



The Opportunities Ahead: Making the Most of Disruptive Change in Oral Health Care

41st Annual National

ADEA Allied Dental Program Directors' Conference

June 7-10, 2008

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 Academy for
Academic Leadership

Objectives

1. Identify Key Drivers of Change Affecting Healthcare
2. Define the Theory of Disruptive Innovation
3. Consider the Question of Quality of Care
4. Explore What Disruptive Innovation means for Allied Dental Education

**“Life must be lived forward,
but it can only be understood
backward.”**

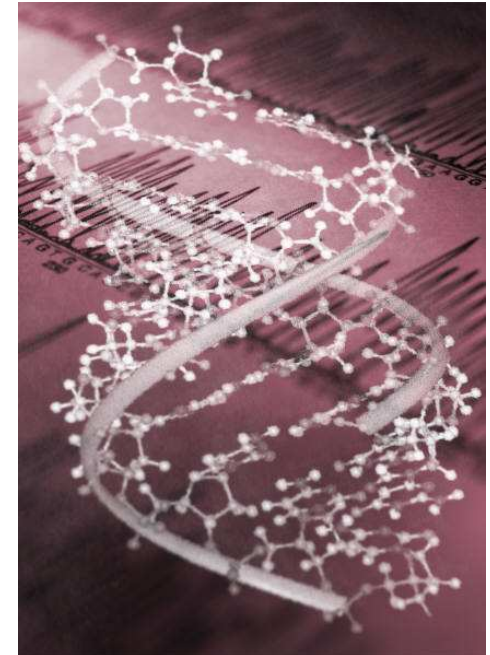


Søren Kierkegaard

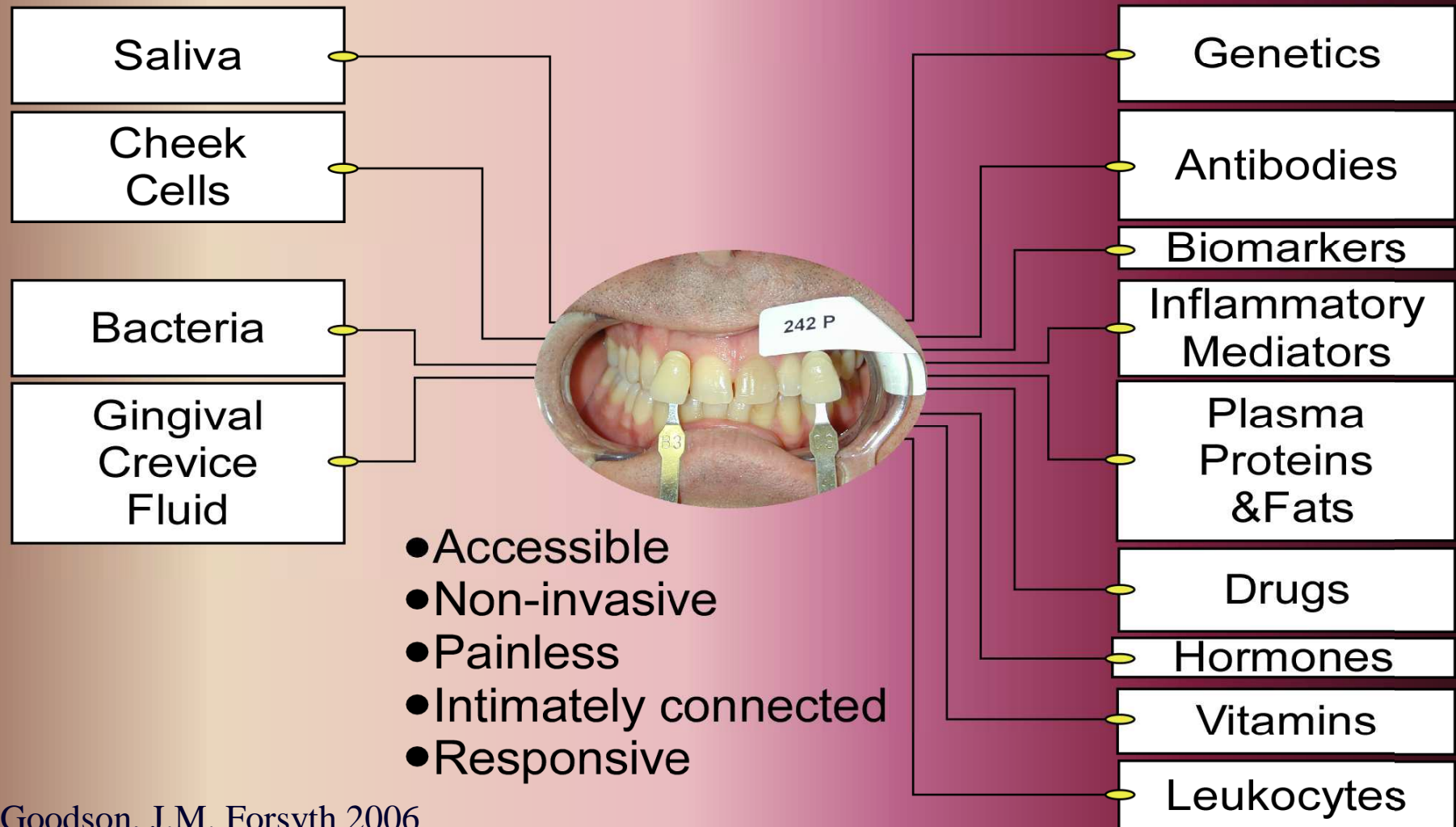
1813-1855

1. Change Drivers in Health Care

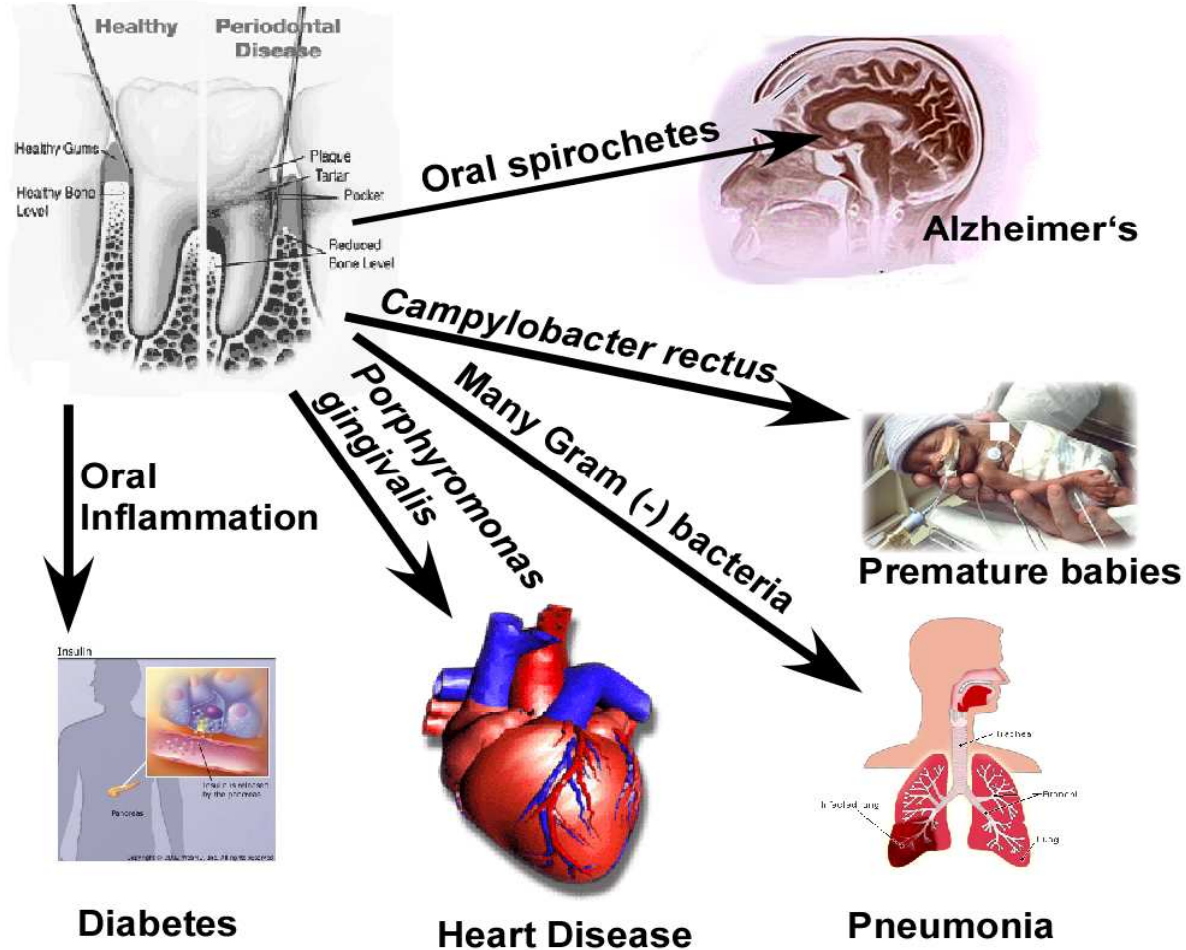
- Globalization
- Consumerism
- Demographics
- Changing nature of disease
- New Science
- Access to care
- Technology



The Oral Cavity: A Passageway For the Study of Human Health and Disease



How oral conditions may affect systemic diseases



2. Disruptive Innovation

A term coined by Harvard Business School
Professor Clayton Christensen



The Theory of Disruptive Innovation (DI)

Key Concepts:

- Simple, inexpensive, and revolutionary
- Low End DI—focused on a product or service that is “too good” and hence overpriced for what the consumer needs.
- New Market DI—arises when existing products or service force consumption at inconvenient, centralized locations.



