

A photograph showing a physical therapist in a white shirt examining a patient's arm. The therapist is using their hands to palpate the patient's forearm and elbow area. The patient is lying down, wearing a red shirt. The background is a plain, light-colored wall.

# Fundamentals of the Physical Therapy Examination





# Fundamentals of the Physical Therapy Examination

## Patient Interview and Tests & Measures

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*To my parents, Barbara and Larry Fruth,  
who taught me that the pursuit of education should have no bounds,  
fostered in me the confidence to know I can accomplish anything I put my mind to, and  
showed me that teaching something you love can be a pretty cool gig.*



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# Foreword

Recently I was asked to give a reflection on wisdom for an ecumenical service marking the centennial of the college where I work. Although one might think that writing a reflection for a church service would be very different from writing the foreword to a physical therapy text, in this case there were remarkable similarities. For both writing tasks, I found myself reflecting on the differences between information and wisdom.

One of the features of life in the twenty-first century is the widespread availability of information. Anyone with an Internet connection or a smartphone can find out the current temperature in Istanbul or the birthdate of their favorite celebrity. But information is not wisdom. Systems theorist Russell Ackoff defined a hierarchy of mental content that starts with data; moves upward through information, knowledge, and understanding; and is capped with wisdom.<sup>1</sup> The first four of these deal with the past, with what has been or what is already known. Only the fifth level, wisdom, Ackoff says, is future oriented, allowing us to innovate and to choose between different courses of action. Bellinger and colleagues interpret Ackoff's hierarchy by providing an amusing example that illustrates how we are able to detect patterns and relationships in information to create higher-level thinking. They ask their readers to consider the following:

- I have a box.
- The box is 3 feet wide, 3 feet deep, and 6 feet high.

- The box is very heavy.
- The box has a door on the front of it.
- When I open the box, it has food in it.
- It is colder inside the box than it is outside.
- You usually find the box in the kitchen.
- There is a smaller compartment inside the box with ice in it.
- When you open the door, the light comes on.
- When you move this box, you usually find lots of dirt underneath it.
- Junk has a real habit of collecting on top of this box.<sup>2</sup>

Of course, at some point in the sequence of bullets, you understood that a refrigerator was being described. You detected the pattern and thought, “aha, a fridge!” You didn’t need the bullets about the freezer section, or the light, or the dirt and the junk. A trivial example, perhaps, but one to which most readers can relate.

In this text Dr. Fruth helps novice physical therapists learn how to collect data and information and turn it into clinical understanding and wisdom. She does this with a remarkable combination of head and heart. Starting first with several chapters about the patient interview, she helps students understand how their appearance and body language affect their perceived trustworthiness; she challenges readers to think about how their unconscious biases might influence their clinical interactions; and she reminds

readers that their deep listening skills should let each patient know that he or she is the most important person in the room. She introduces a useful priority/possible/pointless rubric for deciding what questions to include in the interview, showing them the physical therapy equivalent to “aha, a fridge”: providing guidelines for collecting data that will establish a pattern, giving permission to stop asking questions when the pattern is clear, and determining when it is important to search for red flags that could indicate that an unexpected pattern might be at play.

After the interview chapters, Fruth provides a comprehensive treatment of physical therapy tests and measures, using the *Guide to Physical Therapist Practice*<sup>3,4</sup> as her framework. Once again, her priority/possible/pointless rubric shows novice clinicians how to be thorough, yet judicious, in their use of tests and measures. In today’s health-care system, where patient-centered care can be in tension with productivity expectations and cost pressures, such a thoughtful presentation of how to practice with both efficiency and integrity is welcome.

As I read this text, I had the sense that I was working side-by-side with a master clinician. In an environment in which students are expected to “hit the ground running” when they begin their clinical training, this text offers the

advice one would expect from a skilled clinician—practical yet well-referenced, basic yet sophisticated, and challenging yet supportive. The text does nothing less than help its readers learn to think like physical therapists, collecting data and turning it into clinical wisdom.

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# Preface

Seven years ago, as I embarked on my first faculty position at the University of Indianapolis, I was charged with teaching a course sequence in the Doctor of Physical Therapy program called Generic Examination I and II. Although I was not terribly fond of the course name, I was thrilled to get to teach the content: the “generic” skills required to conduct a basic physical therapy examination with a wide variety of patients. Who wouldn’t want to teach the fun clinical stuff, right? With this excitement, however, came the anxiety-provoking realization that I was responsible for something that would affect each student’s ability to perform one of the most vital components of a physical therapist’s practice: a thorough, concise, and meaningful patient examination.

