



## The Healthcare Dilemma, Part 1

Bob Barnes and Marilyn Lombardi



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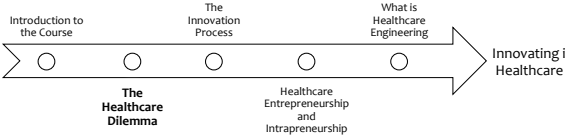
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## Week 1: Innovating in Healthcare



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## Opportunities for Innovation

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## Investing in Healthcare

- \* For those of us living in the United States:
  - \* We spend more per capita on healthcare than any other country
  - \* 17.3% of our GDP last year, up from 7% in 1970
  - \* Yet the WHO ranks us as 37<sup>th</sup> among nations
    - \* The World Health Report 2000 — Health Systems: Improving Performance. Geneva: World Health Organization, 2000.
  - \* Infant mortality (39<sup>th</sup>); adult female mortality (43<sup>rd</sup>); adult male mortality (42<sup>nd</sup>), and life expectancy (36<sup>th</sup>)
    - \* Doe J. WHO Statistical Information System (WHOSIS). Geneva: World Health Organization, September 2009

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## Global Trends in Healthcare Costs

- \* Today, 5.6 billion people pay out of pocket for over half their healthcare costs in low- and middle-income countries.
- \* 100 million = # of people who fall into poverty each year because they must pay for catastrophic care
  - \* "Primary Health Care, Now More Than Ever," WHO World Report 2008, p.24
- \* \$490 billion (in US Dollars) in the year 2030 = expected cost of diabetes care alone among people aged 20-79.
  - \* Zhang, F., et al. (2010). "Global healthcare expenditure on diabetes for 2010 and 2030." Diabetes Research and Clinical Practice 82, 293-301.

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### The Elephant in the Room

"... accessible is a challenge of monstrous proportions – far beyond the most intractable of the problems I had previously tried to study."

—Clayton Christensen, *The Innovator's Prescription*, 2008

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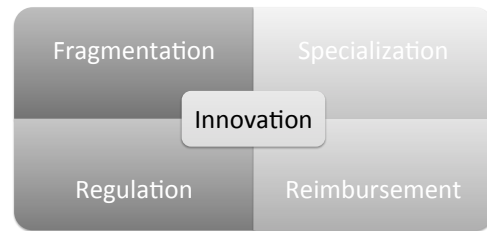
## The Healthcare Dilemma, Part 2



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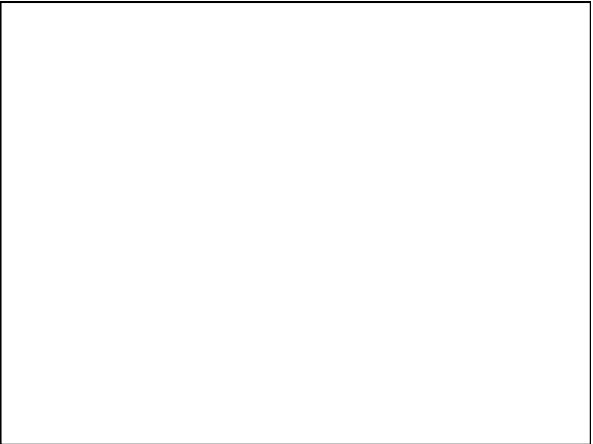


## US Healthcare Context



**FRAGMENTATION**

**SPECIALIZATION**



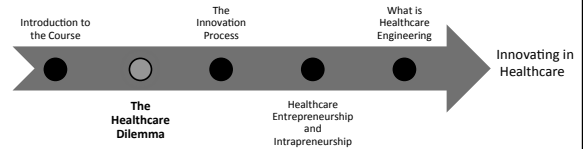
## The Healthcare Dilemma, Part 3A: Creating Value in Healthcare



Bob Barnes and Marilyn Lombardi



## Week 1: Innovating in Healthcare



## DELIVERING CARE

## Four Components of Care Delivery

- **Medical Knowledge**
  - Voluminous and specific; now embedded in clinical guidelines, medical device software or modern biopharmaceutical
- **Care Processes**
  - “That sequence of clinical decisions and tasks that result in patient relief.” Well-understood problems are solved through applying guidelines, while less well-understood problems are addressed through trial and error.
- **Practitioners**
  - Public has Internet access to the same knowledge base that used to be exclusive terrain of practitioners, leading to new goods and services for “empowered” patient and new professional roles (i.e. care navigators).
- **Organizations**
  - In our technologically complex modern health care settings, organizations as well as practitioners are being held accountable and patient relief is as much determined by organizational performance as by individual physician performance.