The Theory of Disruptive Innovation (DI)

Key Concepts:

- DI enables a larger population of less skilled people to do things historically performed by more expensive specialists...
 - *in more convenient places
 - *in less expensive settings



The Theory of Disruptive Innovation-- Key Concepts

- DI does not compromise on **quality**
- DI allows more people to **access** the service or product
- DI focuses primarily on the **least demanding consumers**
- DI is confronted by **restraining** institutional and non-market forces

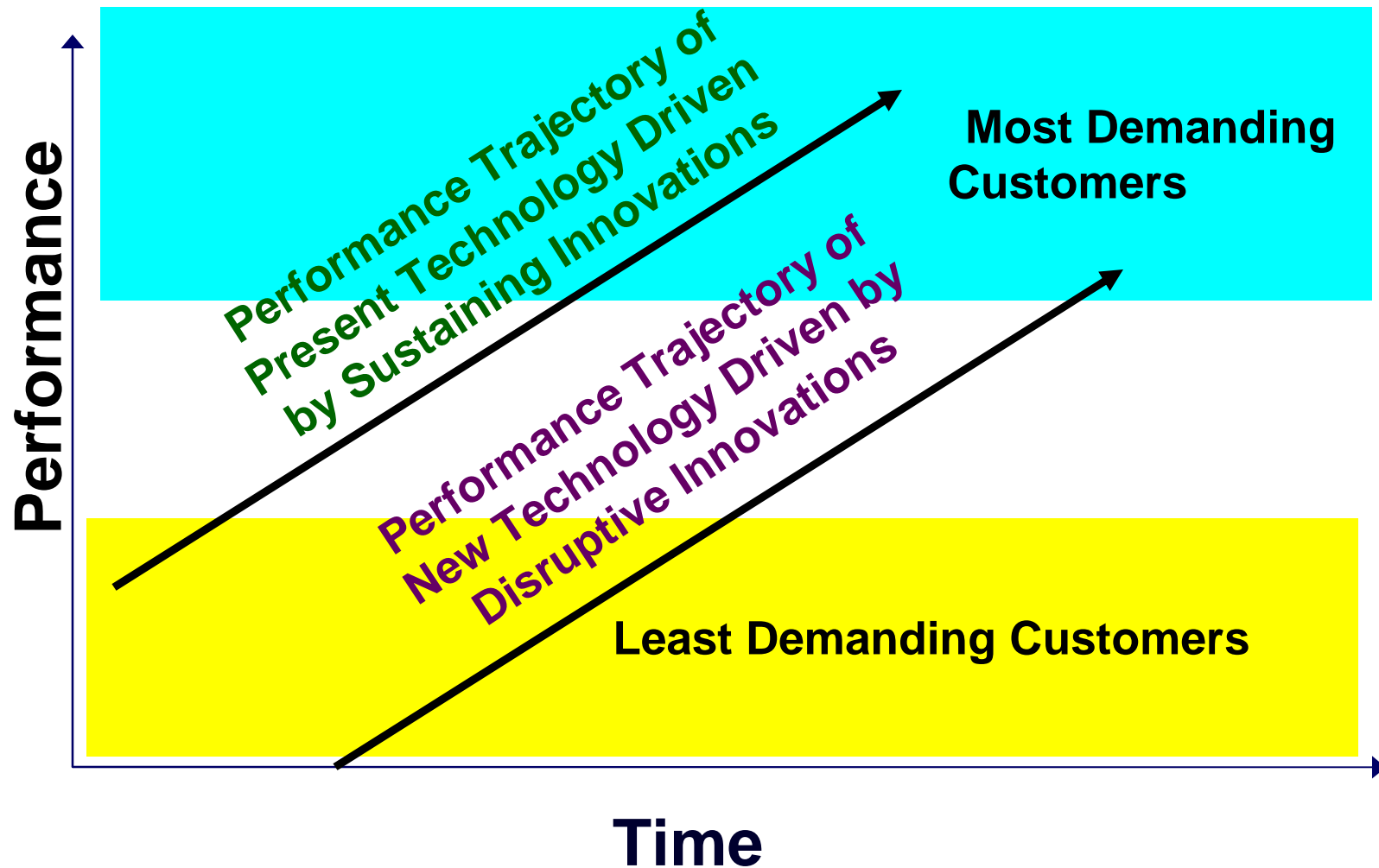


The Theory of Disruptive Innovation-- Key Concepts

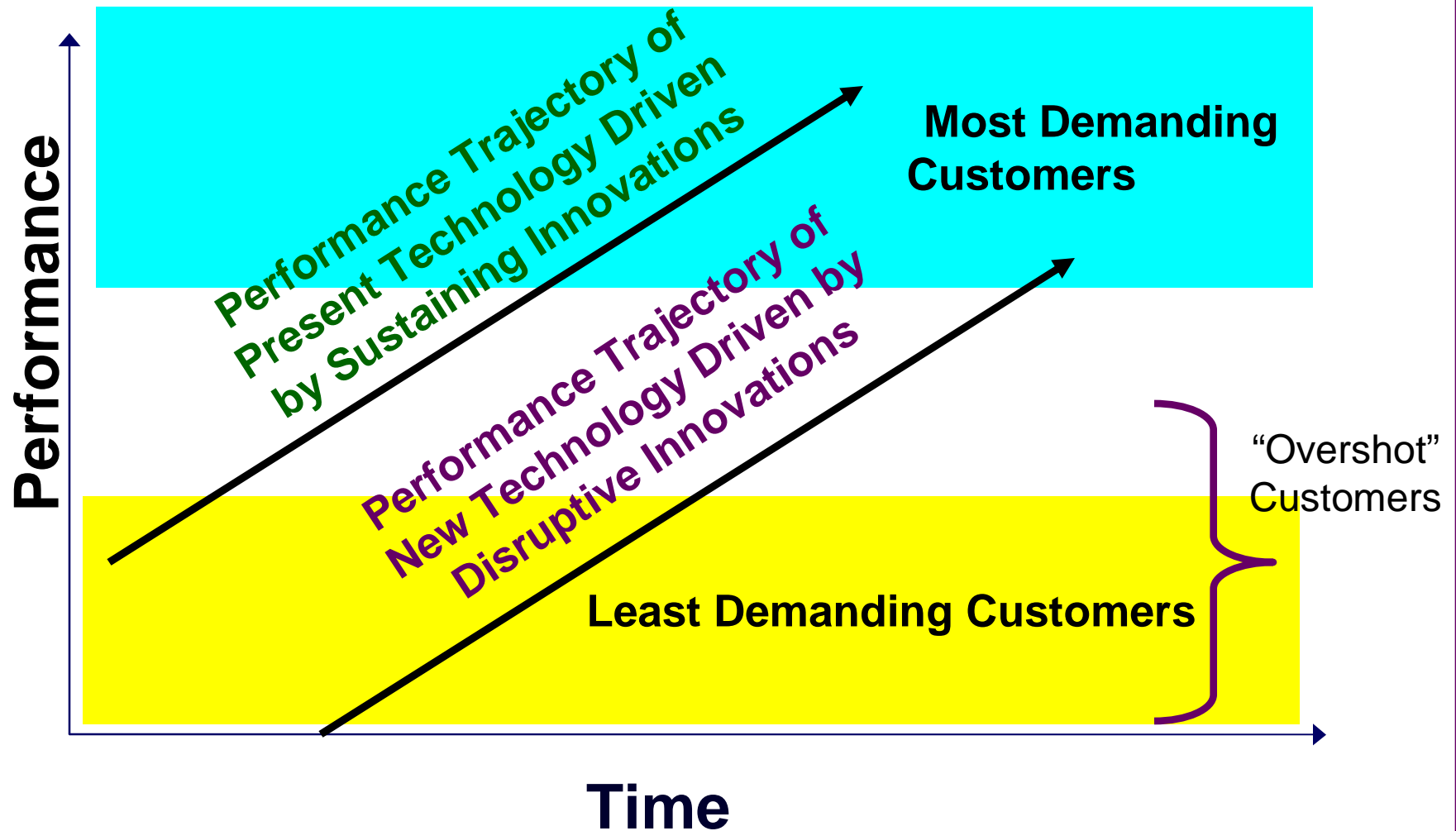
Sustaining innovations

Improvements created as an industry introduces new and more-advanced products/services to meet the needs of sophisticated consumers at the high end of the market.

