See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/329973786

# Transforming health care delivery: An imperative for healthcare systems

Article *in* Technology and health care: official journal of the European Society for Engineering and Medicine · December 2018 DOI:10.3233/THC-181494

citation 1	READS 633
1 autho	·
	Etienne Minvielle   Ecole Polytechnique/Institut de Cancérologie Gustave Roussy   224 PUBLICATIONS   SEE PROFILE
Some of the authors of this publication are also working on these related projects:	

Care customization: Empirical studies based on a theoritical framework View project

Human sciences program in Gustave Roussy: Innovations in oncology View project

Technology and Health Care 27 (2019) 103–106 DOI 10.3233/THC-181494 IOS Press

# Transforming health care delivery: An imperative for healthcare systems

**Etienne Minvielle** 

13, CRG, CNRS, Ecole Polytechnique, Gustave Roussy, France E-mail: etienne.minvielle@gustaveroussy.fr

Received 18 September 2018 Accepted 21 November 2018

**Abstract.** The ways in which patient care is organized, managed and delivered are changing dramatically. As these changes continue to unfold, the organizational arrangements within which they take place – the production process – need to be redesigned. Redesign is always challenging, as peoples' routines, habits and expectations are frequently disrupted, and need to be modified or replaced by new ones. However, it should be a priority, as the need for change is only going to increase over time.

Keywords: Coordination of care, delivery of care, managerial behaviors, organization of work

# 1. Introduction

No one would dispute that the delivery of patient care is complex. But the level of complexity is increasing at a greater rate than the managerial capacity to deal effectively with it. Among the drivers of increasing complexity are intensification of economic pressure, the need to find better ways of managing chronic conditions in aging populations, and efforts to build patient preferences and goals into the delivery process.

In the last 10 years, hospitals in industrialized nations around the globe have been incentivized to increase their volume of activity. This trend has been widely documented [1] and often criticized [2]. For better or for worse, its impact on patient care has been huge. The average length of stay has fallen in the last ten years in virtually every OECD member country, dropping from 9.2 days in 2000 to 7.3 in 2013 [3].

Demand-side pressures (the aging of populations) and supply-side capabilities (new technologies and therapies) have also pushed care outward from the hospital inpatient ward to the community and even the home [4]. This decentralization of care requires new intra-professional collaboration and coordination among professionals who are not used to working together. For many patients, their cares include not only inpatient episodes, but also a variety of outpatient encounters in different settings, including their homes. The combination of medical innovations such as oral chemo therapies, and pressures to reduce both the number and length of inpatient stays and the number of medically unnecessary readmissions lead to more care being delivered in the home – wherever that may be – and both increase the need for remote monitoring capabilities and for greater coordination among various professionals with differing skills and expertise.

0928-7329/19/\$35.00 © 2019 - IOS Press and the authors. All rights reserved

#### E. Minvielle / Transforming health care delivery: An imperative for healthcare systems

A third driver of complexity, not yet fully appreciated, but clearly increasing in significance, is the incorporation of patient preferences into the choices about, and processes of, care. Sometimes referred to as "patient-centered care" [5] or "care customization" [6], this trend inevitably draws a complementary, but different, set of skills in the process of care that need to be integrated with more traditional approaches and managed effectively.

The result is profound changes in the way patient care is organized, managed, and delivered – the involvement of more professionals and para-professionals, more activities that need to be coordinated in order to respond to the needs of each patient, more "sites" for care to be taken into account, and all of this under pressure to get it done more quickly and at lower cost. The challenge, then, is clear. New approaches need to be invented.

The track record thus far, however, is not promising. Studies documenting deep flaws in the system [7] and undesirable incidents in the care process [8] suggest strongly that efforts to address these (and other) changes have not been effective and that much remains to be done.

### 2. Organizational options

Getting to the heart of the matter requires an understanding of how the production of a service is organized and managed, a "micro" perspective firmly anchored in activities and behaviors that are necessary in the process of care delivery. From this vantage point, it is clear that the process depends for its success on expertise from a number of different dimensions, mainly: the use of new information technologies, a better patient engagement, and new modes of payment like bundled payment [9].

Beyond all of these dimensions, professional groups, both within the hospital and outside, including hospital-based specialists, primary care physicians, nurses, pharmacists, physical therapists, home health aides, and social workers, and from newly emerging professional groups such as nurse navigators as well, play a key-role. These professionals are on the front lines of care delivery. They are the ones who are at the intersection of clinical knowledge and organizational demands. They are the ones who will need to know how to incorporate the participation of patients in the process, and to develop positive use of the new information technologies. Their behavior, collectively, will determine how well the process works and, organizationally, how much value they add through the ways in which their interdependence is managed. In addition to the professionals listed, it can be added that potentially family members who provide a large part of home care (particularly for chronic diseases such as Alzheimer's disease) are also involved in these issues.