SOURCE: Richard M. J. Bohmer. 2009. *Designing Care: Aligning the Nature and Management of Health Care*.

## The Healthcare Dilemma, Part 3B: Creating Value in Healthcare



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## Two Approaches to Innovation

In this course, you'll encounter **two different approaches** toward innovation in the delivery of patient relief:

1. **"Blue Ocean" Innovation = Radical policy-level innovations that reconfigure the whole system by which value is created and delivered to the consumer.**
2. Focused, Pragmatic Innovation = incremental value-added changes (in processes, products, or services) undertaken by small, entrepreneurial teams of innovators

Create uncontested market space.

Make the competition irrelevant

Create and capture new demand

Provide high **VALUE** at low cost

### Blue Ocean Strategy

Turning the vast array of pressures and needs into a new unexplored and uncontested market territory.

Example: The first commercial massive open online education providers

## What is Value in Healthcare?

In the healthcare market, we can define **VALUE** as **"patient health outcomes achieved relative to cost of care."**

**"In a well-functioning healthcare system, the creation of value for the patients will determine rewards for all system actors."**

Source: Porter, M. E. 2010. Value in Health Care. Supplementary Appendix 1 to "What is value in health care?" *N Engl J Med* 363:2477-81 (10.1056/NEJMp1011024).

## Value Innovation From the 'Blue Ocean' Perspective

**"Only by combining innovation and value will we generate new products, processes, or services that gain market acceptance."**

-- Source: Laszlo & Zhexembayeva, 2011, p. 83

## Value Without Innovation

Tends to encourage the type of changes that are not sufficient to make a company or organization stand out in the marketplace.

- Example: A primary care practice pilots a new intake process for reducing patient wait time (an small change inside the existing paradigm), when the real challenge may be to move beyond the entire primary care practice paradigm altogether.

## Innovation Without Value

Tends to be technology-driven, going beyond the patient's comfort zone.

- Example: A group practice overcomes its concerns about confidentiality breaches and fear of litigation stemming from misuse, and decides to use monitoring devices to increase treatment compliance in elderly patients, only to learn that patients find them difficult to use.

Thank you for listening!

Please be sure to watch the fourth and final segment of the "Healthcare Dilemma" which focuses on "Value Innovation in Action"

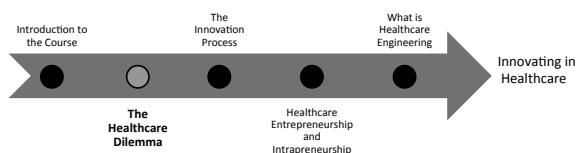
## The Healthcare Dilemma, Part 4: Value Innovation in Action



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## Week 1: Innovating in Healthcare



### Value Innovation in Action: Consider this dilemma & opportunity . . .

Patients with a single chronic disease or multiple chronic conditions represent 20% of all patients and incur 80% of healthcare costs.

These chronic care patient populations, like other patient populations (health children, healthy adults, frail elderly people) each require different bundles of services delivered by different teams of providers.

### ‘Blue Ocean’ Response: The Integrated Team Approach

- INTEGRATED TEAM APPROACH –
  - Local providers at different sites who care for diabetes patient population – i.e. cardiologists, nephrologists, neurologists, dermatologists, podiatrists, nutritionists, social workers and perhaps mental health professionals – band together to create an economically feasible integrated team approach to diabetes care.
- PATIENT-DRIVEN VALUE --
  - Team-based approach makes it easier to track the actual health outcomes achieved relative to cumulative costs of care.
  - Recent initiatives such as the Patient Centered Medical Home show promise in improving outcomes through coordinated primary care and offer new opportunities for team-based chronic disease care.\*

\*Source: Parchman ML, Zaker JE, Romero RR, Pugh JA. Risk of coronary artery disease in type 2 diabetes and the delivery of care consistent with the chronic care model in primary care settings: a STARRNet study. Med Care 2007; 45: 1129-1134.