Types of Innovation



Types of Innovation



The Wall Street Journal

April 2005

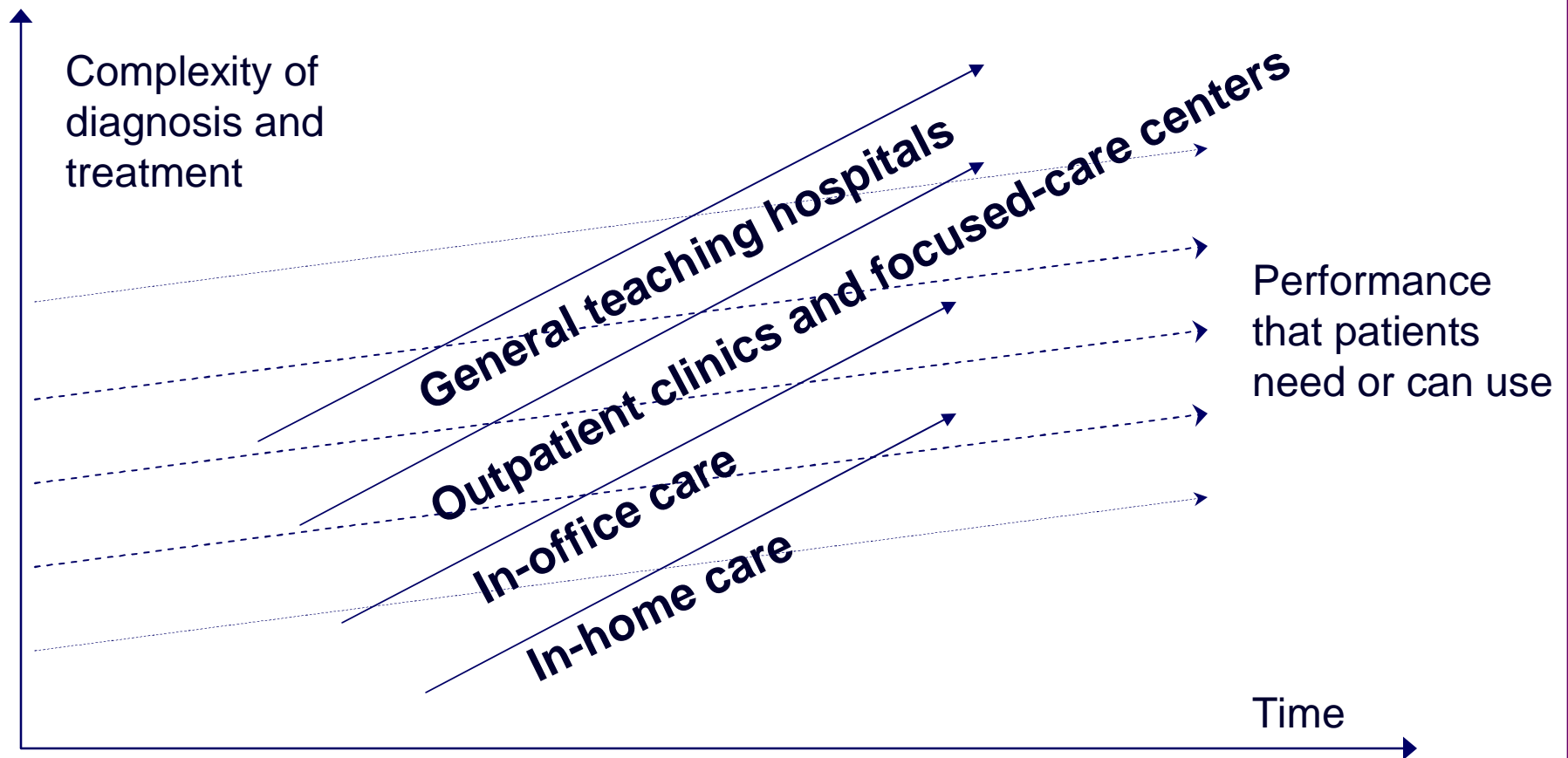
Why Dentists Are Smiling

They Now Average Higher Salaries Than
Some Physicians

By Mark Maremont, Staff Reporter, Wall Street Journal

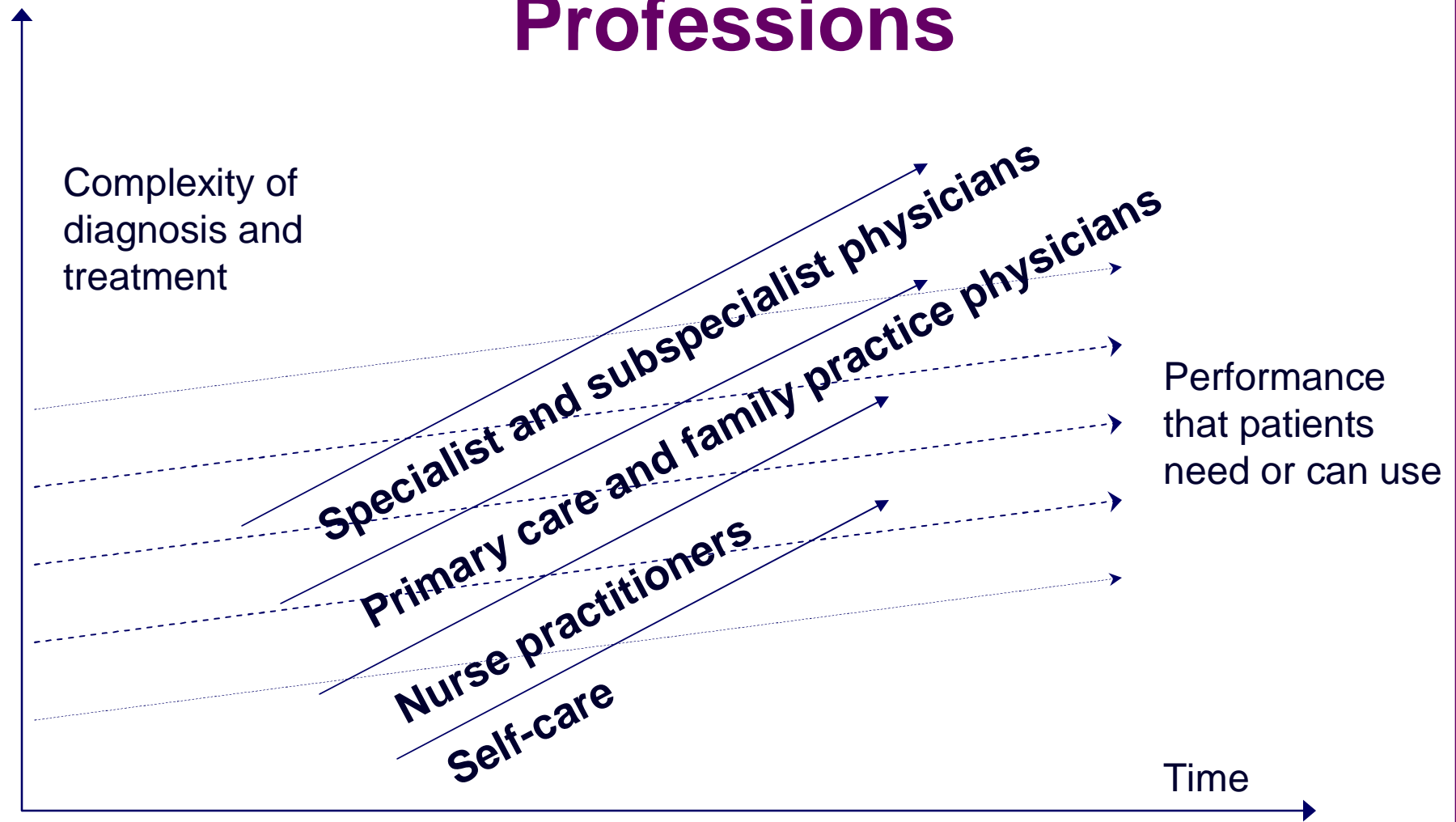
Has dentistry focused too much on
sustaining innovations?

Disruptions of Health Care Institutions



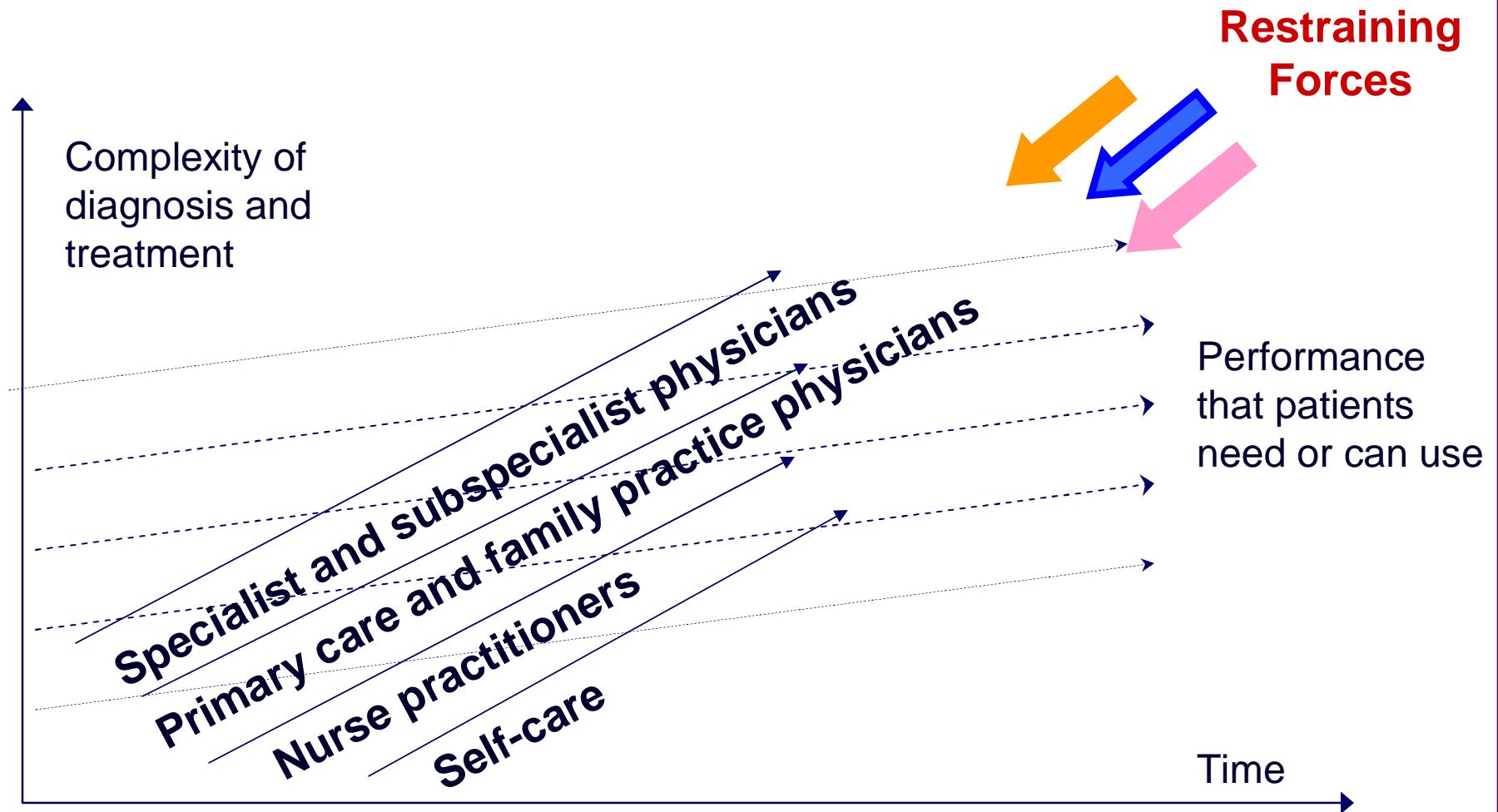
Source: Christensen CM, Bohmer R, Kenagy J. "Will Disruptive Innovations Cure Health Care?" Harvard Business Review 2000;9-10:102-112.

Disruptions of Health Care Professions



Source: Christensen CM, Bohmer R, Kenagy J. "Will Disruptive Innovations Cure Health Care?" Harvard Business Review 2000;9-10:102-112.

Disruptions of Health Care Professions



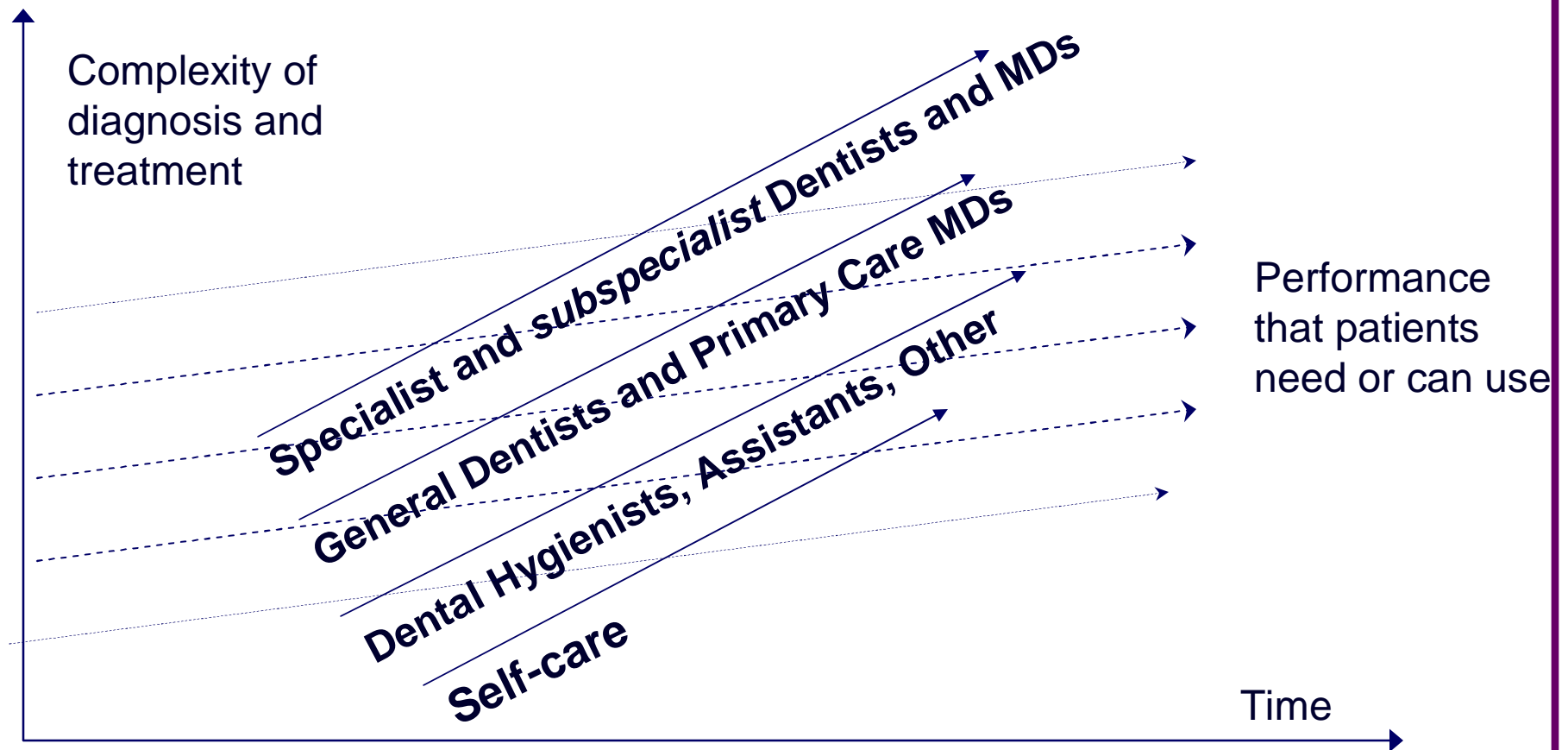
Source: Christensen CM, Bohmer R, Kenagy J. "Will Disruptive Innovations Cure Health Care?" Harvard Business Review 2000;9-10:102-112.

