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Is organizational complexity the way to improve medical care? Unscientific reflections from going to the doctor in Cleveland and Paris

Joseph White

Abstract

Conventional wisdom suggests that health care will provide better value if physicians are replaced by other caregivers and care is provided less in "silos" and more in "integrated" organizations. By this standard French care appears backwards compared to American care. Yet that does not seem to make US care more efficient or effective. This perspective reviews some differences in practice and suggests why the conventional wisdom should be tested with research.

Keywords

integration, international comparisons, teamwork

Comparing health care systems provides a means of studying policies or organizational factors, such as the impact of prices or volume on health care spending.[1,2] However, demonstrating causal relationships may still be difficult either because of measurement issues (for example, Diagnosis Related Groups are different in different countries) or the number of countries compared does not exceed the number of relevant independent variables. Yet even comparisons of small numbers of countries can show possibilities that are not revealed in any one country, or can raise doubts about common assumptions by showing that two variables are not always associated in the way assumed.[3] For example, monthly 3-min doctor visits by elderly patients in Japan may seem to outsiders like a bizarre form of care but appear more useful when regarded more closely.[4]

I cannot offer the kind of systematic observation that Ruth Campbell provided for 3-min visits. Yet my family's experiences of health care in the US and in Paris raised some questions for me about whether some common ideas about reforming care are justified by evidence.

The promotional material for one conference, for example, talks about "innovation," "international best practices," "economic evaluation of technologies," "big data," and the search for "the secret for implementing value-based payment." Amid these buzzwords it also refers to "the optimal skill mix of providers" and asks, "will care coordination and clinical integration of various pieces among the value chain become reality in the future?"[5]

Frequently in health policy discourse, less reliance on doctors and more on other personnel is generally considered desirable.[6] Similarly, greater integration seems to be preferred to isolated solo practice. So which system might seem closer to those goals? Consider my wife's visits for a cardiac consultation.

At the Cleveland Clinic in the US she arrives at a reception desk, gives insurance and ID information, goes to a changing room and puts on a gown, waits in another lobby, is called for the electrocardiogram and it is done by a technician. She dresses again, goes to another station, gives her information again, waits, and is called for an echocardiogram. She dons another

Luxenberg Family Professor of Public Policy, Department of Political Science, Case Western Reserve University, Cleveland, USA

Corresponding author:
Joseph White, Department of Political Science, Case Western Reserve University, Mather House 111, 11201 Euclid Ave, Cleveland, OH 44106-7109, USA.
Email: Joseph.white@case.edu

gown, the test is done by a technician, and she returns to the lobby. When she is called she first sees a nurse, who weighs her, gives her another gown, checks her blood pressure, and then she waits in an examination room for the cardiologist to meet with her.

At the Institut Mutualiste Montsouris in Paris, she checks in at a hospital arrival desk, then goes to the clinic and waits to be called. An electrocardiogram is done by a technician (no gown; nobody cares). Then a doctor comes in to do the echocardiogram (still no gown). She returns to the waiting room, from where her cardiologist calls her into his office. There are no nurses, nurse practitioners or physician assistants in the process.

Each cardiologist is eminent in the field, takes time to talk with her and provides the same services. But more of the work in Paris is done by doctors, and care in Cleveland involves more staff and more space.

Doctor office visits differ in similar ways. In the US, we call a receptionist to make an appointment. In Paris, some doctors answer the phone and make their own appointments. Billing, of course, is far more complex in the US, requiring full-time staff even for a solo doctor. In Paris, a doctor normally gives you the bill and you pay him directly (being reimbursed by insurance). At the office in the US we usually wait and then are ushered into an examination room. Nurses do preliminary work, while the physician goes from room to room. At each he reviews the results of the nurse's work, then does his examination. In Paris, we would go straight from the waiting room into the doctor's office, which included his desk and examination table. Ancillary staff were rare.

In the US, tests may be done at the office. More commonly, the office is in a building of medical offices; we go to one of the other offices to have the test performed and results are sent directly to the physician. Doctors have supplies of vaccines and sometimes other drugs. In Paris, we would receive a requisition for a test and go to a lab off-site, even for an X-ray. Often we had to bring the results back to the doctor. We would get a vaccine from a pharmacy, and bring it back to the doctor for inoculation.

Our care in Paris seems further from "clinical integration of various pieces among the value chain" than our care in Cleveland. There is also less of a "skill mix of providers," and so it might be expected to be suboptimal because of the greater reliance on doctors. Analysts and reformers of the French system frequently seek greater integration, through methods such as electronic health records and gatekeeping. Yet comparisons of cost and quality of care in the US and France, difficult as it is to measure quality, do not suggest that the organization of care in the US is superior.[7] Perhaps French shortfalls in integration and in replacing physicians are being overwhelmed by the effects of other factors. Yet other inferences are possible.

Perhaps to achieve efficiency different ways of organizing services are needed in the two countries. Replacing doctors with other providers may be more useful in the US, where physician incomes are much higher than in France.[8] If this is true, however, then there is no internationally standard "optimal skill mix of providers" if our goal is to minimize value, for it depends on national wage patterns.

