Improving Medical Diagnosis: A Sociological Perspective

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INTRODUCTORY REMARKS

The United States economy is "in the midst of a revolution ... driven by the masses of data that we can now collect and analyze about consumers" particularly in regard to "their needs and desires" (Wang, 2012). And, as Wang further argued, this "new Age of Big Data...."poses huge challenges" as well as "presents new opportunities." Nowhere is this more evident, in the authors' opinion, than in health care delivery in the United States in the wake of the Affordable Care Act of 2010. Better known as "Obamacare" to detractors and fans alike, it has expanded health insurance coverage via a "federal mandate" to possibly as many as forty-seven million Americans estimated to have no health insurance when the law was passed. This will put a huge burden on the health care system because it adds to the present problems of providing health care coverage to older people. Older people usually require more medical attention, more complicated procedures, and more contact and use of the health care system. We need to face the fact that these additional burdens on the system will cost a lot of money and inevitably we will need to design and implement cost effective ways to improve how health care.

This main point of this essay is that the health care system needs to collect key patient information ("pivotal information") and to do this at the earliest possible point in the patient's disease process to deliver cost effective service. The essay discusses three suggestions for putting such pivotal information in physicians' hands. While the authors believe huge benefits in cost savings and greater effectiveness of treatment are possible if we implement these strategies. However, the nation faces various challenges that it will need to overcome to realize these benefits including (1) the fact that incentives in the current health care system fail to encourage collecting pivotal medical information as early as possible (2) physician resistance to some of these ideas and (3) technical problems that remain to be solved.

MAIN FOCUS

The Current State of the American Health System

It is important to first note that in the current health care system no incentives seem to exist to improve how diagnostic work is performed. Yet only in the context of a system that offers financial incentives for improving diagnostics will these suggestions be implemented widely and thereby realize improvements in diagnostic accuracy and efficiency.

Most patients encounter the health care system in one of two basic ways: an urgent need for medical attention occasioned by some problem afflicting the patient or a more routine encounter such as a periodic medical check-up. An obvious place to

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look for significant improvements in effectiveness and efficiency of treatment is the first situation of urgent care because it often is the more costly.

In the case of a patient visit to an urgent care facility or emergency room, assuming some kind of insurance coverage exists or applies (which will now be true for about 94 percent of patients), the compensation reflects the benefits that have been negotiated between providers, facilities and insurers. The patient then pays fees beyond basic insurance premiums related to the uninsured expenses, usually "deductibles," and "co-pays," related to the insurance contractual arrangements. In the rather uncommon situation created by the new legislation, the patient who lacks insurance coverage personally pays the expenses as dictated by provider or negotiated between patient and provider.

One of our concerns is that the insurance rules do not clearly focus on careful assessment of the patient. Regardless of how providers are compensated, we find a lack of any emphasis on accurate diagnosis based on a careful assessment of a patient to determine the underlying problem. All the models examined seem to favor offering some kind of symptom treatment to patients based on their presenting complaint and a cursory assessment of their medical history. This is true whether they tie payments to the number of patients seen (a capitation model); or to the number of procedures used (a fee for service model); or --more rarely-- to a "global" model which pays based on the final diagnosis an amount which covers the entire treatment, but does not necessarily itemize all the services provided. (A blended combination of these models is possible but we know of no examples). Even when the insurance coverage contains cost containment provisions, such as "medical necessity," or a review by auditing committees of same, or incentives to focus on preventive medicine, careful patient assessment is sometimes sacrificed to business practices of the provider or the insurance carrier. For example, one aspect of a careful assessment may be a treatment plan which goes along with the diagnosis.

We argue that for theoretical reasons (see our chapter on the garbage can model applied to medical diagnosis), relatively few patients actually receive a formal diagnosis. Anecdotal evidence seems to support that expectation. One observer (a supervisor/ICU nurse with many years experience) of the medical care scene in Arizona, for example, suggested that perhaps no more than ten percent of patients receive a diagnosis together with treatment plan in that state. Geographic variations occur because Medicaid program rules differ from one state to another for medically indigent persons, but this informant's opinion does underscore a basic flaw in the way physicians are compensated in the United States.

An Organization Studies Proposal for Improving Medical Care

We believe that two conditions underpin true improvement in medical care. The first is a compensation system that ties physician income to caring for a set number of patients rather than to the number of patients seen and/or the procedures used, although in respect to the latter, some attention is needed because certain procedures are very expensive. Also we note that certain procedures may be experimental, and insurance coverage tends to limit compensation for those procedures until they become more established medical practice.

At present there are only pilot programs that pay physicians to (a) care for a set number of people and (b) do it properly and comprehensively. A problem in institutionalizing these programs may entail some demographic redistribution of medical care providers to provide for optimal patient/provider metrics, a sociopolitical issue we cannot deal with in this paper, but ultimately we believe that all patients would benefit from such a program.

The second is a variety of steps to improve the process of diagnosis. Improving diagnostics begins with recognizing that it is a process of bounded rationality, consisting of evidence gathering punctuated by a series of conjectures

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