Who Provides Preventive Care?

“By 2015, the shift to preventive care will create a corresponding shift in provider roles. There will be many more midlevel providers, such as physician assistants, nurse practitioners, and others as-yet-unnamed professionals....”

Healthcare 2015: Win-Win or Lose-Lose? A portrait and a path to successful transformation. IBM Global Business Services, 2006.

Disruptions of Oral Health Care Professions?

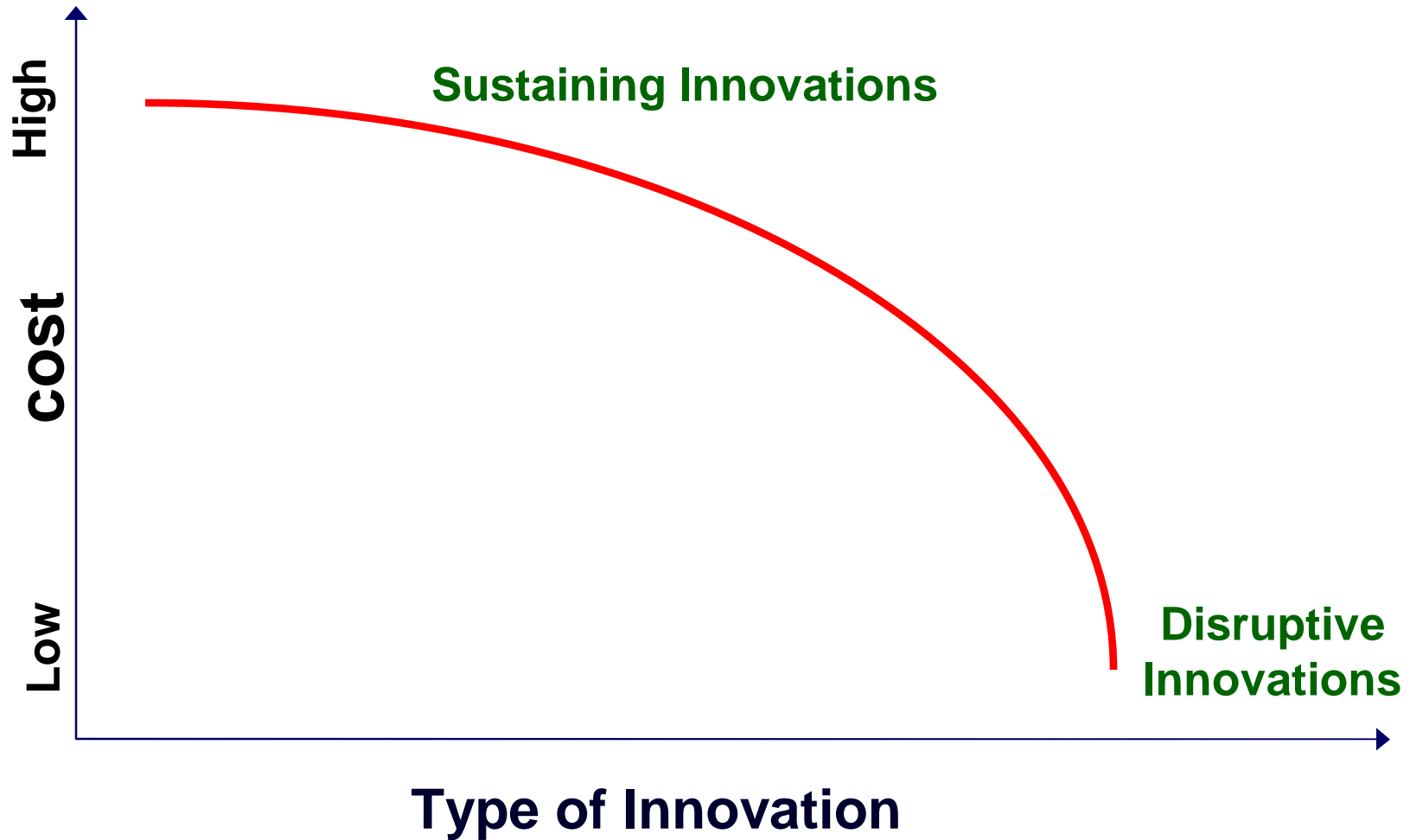


The New York Times

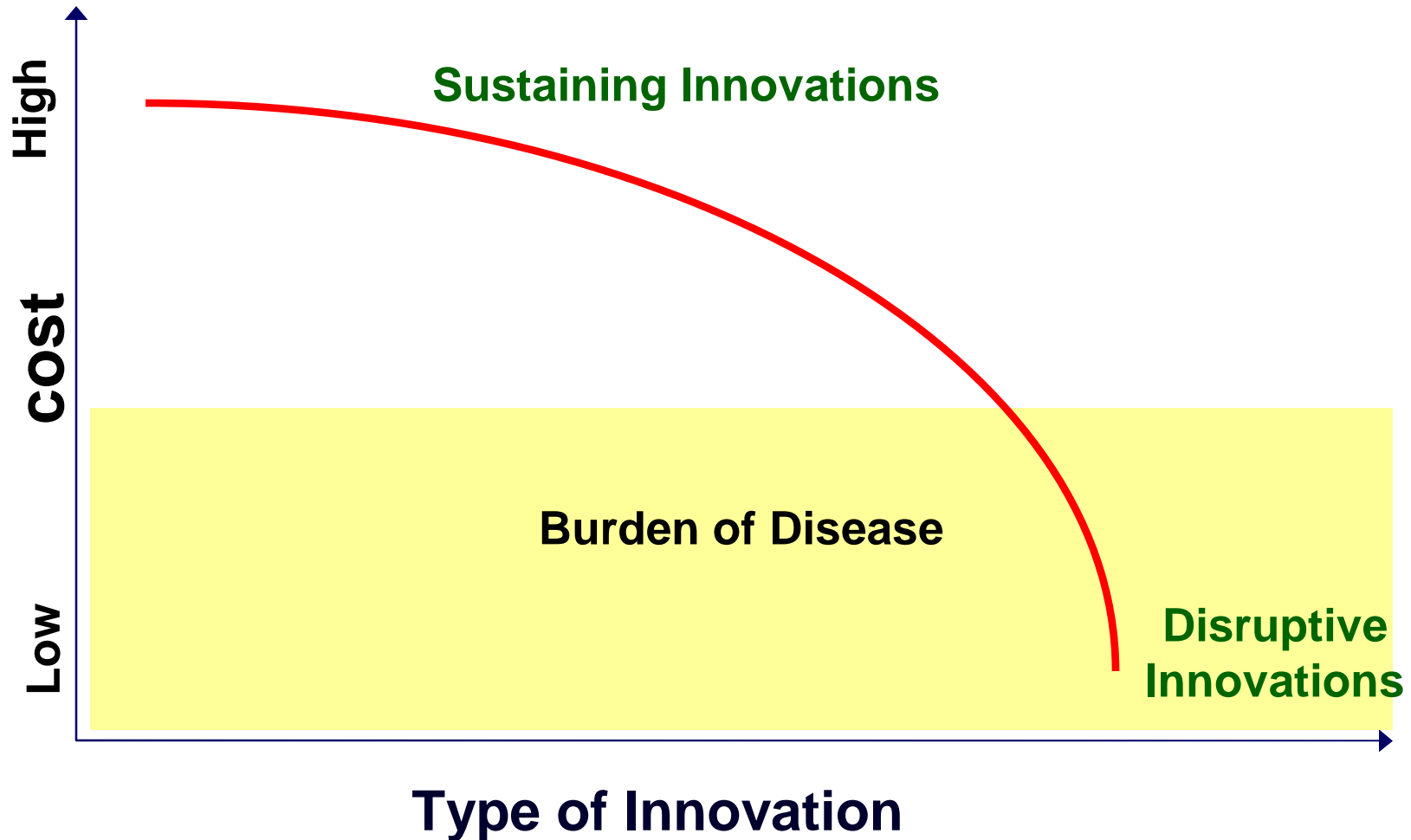
April 28, 2008

Dental Clinics, Meeting a Need With No Dentist
By Alex Berenson

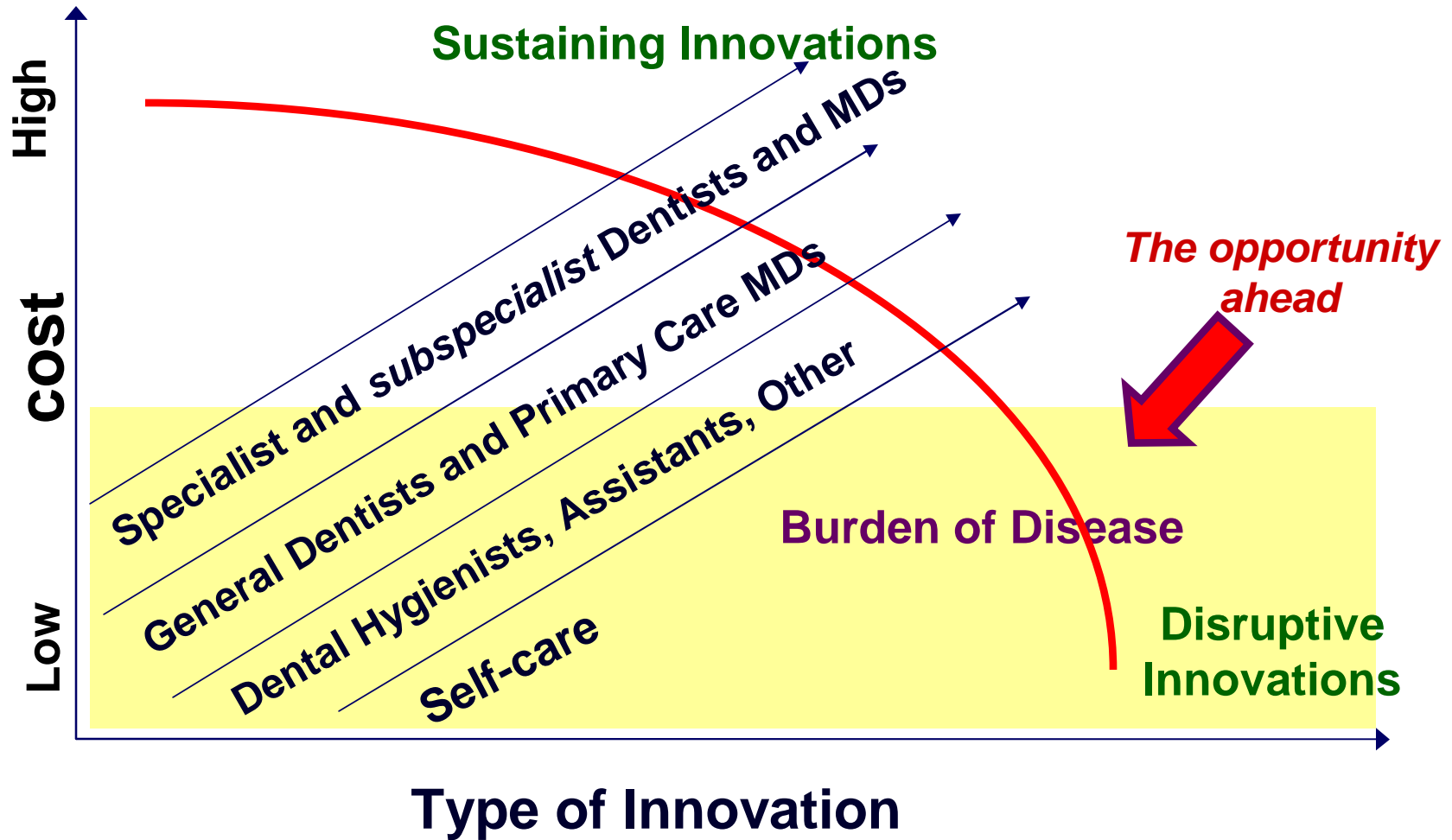
Innovation Curve and Disease



Innovation Curve and Disease



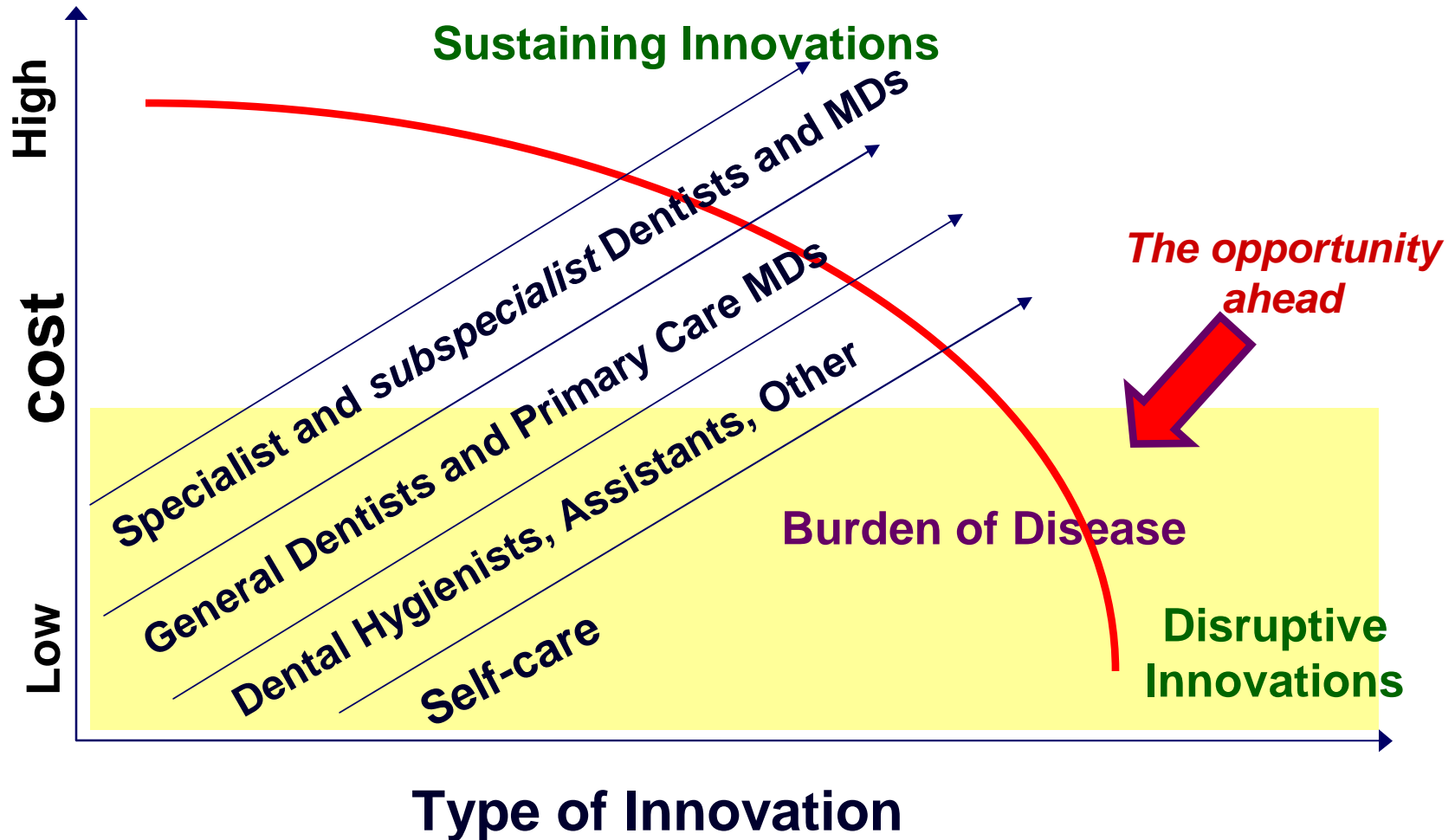
Innovation Curve and Disease