Perhaps, instead, more complex care adds costs. Doctors in the US are replaced by extra personnel, who thereby maximize the use of expensive physician time. But casual observation suggests those nurses and technicians have more idle time than the doctors do. They also require extra space (such as the examination rooms) and equipment and administration and coordinating effort. The doctor still has to spend time checking the records created by the nurse; is that really more efficient than having the doctor take my blood pressure, since we can talk while he does that?

The French approach to lab work displaces a coordination cost onto patients; the communication from labs to doctors in the US must be built into prices and so becomes monetized. So there is a hidden cost in France. Yet the French approach has two advantages. First, it gives both doctors and patients incentives to only do tests they believe are necessary. Doctors won't profit from doing extra tests and patients have to go to some trouble to procure them. Second, integration poses major capacity challenges. Different services are efficient at different volumes of patients. If, for example, the ideal number of patients per primary care doctor is 1500, and the ideal number per magnetic resonance imaging machine is 10,000, then each facility will only be efficient if it serves 30,000 members (or some multiple thereof). The difficulty of matching capacity to patient numbers is one reason why truly integrated health maintenance organizations lost out in the US marketplace.[9,10] In a more modest way, combining services within a doctor's practice risks similar capacity mismatches. Having each doctor keep a stock of vaccines may not be as efficient as having pharmacies maintain supplies. Independent laboratories will adapt their capacity to a market and have economies of scale compared to doctors' practices.

The experience of care in France may also be preferred by patients. A French friend who lives in Washington DC dislikes going to the doctor because he wants to see his doctor, not a bunch of other people. That may not seem "rational" to policy analysts but being shunted from room to room is aggravating to many Americans.

When we go to hospitals for outpatient care in Cleveland, we spend a lot of time recounting the same

history to different physician assistants so they can ensure the electronic health record is up-to-date. My wife (the only one of us who used hospital care) did not do this in Paris. But she saw the same doctor each time, he was familiar with her case, and it seemed to be no problem. In theory, electronic health records should ease transitions among practitioners. But that is required more in a more complex system where you might see a different practitioner each time, as in the US, than in a simpler system in France.

If you move you will need to switch providers and having one's records in electronic form could be convenient. Yet we moved across an ocean after my wife had very major surgery. We had the records printed by the Cleveland Clinic, brought them to Paris, and the cardiologist read through them and asked us questions. This was old-fashioned but seemed quite effective. Whether it is efficient probably depends on how often people move – but the massive costs and implementation failures of electronic health records suggest that assumptions about the greater efficiency and effectiveness of computerized records also should be questioned.

Cutler and Ly[8] argue that administrative expenses, factor prices (conceived as doctors' earnings) and intensity of services are the major reasons explaining differences in costs between health care systems. The differences discussed here involve something else: the factors of production differ between systems. Advocacy for primary care over specialty care involves this kind of difference. Yet the potential issues involve far more than just the debate about primary and secondary care.

It may seem obvious that replacing doctors with less-skilled and lower-paid workers, as well as combining services within larger firms, would increase efficiency. Yet health policy analysts also continually assume that money will be saved by shifting patients out of inpatient care. As Reinhardt[11] wrote 20 years ago in a classic article that assumption may be illusory. My experiences in two systems suggest that conventional wisdom about skill-mix and integration might also be misguided. Perhaps persuasive management rhetoric should be challenged by research.

References

1. Anderson GF, Reinhardt UE, Hussey PS, et al. It's the prices, stupid: why the United States is so different from other countries. *Health Affairs* 2003; 22: 89–105.
2. Angrisano C, Farrell D, Kocher B, et al. *Accounting for the cost of health care in the United States*. San Francisco, CA: McKinsey Global Institute, 2007.
3. White J. American health care in international perspective. In: Morone JA and Ehlke DC (eds) *Health politics and policy*, 5th ed. Stamford, CT: Cengage Learning, 2014.
4. Campbell R. The three minute cure: doctors and elderly patients in Japan. In: Ikegami N and Campbell JC (eds) *Containing health care costs in Japan*. Ann Arbor, MI: University of Michigan Press, 2014.
5. Center for Healthcare Management, Columbia University. Press release: 4th forum on health policy and management: innovation & implementation. Received by e-mail. http://centerforhealthcaremanagement.org/events/4th-forum/ (accessed 4 January 2015).
6. Niezen MGH and Mathijssen JJP. Reframing professional boundaries in healthcare: a systematic review of facilitators and barriers to task reallocation from the domain of medicine to the nursing domain. *Health Policy* 2014; 117: 151–169.
7. Rodwin VG and Contributors. *Universal health insurance in France: how sustainable?* Washington, DC: Office of Health and Social Affairs, Embassy of France. http://wagner.nyu.edu/files/faculty/publications/universal.pdf (accessed 28 January 2015).
8. Cutler DM and Ly DP. The (paper) work of medicine: understanding international medical costs. *J Econ Persp* 2011; 25: 3–25.
9. Gitterman DP, Weiner BJ, Domino ME, et al. The rise and fall of a kaiser permanente expansion region. *Milbank Q* 2003; 81: 567–601.
10. White J. Markets and medical care: The United States, 1993–2005. *Milbank Q* 2007; 85: 395–448.
11. Reinhardt UE. Spending more through cost control: our obsessive quest to gut the hospital. *Health Affairs* 1996; 15: 145–154.