## Barriers & Signs of Disruption

**Reimbursement structure is disincentive** to providers wanting to offer disease management services to patients and only partially covers fragments of wellness care services.

## Another dilemma/opportunity

Patients in the U.S. who are currently without a “medical home” (i.e. without a primary physician) often use emergency rooms or urgent care clinics to meet their primary or preventive care needs, incurring high costs and enduring long wait times for care.

## ‘Blue Ocean’ Response: Retail Clinics

- PHARMACY-BASED CLINICS (sometimes called “MinuteClinics”) offer patients convenient access, short waits and set prices for services offered.
  - Made possible now because of the development of cheap, reliable tests (for strep throat or chlamydia, for instance)
- TECHNOLOGY DRIVING ACCEPTANCE OF RETAIL CLINICS:
  - The electronic medical record (EMR) with computerized physician order entry and sometimes e-prescribing applications embedded in the EMR.
  - Prompts, alerts, and reminders using evidence-based decision support help nurse practitioners, who staff 80 percent of the clinics, to make sound medical decisions and extend their scope of practice.

Source: Glabman, Maureen. January 2009. Disruptive Innovations That Will Change Your Life in Health Care, Managed Care Online.

## Barriers & Signs of Disruption

What we are seeing as Retail Clinics catch on in the U.S. marketplace:

- MEDICAL TRADE GROUPS
  - Already, doctors have expressed opposition to clinics through their trade groups. The academies of pediatrics and family physicians argue that clinics disrupt continuity of care, have no uniform quality standard, and do not support the concept of a medical home because they fragment care. And physicians are skeptical about whether NPs actually make referrals for chronic or seriously ill patients.
- SCOPE OF PRACTICE ISSUES
  - Continuous legislative scrutiny of NP scope of practice, supervision restrictions, and prescription-writing challenges.

## More 'Blue Ocean' Opportunities . . .

- Single-organ hospitals, such as the 55-year-old Shouldice Hernia Centre in Ontario, Canada where hernia repair is about \$2,300 vs. \$7,000 at a general hospital in the United States.
- Additional opportunities for bringing an Amazon.com online approach to health care services, just as MEDCO/ Express Scripts did for prescription ordering and filling services.
- In-home technologies that monitor & prevent non-adherence
- Medical tourism: in 2009, more than 750,000 Americans left home for treatments and care elsewhere, mostly for elective procedures such as cosmetic surgery, dental work, and surgeries like heart valve, knee, and hip replacements in India, Thailand, and more than 30 other countries, according to Deloitte.
  - Will "medical immigration" (for patients requiring substantial support) become a business opportunity?

## Recap: Patient-Driven Value

- Shifts the focus to the actual health outcomes of patients relative to cost of care.
- Requires **whole system thinking** along with better ways of tracing a patient's progress across multiple units and through **the full care cycle**.
- The best way to lower the cumulative cost of care for a patient may be to spend more on some high-value **preventive or other earlier-stage care** services.

## Suggestions for Value Innovators

- First, learn the language of **whole systems thinking**
  - Focus on interdependencies. Visualize the moments where **x** influences **y**, and **y** influences **z**, etc.
- Practice life cycle analysis
  - Understand **the full cycle of care**
- Map the Stakeholders
  - Begin by identifying all the people that have a stake in patient-driven value creation, and map out their relationships to one another. Look at every decision through an outside-in perspective of stakeholder issues, interests, and frustrations.

Source: Lazlo & Zhexembayeva, 2011

## Helpful Questions As We Move Forward

- Whether you take a "Blue Ocean" or a more pragmatic approach to healthcare innovation & entrepreneurship, it's helpful to begin by asking yourself a few key questions:
  - Who are the stakeholders across my healthcare system – those people who have a stake in its future?
  - In my region, are public expectations for healthcare changing?
  - Who or what is fueling these changes in public expectations?