“Enabling less expensive people to do things that were previously unimaginable has been one of the fundamental engines of economic progress—and the established health care institutions have fought that engine tooth and nail.”

Christensen CM, Bohmer R, Kenagy J. “Will Disruptive Innovations Cure Health Care?” *Harvard Business Review* 2000;9-10:102-112.

Professional Concerns...



The Argument from Competency



Nurses should not administer anesthesia because they are incompetent to administer anesthesia safely.

Today, 65% of all anesthesia care is delivered by RN anesthetists—safely.

The Argument from Competency



Dental hygienists should not do X unsupervised because they are incompetent to do X safely unsupervised. (examples, X=fluoride treatment, application of sealants, root planing, assessment and treatment planning)

Fails to account for the migration of competency upstream due to disruptive innovation

3. Quality of Care

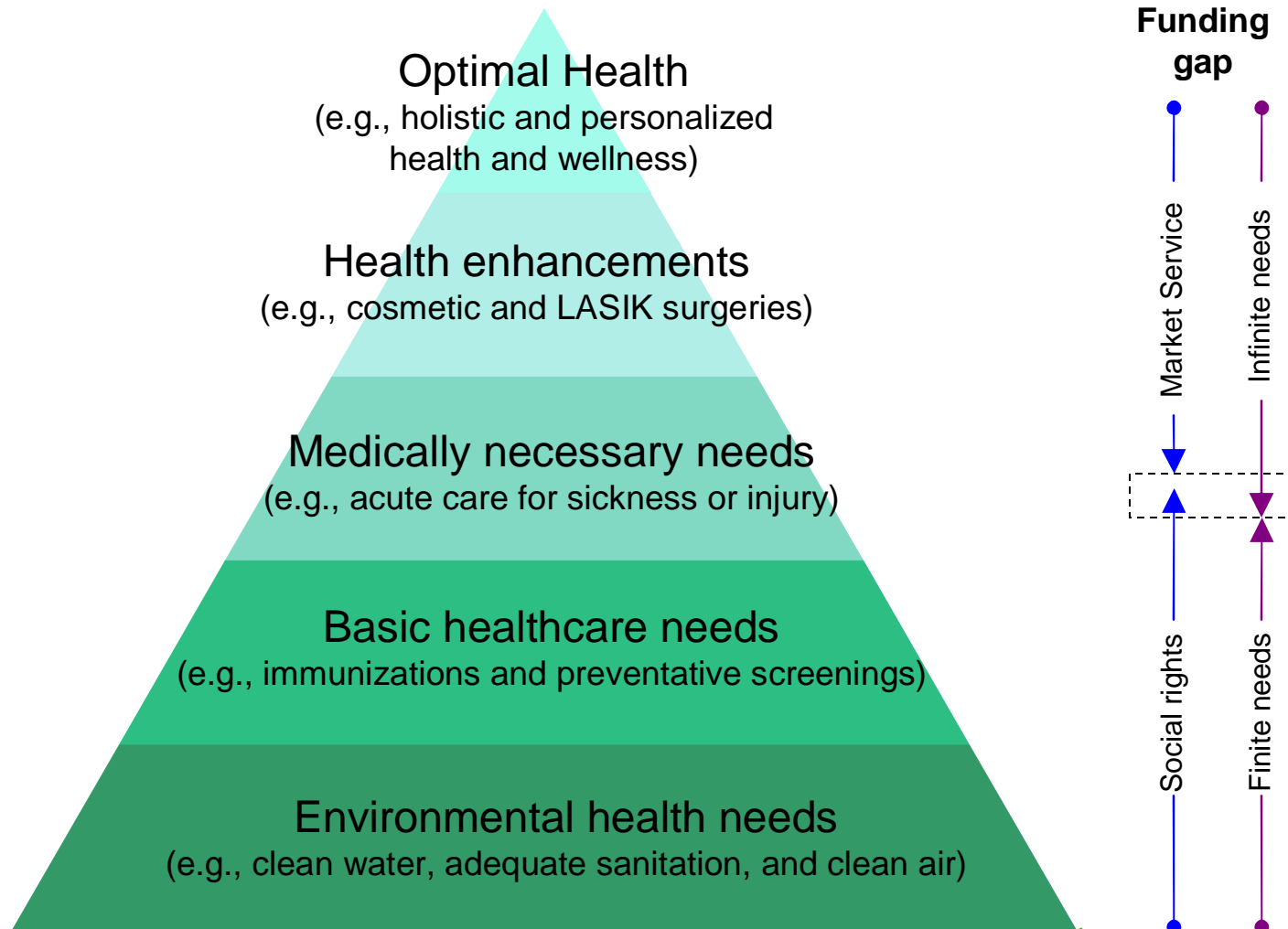


Access to Care

Guiding Principles:

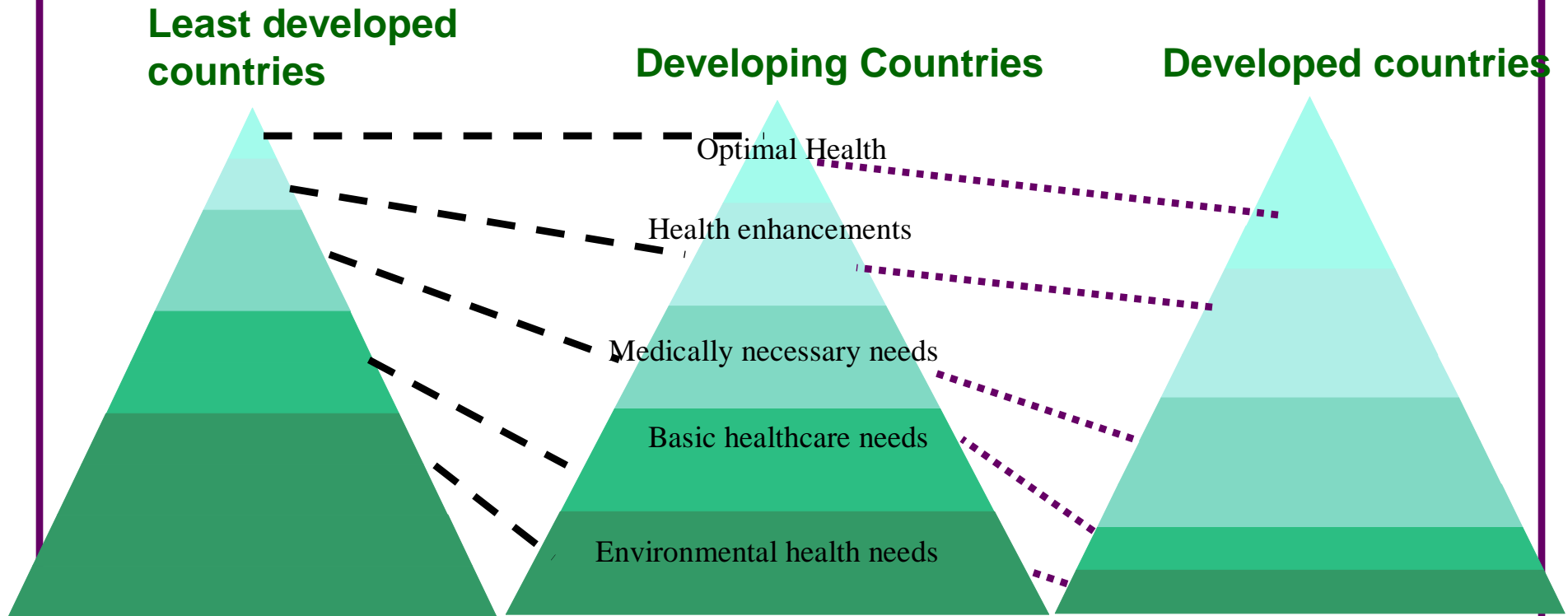
- Access to basic oral health care is a human right
- The oral health care delivery system must serve the common good
- The oral health care needs of vulnerable populations have a unique priority
- A diverse and culturally competent workforce is necessary to meet the oral health needs of the nation

Hierarchy of Healthcare Needs Model



Source: Healthcare 2015 IBM Global Services 2006

Relative Value Of Needs



Source: Healthcare 2015 IBM Global Services 2006

The Quality or “Two Standards” Argument

Dental hygienists should not do X
unsupervised because their doing X will
result in a lower quality of care
(=introduce two standards of care).

(examples, X=fluoride treatment,
application of sealants, root planing,
assessment and treatment planning)



The Quality or Two Standards Argument: Problematic Assumptions

- A standard of care has been determined
- A standard of care has been accepted by relevant stakeholders, including (*and especially*) the patient
- The standard can be met not only in theory but in practice
- The profession decides the standard

ACCESS: Is accessibility a necessary and/or sufficient condition to quality?

1. P is necessary for Q =

“Accessibility is *necessary* for quality care.”

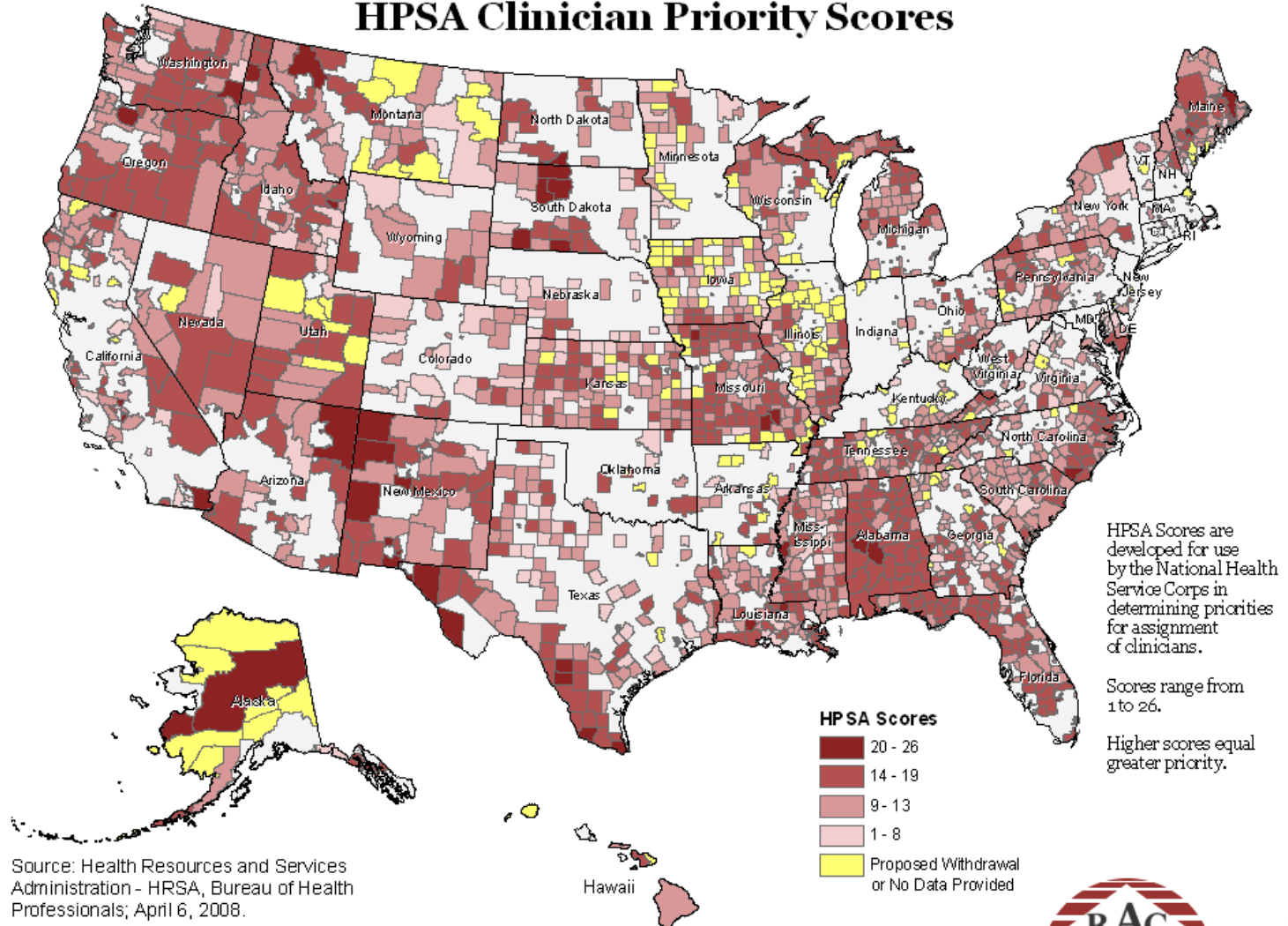
2. P is sufficient for Q =

“Accessibility is a *sufficient condition* i.e., assures, quality care.”



3. Inaccessible care is not quality care.

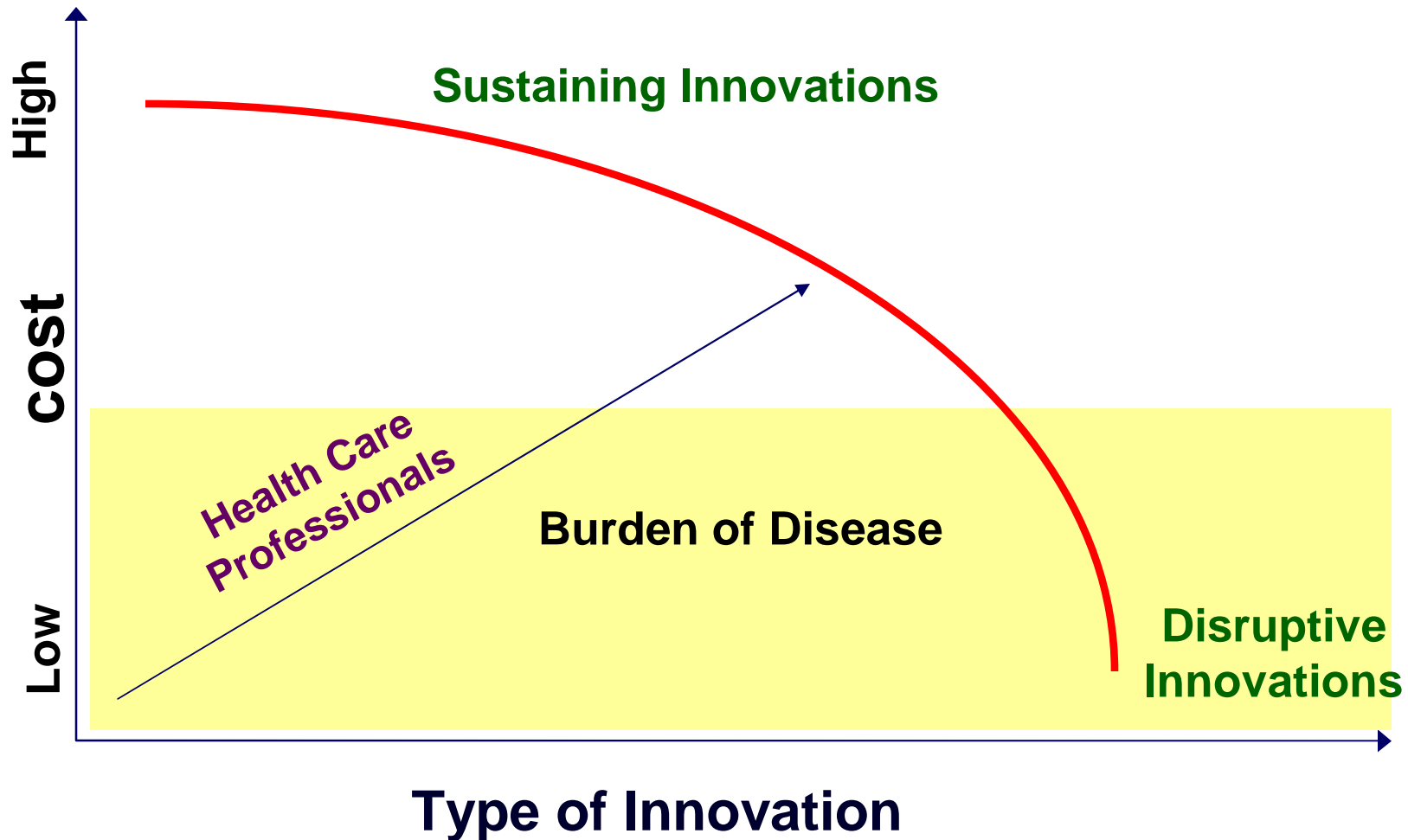
Health Professional Shortage Areas (HPSA) - Dental Health HPSA Clinician Priority Scores



Source: Health Resources and Services Administration - HRSA, Bureau of Health Professionals; April 6, 2008.