Like any instructor assigned to teach new content, I went in search of a textbook I could both recommend to my students and use to supplement my teaching. It wasn’t long before I realized that what I was looking for didn’t exist. There were a number of textbooks that covered advanced tests and measures, and many that dealt with examination techniques specific to a certain genre of patients. But I was unable to find anything that encapsulated the skills necessary for a novice student to learn the art and science of conducting both the interview and tests/measures components of an initial examination with a variety of patients. That first year I scrambled to create a 38-page course packet to

provide students with rudimentary “how to” information. Over the next 7 years, I sought substantial input from students, graduates, and my colleagues who taught advanced skills. This invaluable feedback allowed that little course packet to grow to a 150-page manual (well known to many UIndy DPT graduates as the “Purple Book”). As the Purple Book evolved over the years, I increasingly heard, “You need to publish this!” Trusting that positive feedback and my inherent “why not?” mentality, that’s just what I did.

The essential purpose of *Fundamentals of the Physical Therapy Examination: Patient Interview and Tests & Measures* is to provide novice to intermediate students of physical therapy with a resource that can be used both in the classroom and the clinic to help them learn methods of collecting meaningful verbal, observational, and measured data from any patient, regardless of setting or diagnosis. It also is designed as a classroom resource for physical therapy faculty who, like me, have been searching for a text that covers this broad content in a classroom-friendly way. This text is intended for active use! Students are encouraged to highlight content, write notes in it, frequent the companion website to watch the how-to videos, and take it along during clinical experiences. Faculty are encouraged to use the multitude of short case examples as classroom talking points, utilize the step-by-step instructions of how to perform each test/measure (while emphasizing the need to adapt based



on individual patient needs), and show the accompanying technique-based videos to complement classroom instruction.

What makes this text different from most is that it does not ask the reader to learn methods of examining a particular body region or a specific condition. Instead, common interview questions and a myriad of physical tests/measures are described, and the reader is asked to consider which questions and which tests/measures are appropriate for *any* given patient. As experienced clinicians well know, “text-book” patients are few and far between. Physical therapists must have the knowledge and confidence to assess problems or conditions that may be outside any given patient’s presenting diagnosis. This text encourages students to understand that it is never too early to learn this essential skill of clinical decision making.

The first chapter of this text describes the global concepts and content of the remaining chapters, which are presented in two interrelated parts. Part I (Laying a Solid Foundation) focuses on what many clinicians would argue is the most important part of the patient examination: the initial interview. Chapters 2 and 3 discuss the vital aspects of creating rapport and an environment of trust, using a variety of communication tools, understanding the influence of biopsychosocial and cultural factors, recognizing personal biases, and appreciating the need to meet patients where they are. Chapter 4 then provides a thorough description of categories, types, and examples of interview questions. A “priority/possible/pointless” clinical decision-making system is introduced, encouraging and empowering students to embrace this essential component of an autonomous profession.

Part II (Building on the Foundation) begins with a chapter describing the transition from patient interview to performance of tests and measures. Emphasis is placed on the importance of using information gathered from the interview to guide decisions about which tests/measures

are appropriate. The remaining chapters describe the purposes and techniques of fundamental tests and measures commonly utilized in patient examinations, organized in a combined body system/patient condition manner. The “priority/possible/pointless” system is carried through each chapter, encouraging even novice clinicians to make clinical decisions about which tests/measures are essential and which ones may be unnecessary.

Brief case examples, accompanied by sample documentation, allow the reader to understand each test/measure in the context of a patient scenario. While complete case examples may be helpful to more advanced learners who have a greater ability to grasp the big picture, I have found that novice students often become overwhelmed or lost when trying to make sense of full cases. Thus, the case examples provided after each test/measure are purposefully short and focused to help the reader learn how information gathered from the patient leads to the selection of particular tests/measures and documentation of the findings.

Most students of physical therapy are visual or kinesthetic learners. The most requested study aid from my students has been pictures and videos of the techniques covered in class. Therefore, this text is laden with photos, and its companion website houses multiple videos that demonstrate most of the tests/measures described. In addition, videos of two complete initial examinations are provided. Students may find these helpful to obtain a “big picture” view of the examination process; instructors may find it helpful to use portions of these videos to highlight particular aspects of a typical patient examination.

Finally, my love and passion for teaching this content has only grown in the past 7 years, and I hope this is conveyed throughout the text. I also hope you find this text easy and enjoyable to read and, above all, one that is truly an asset on your journey toward becoming a confident, skilled, and successful physical therapist who finds as much reward in this profession as I have.





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