s current editor, Andy Auerbach, who has continued to support and encourage us in our efforts. Finally, we would be remiss were we not to thank Sanjay Saint and Gurpreet Dhaliwal, both of whom have contributed to the CCC series in a variety of significant ways.

We hope that you enjoy reading the book, and even more importantly, that your patients benefit from you having done so.

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One of the challenges of a generalist field—one that cannot define itself by its expertise in managing the derangements of an organ (as with cardiology) or by its skills in performing a procedure (as with surgery)—is to develop a core curriculum and a raison d’être. From the time that Lee Goldman and I coined the term hospitalist in 1996,¹ hospitalists began to struggle with this existential question. What was their field about, and what justified its existence?

This struggle abated in 1999–2001, with the publication of two seminal reports on patient safety and healthcare quality by the Institute of Medicine.²,³ Soon, the hospitalist field had put its collective nickel down: while hospitalists would be excellent doctors in the traditional, Marcus Welbian sense of the word, our unique niche would be as system leaders, helping to build systems to ensure the highest quality, safest care for hospitalized patients.

This focus—which was codified in the publication of the Society of Hospital Medicine’s Core Curriculum in 2006⁴—has unquestionably helped the field establish credibility within the House of Medicine and with a variety of important stakeholders, such as legislators, the media, regulators, accreditors, and, most importantly, patients and their advocates. Also, as the overall pressure to improve quality, safety, and value has increased, many hospitals, training programs, and national and international organizations have turned to hospitalists to “see how it is done.” This is all for the good—for both patients and for our rapidly growing field.

But, just as we now understand that certain safety fixes can have unanticipated consequences, so too can a narrow focus on systems improvement. I think we have begun to see these consequences play out over the past few years, both as they pertain to our entire system of care and more specifically to the core work of hospitalists.

In 2010, I wrote an article entitled Why Diagnostic Errors Don’t Get Any Respect … and What can be Done About Them,⁵ in which I argued that the focus on systems thinking to address safety targets such as medication errors and falls was terrific, but the crucial matter of diagnostic errors had been strangely omitted from the safety agenda. This “diagnostic errors exceptionalism” began at the beginning, with the IOM report, To Err is Human.² In that report, the term medication error is mentioned 70 times, while the term diagnostic error is mentioned fewer than 5 times.
However, diagnostic errors make up nearly one in five preventable adverse events in the famous Harvard Medical Practice Study and they are far more common than medication errors in studies of closed malpractice claims.

It is easy to see why diagnostic errors have been overlooked in the safety field: they are hard to measure and fix. But by ignoring them, we risk a self-fulfilling prophesy, one in which we get better in developing process changes, information technology, and checklists that address system errors, while neglecting interventions and research that could ultimately improve diagnostic accuracy.

Luckily, diagnostic errors have recently started to receive the attention they deserve, from academic experts, accrediting boards, and researchers. Also, some promising solutions are beginning to emerge, both in the form of new ways of thinking (such as metacognition and cognitive de-biasing) and in new models of computerized decision support. But even with these methods, I believe that the time-honored tradition of having clinicians learn from tough cases remains central to our efforts to improve diagnostic reasoning.

This brings me to the more specific issue for hospitalists. While the American hospitalist model has taken on unique aspects, the US hospitalist in some regards resembles the Canadian or British internist—a hospital-based highly trained physician who specializes in managing the really knotty cases that have stumped everyone else. In America, we know what such a doctor looks like: Dr. Gregory House (hopefully without the arrogance, inappropriateness, and substance abuse). Andrew Holtz, in his 2006 book, “The Medical Science of House,” recognized this. “Although Dr. House is called a ‘diagnostician,’ he is really a hospitalist,” wrote Holtz. While we have focused on the hospitalist as systems improver, the need for a “go-to” diagnostician remains, and hospitalists have assumed this role in many of their institutions, not just on television.

Perhaps in the distant future, a computer—maybe a version of IBM’s Jeopardy-beating computer Watson—will obviate the need for a really smart physician, willing and able to gather all the relevant facts and armed with the experience and training required to convert these facts into a differential diagnosis, a diagnostic plan, and ultimately the right diagnosis. But today, we depend on physicians to serve in this role. To excel as a diagnostician, we know that clinicians need to constantly mine both their own cases as well as the cases of others for lessons. It would be best if these learning cases were carefully selected for their lessons, and if one could follow the thinking of a master clinician as he or she worked through their cognitive twists and turns.

All of which is to say that the lessons contained in this book are crucial for hospitalists if we are going to fulfill our dual missions of being system improvers and superb diagnosticians. I suspect you will read it, then return to it over and over through the years for wisdom and inspiration.

REFERENCES


CHAPTER 2

IMPROVING DIAGNOSTIC SAFETY IN HOSPITAL MEDICINE: CAN CLINICAL CARE CONUNDRUMS HELP?

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INTRODUCTION

One of us (EE) recently read a “Clinical Care Conundrum” in the Journal of Hospital Medicine that described a 45-year-old female patient with recurrent unexplained delirium. The final diagnosis was Hashimoto’s encephalopathy. EE was fascinated. He had never heard of this diagnosis being mentioned in any consultation, conversation, lecture, morning report, rounds, article, chapter, monograph, or text. For the next few months, every time EE heard about a delirious patient, the diagnosis of Hashimoto’s encephalopathy popped into his mind. He made a special point of mentioning the diagnosis at morning report and during case discussions, hoping to look intelligent. His coauthors (KGS and DAR) thought that EE was becoming increasingly tangential and wondered if his reading the clinical conundrum had been helpful or harmful.

In this chapter, we

1. describe the frequency and consequences of diagnostic delay and diagnosis-related harm;
2. analyze causes of diagnostic delay and diagnosis-related harm;
3. review core concepts in diagnostic reasoning and common cognitive errors;
4. outline steps that might improve diagnostic safety in hospital medicine.