Note: Alaska and Hawaii not shown to scale

Innovation Curve and Disease



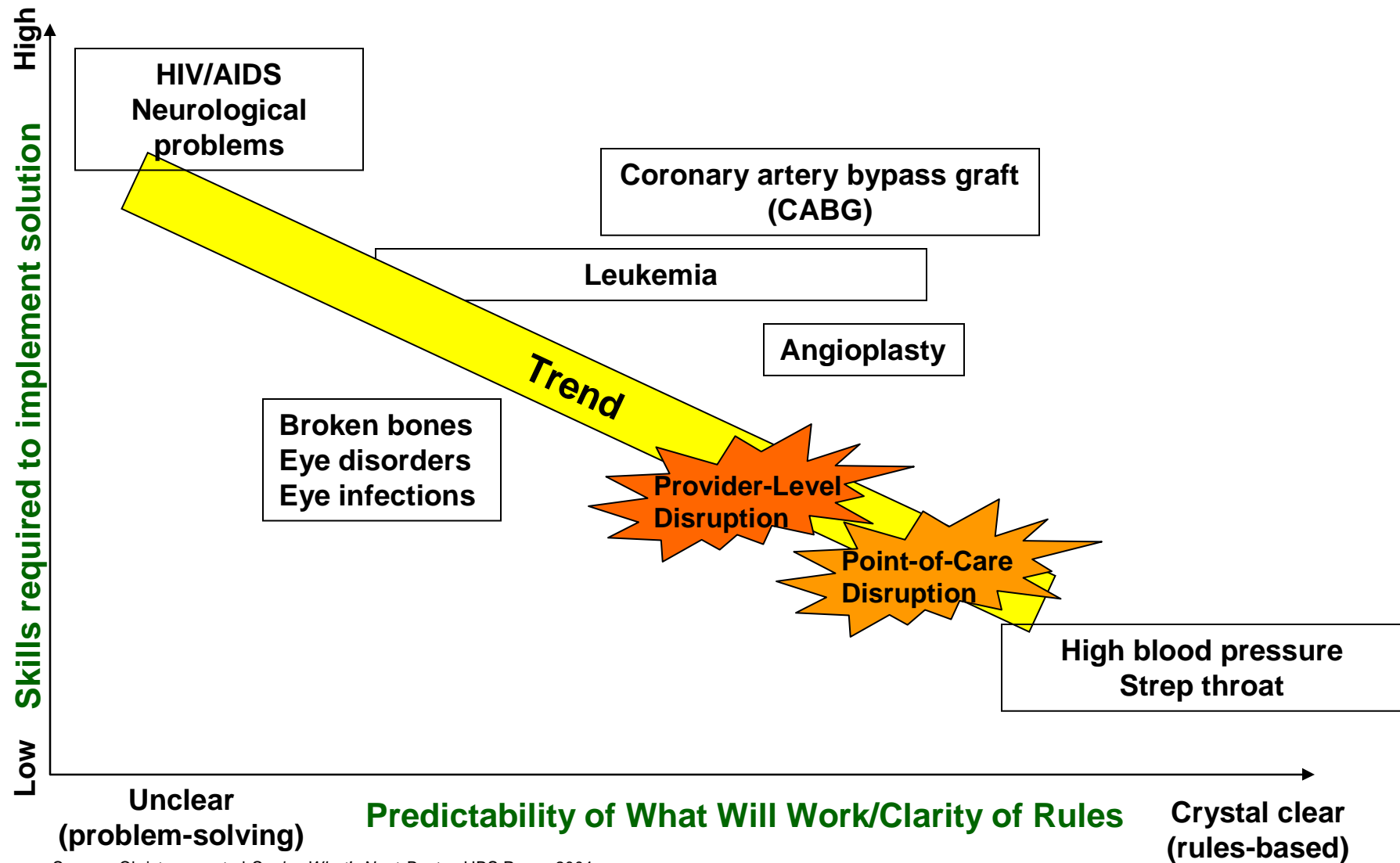


**Robert Wood
Johnson
Foundation
Competition to
Discover
Disruptive
Innovations in
Health Care (2007)**

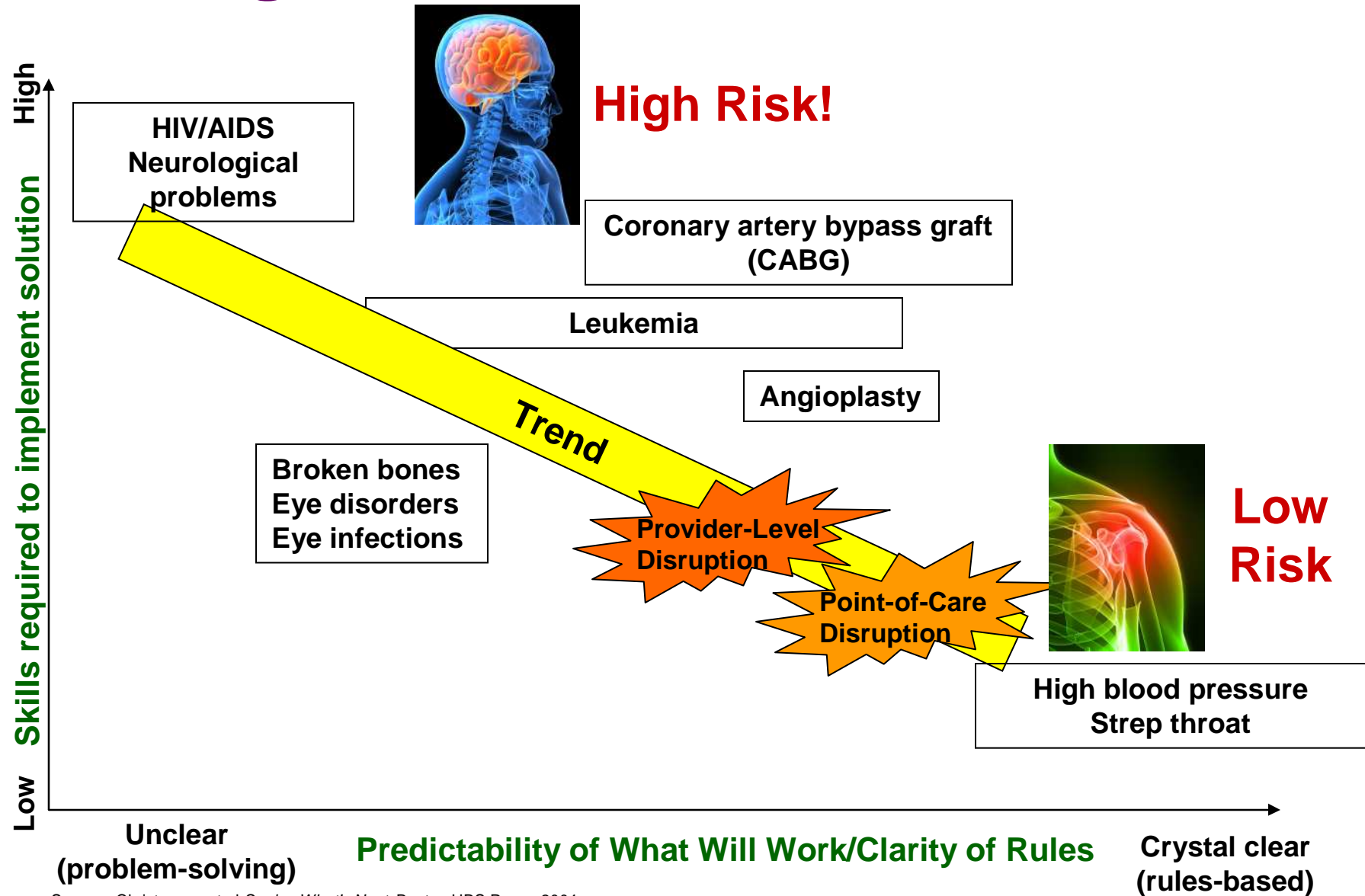
RWJ Winners

- **Project Echo: Knowledge Networks for the Treatment of Complex Diseases in Remote, Rural, Underserved Communities** (U New Mexico HSC)
- **Family Coaching Clinics** (UCLA)
- **Instant Birth Control** (Planned Parenthood Columbia/Williamette--Portland, OR)

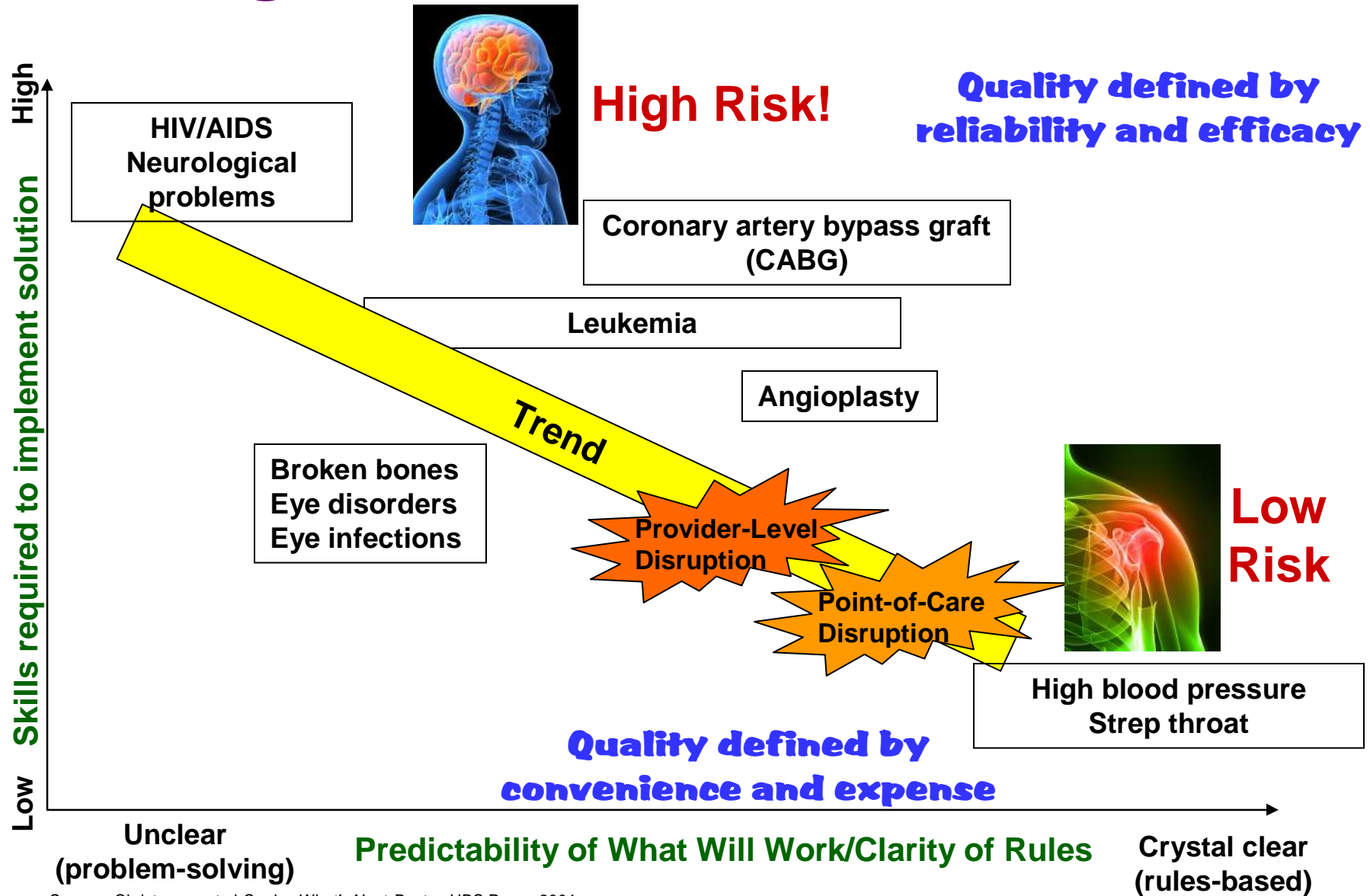
Migration in Disease Treatment



Migration in Disease Treatment



Migration in Disease Treatment



Unleashing the Potential

“Working collaboratively with dental and other health professionals, highly educated allied dental professionals with expanded skill sets are able to markedly increase workforce productivity and enable it to move effectively to meet access and availability needs of the population. Potential cost effectiveness outcomes could ensue through the leveraging of allied dental professionals.”