The challenge at this level, then, is how best to address the need for change that currently exists, that is, how to infuse organizational and managerial know-how into the ways the various groups of professionals involved in the process of care execute their responsibilities and how to ensure that cooperation across professional lines in the service of providing "customized care" becomes the norm.

Although few in number, certain studies identify the kinds of managerial behaviors that are needed to enhance performance in health care now and in the future. These behaviors all relate, in one way or another, to "organizing work" and are typically outside prevailing professional norms and routines [10].

Burns et al. [11], for example, focus on issues involving coordination, learning, communication, and conflict resolution among professionals. In looking specifically at the case of nursing, Allen [12] identifies four sets of organized activities for nurses: creating working knowledge, articulation work, bed management, and transfer of care. Edmondson [13] emphasizes the importance of team learning, which she argues, creates a basis for shared understanding of situations that will be encountered and for continuous improvement in the organization of work. Cognitive approaches to risk management that lead

104

to what Koppel and Gordon [14], in their analysis of efforts to improve patient safety in hospitals, call "crew management", also emphasize the central role of teamwork, in this case focused on developing enhanced capabilities around vigilance. And Minvielle [15] emphasizes four organizational factors that play a role in the implementation of "actes techniques": coordination of activities, adaptation to unfore-seen events in the course of patient care, awareness of the full scope of work that needs to be done, and empathy in communications with patients.

None of these five classification schemes are itself sufficient, and points of convergence between them need to be explored more deeply. That said, they do converge around the behaviors that need to be encouraged. These behaviors are the cornerstones of an approach to care that recognizes the uncertainty and consequent need for flexibility that is inherent in this type of work, that places a priority on coordination and team-based workflows, and that cannot be encompassed in a performance manual or set of explicit rules and procedures. They must also be valued through appropriate new modes of payment to improve teamwork, coordination and the appropriateness of care.

# 3. The need to acquire substantive managerial know-how will only increase

In this brief overview, we can only sketch the broad contours of the ways in which the delivery of patient care is changing, and the consequent need for more organizationally sophisticated responses. As the process of care delivery becomes more complex, and as the need for coordination increases, the professionals involved directly in that process will need to acquire more managerial know-how to complement their clinical expertise and reduce the behavioral gap that currently exists. Such investment is essential to meet the changing managerial demands.

# Acknowledgments

This work is the result of a joint reflection with John Kimberly (Wharton School, University of Pennsylvania) that I thank.

#### **Conflict of interest**

None to report.

#### References

- [1] Kimberly J, Pouvourville de G, D'Aunno T. (2008). The Globalization of Managerial Innovation in Health Care, Cambridge University Press.
- [2] Porter M, Lee T. (2013). The strategy that will fix health care. *Harvard Business Review*, 91(10): 50--70.
- [3] OECD (2015). Health at a Glance 2015: OECD Indicators. OECD Publishing, Paris. doi: http://dx.doi.org/10.1787/ health\_glance-2015-en.
- [4] Topol E. (2012). The Creative Destruction of Medicine: How the Digital Revolution Will Create Better Health Care, New York: Basic Books.
- [5] Barry M, Edgman-Levitan S. (2012). Shared Decision Making The Pinnacle of Patient-Centered Care. *N Engl J Med* 366(9): 780-781.
- [6] Minvielle E, Waelli M, Sicotte C, Kimberly J. (2014). Managing customization in health care: A framework derived from the services sector literature. *Health Policy*, 117(2): 216-227.

#### E. Minvielle / Transforming health care delivery: An imperative for healthcare systems

- [7] Berwick D, Hackbarth A. (2012). Eliminating waste in us health care. JAMA, 307(14): 1513-1516.
- [8] Smith M, Institute of Medicine eds. (2013). Best care at lower cost: the path to continuously learning health care in America, National Academies Press, Washington, DC.
- [9] Bodenheimer T. Wagner EH. Grumbach K. (2002). Improving Primary Care for Patients. JAMA. 288-15. pp. 1909–1914.
- [10] Nelson S., Gordon S. (2006). The Complexities of Care: nursing reconsidered, Cornell University Press.
- [11] Burns L, Bradley E., Weiner B. (2011). Shortell and Kaluzny's Healthcare Management: Organization Design and Behavior, Cengage Learning.
- [12] Allen D. (2014). Re-conceptualising holism in the contemporary nursing mandate: From individual to organisational relationships. *Soc Sci Med*, 119: 131-138.
- [13] Edmondson A. (2012). Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy, John Wiley & Sons.
- [14] Koppel R, Gordon S. (2012). First, Do Less Harm: Confronting the Inconvenient Problems of Patient Safety. Cornell University Press.
- [15] Minvielle E. (2018). Le patient et le système. (The patient and the system). Ed.Seli Arslan, Paris.

106