Chapter 5: Clinical Performance

Teaching Goals

Chapter 5 presents the core idea of evidence-based medicine: that clinical performance is a measurable and improvable technology. For clinically prepared students, the goal should be to move their focus from their own professional contribution to the organizational goals of achieving patient satisfaction and the desired clinical outcomes. For students without clinical background, the goal should be to strip the mystery off of clinical care. This approach was enormously facilitated by the American Medical Association’s endorsement of evidence-based medicine and the subsequent growth of clinical protocols. It will be further facilitated by the prevalence of electronic medical record.

Here are the takeaways from this chapter:

1. All medical decisions are under uncertainty. One critical role of caregivers is to deal with uncertainty.
2. Despite the uncertainty, medical care is now evidence-based. It is a science of tested responses to specific indicators.
3. Medical care is provided by teams; very little care is given by only one individual. (Note that about ten different caregivers are involved in the door-to-needle path in Figure 5.4, p. 170 in the book.)
4. Patient management protocols apply the science and coordinate the teams. The second critical role of caregivers is to apply the science by implementing the protocol.
5. Physicians have a unique role and contribution: they make the diagnosis, thereby selecting the protocol, and they monitor progress, abandoning the protocol when it is not working. (Protocols only fit about 60 percent of cases.)
6. More complex approaches (care plans, case management) are often necessary for patients who do not respond to protocols as expected.
7. Accountability and performance are improved by clinical service lines that aggregate similar patients to dedicated teams.
8. The fact that decisions are made under uncertainty means that clinical measures will have random variation. Random variation (Deming’s “special causes”) must be removed to identify correctable events (Deming’s “general causes”).
9. Prevention is important. It occurs at three levels and is subject to uncertainty. Reducing the cost of prevention often depends on targeting the intervention to people with high risk of disease.

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In a Few Words
Clinical performance is the degree to which the clinical professions and HCOs provide care that meets the IOM aims and Healthy People 2010 goals. Excellence is achieved through the effective use and continuous improvement of protocols based on the best available clinical evidence. An HCO should have both patient management and functional protocols to guide clinical care, a clinical quality improvement plan to move toward excellence and stay current with science, and prevention strategies for the local community. Clinical excellence demands overall excellence—functions for logistics, strategic planning, and conflict resolution must be maintained by the organization’s senior managers.

Chapter Outline
Using patient management protocols to guide clinical care
- Selecting and adapting protocols to guide care of similar patients
- Encouraging careful professional guidance for individual patients
- Using individualized care plans and case management for complicated cases

Using functional protocols to ensure safe, reliable, patient-centered care elements
- Ensuring quality and safety by standardizing care processes.

Continuously improving clinical care
- Developing a Service Line Structure to facilitate clinical accountability
- Measuring and reporting outcomes and effective care processes
- Using clinical performance teams to identify opportunities and coordinate changes in care

Strengthening prevention and health promotion
- Understanding cost and benefits of prevention
- Developing coalitions to promote health

Supporting a culture of clinical improvement
- Maintaining the values of evidence-based medicine
- Providing a structure for discussion, adaptation, and conflict resolution

Powerpoint Slides
See Learning Tools.

Questions to Debate
Slides of the individual questions are downloadable. We have prepared some summary thoughts on the content of class discussion. Obtain this information by writing (conventional mail) on academic letterhead to:
1. Why should clinical performance be focused on outcomes? Why is it necessary to
differentiate the concepts of quality, appropriateness, economy, and efficiency?
Why is it important that medical decisions involve probabilities?

2. What is the contribution of a patient management protocol? When is compliance
incorrect? How do we improve compliance with protocols? How do the answers
to these questions differ for functional protocols?

3. What is the role of individualized patient care plans and case management?

4. How would you improve clinical performance without service lines? Should an
organization focus clinical measurement in an office of quality management?
How would you develop functional protocols for functions like drug
administration, which involve several different accountability units?

5. Why should a hospital address issues of prevention and health promotion?

Additional Discussion Questions

1. Premises
   1.1. Can we measure clinical performance of an HCO as a whole? For example, can
        you aggregate good performance in cardiology and poor performance in
        obstetrics and, say, “overall its average”?
   1.2. Would you propose that your institution not adopt the Institute of Medicine
definitions of quality, appropriate care, efficiency, and economy? Why is it
        important that these terms be defined? What alternatives exist to the Institute of
        Medicine definitions?
   1.3. Explain, in terms that a member of the medical staff might understand, why it is
        important that the community at large establish the desired level of economy.

2. Decision theory. Draw a decision tree (see Figure 5.1, p. 159) for a patient-oriented
healthcare event, like using seat belts, stopping smoking, or getting immunizations. Several
of the outcomes have huge negative results associated with them, yet too many people end up
with those outcomes. Using the decision tree, identify four general approaches that an HCO
can use to help people change to “yes.” How would you identify the most desirable strategy?
How would you reduce the cost-benefit ratio for each of your strategies? (This question can
be used in class and later graded, using a different healthcare event.)

3. Continuous improvement approach. If your organization is committed to the principles
summarized in Figure 5.2 (p. 163), there will still be problems of implementation. Where do
you suppose the greatest risks of failure are in terms of the eight components of Figure 5.2, and what can the organization do to minimize those risks?

4. Development of clinical protocols
   4.1. What does a local performance improvement team contribute to patient care protocols that are not already part of the guidelines available through the National Guideline Clearinghouse?
   4.2. How would a local team proceed to generate or update a protocol? What kinds of people should be on a patient care protocol development team? What support should the team have? What should the charge to a patient care protocol development team state?
   4.3. How do we continuously improve clinical protocols?

5. Implementation
   5.1. How many diseases/conditions should be covered by patient management protocols?
   5.2. How would you select the next disease group to develop protocols for?
   5.3. As protocols are developed and implemented, doctors who treat those patients generally move toward compliance.
       a. What would be a good plan if that does not happen?
       b. What would be a good program for those few physicians who remain substantial outliers?
   5.4. On what terms should individual physicians be allowed to depart from the guideline?

6. Monitoring
   6.1. How do we deal with imperfect measurement?
   6.2. If you set up a control chart for a given, common diagnosis that had an upper confidence limit on the number of departures from protocol (or better, unfortunate outcomes), what steps would you take if the limit was exceeded?
   6.3. What other data would you want to monitor for that diagnosis in a protocol-oriented environment?
   6.4. Why is it difficult to measure outcomes of a clinical support service like anesthesia or laboratory? What is the role of process measures in a clinical service?

Questions for Examination

These questions are less ambiguous than the discussion questions. Obtain these questions and the authors’ answers by writing (conventional mail) on academic letterhead to:

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