Weaver RG, Valachovic RV, et al. Unleashing the Potential. ADEA 2007.

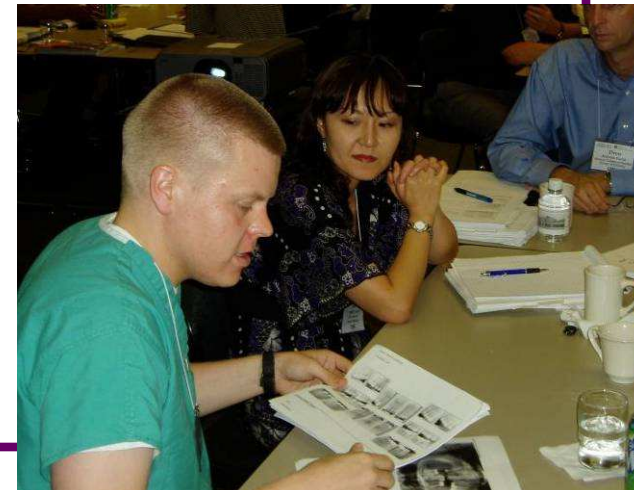
4. What Disruptive Innovation Means for Allied Dental Education



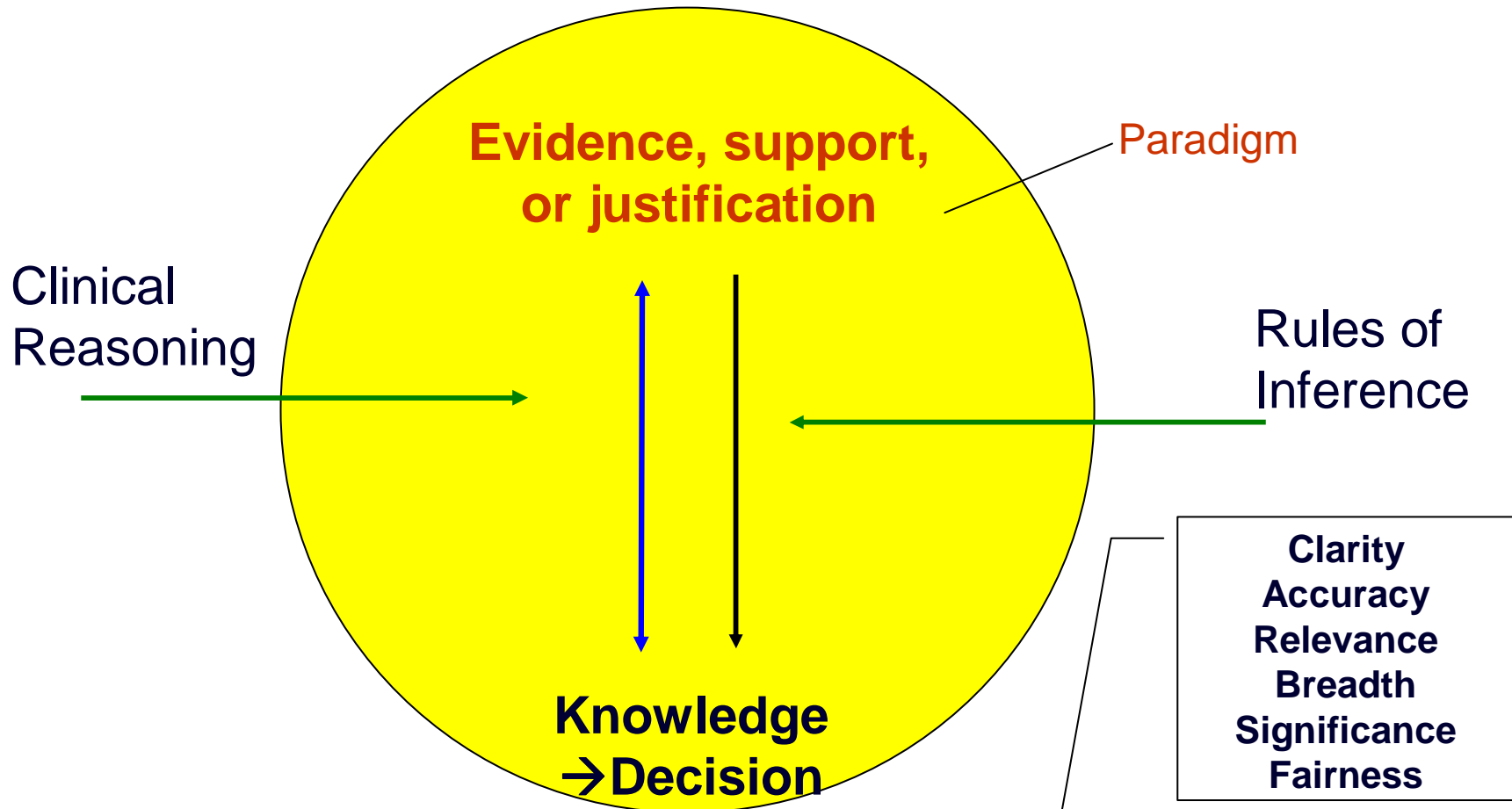
The Educational Environment in the 21st Century

- **Critical thinking**
- **Life-long and self-directed learning**
- Humanistic environment
- Scientific discovery and integration of knowledge
- Evidence-based oral health care
- Assessment
- Faculty development
- **The health care team**
- ***Application of technology***

Haden NK, ADEA Commission on Change and Innovation in Dental Education. The Dental Education Environment. J Dent Educ. 2006; 70(12): 1265-1270.



Critical Thinking in the Health Professions



Universal Intellectual Standards

The Health Care Team

“All healthcare professionals should be educated to deliver patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches, and information.”

Institute of Medicine, *Crossing the Quality Chasm*, 2001

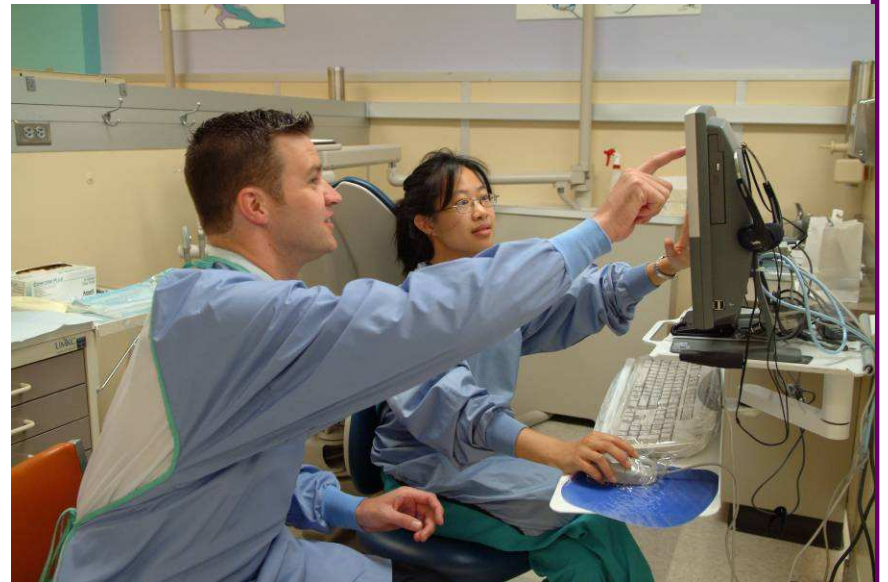
The Health Care Team

“We should not feel threatened by emerging groups of oral health care providers but invite them into our midst to maximize access to and use of much-needed oral health care.”

Wendal OT and Glick M. Lessons Learned, Implications for Workforce Change (editorial). *Journal of the American Dental Association*, Vol 139, March 2008.

Application of Technology

- Reaching the “overshot” and the nonconsumers of allied dental education
- Preparing for new applications (e.g., collaborative practice through teledentistry)



Other Thoughts

1. Choose your battles wisely (remember where the opportunities are)
2. “Battle” is a poor metaphor. However, politics are a play and always will be where institutions, resources, and power are at stake.
3. Create new institutions (e.g., state boards independent of dental boards).



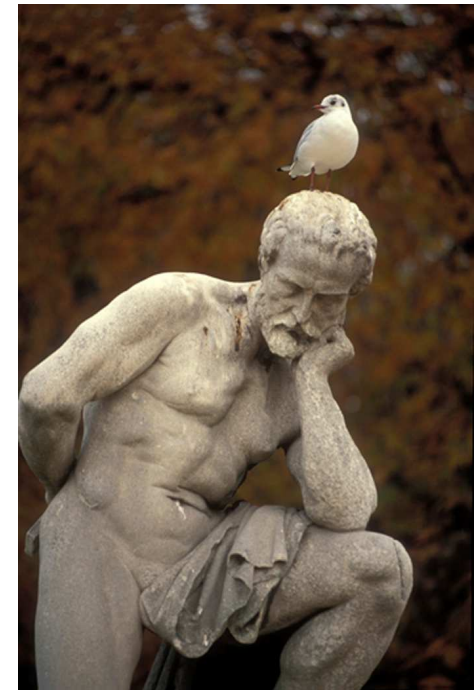
Other Thoughts: The RPV Equation

Christensen: Organizations and institutions that succeed in addressing new opportunities have:

Resources (technology, money, people, knowledge, skills, reputation, alliances)

Processes (ways of getting things done, cf. the mission of education)

Values (the motivation to prioritize an opportunity over other demands)



Other Thoughts

LEAD!

"The secret of success is
constancy to purpose."

— Benjamin Disraeli



ADA News

Maine Law Allows Unsupervised

Dental Hygiene Practice May 5, 2008

Minnesota OKs Mid-level Dental

Care Provider: Oral Health

Practitioner May 5, 2008

Access Tops DC Talk

Washington Leadership Conference

examines how issue receives

legislative, media scrutiny

May 19, 2008



Train leaving the station
(France)

Helpful References

Christensen CM. The innovator's dilemma. Boston: Harvard Business School Press, 1997.

Christensen CM, Bohmer R, Kenagy J. Will disruptive innovations cure health care?" Harvard Business Review 2000;9-10:102-112.

Christensen, CM, Raynor ME. The innovators solution: creating and sustaining successful growth. Boston: Harvard Business School Press, 2003.

Christensen CM, Anthony SD, Roth EA. Seeing what's next, using theories of innovation to predict industry change. Boston: Harvard Business School Press, 2004.

Haden NK, Catalanotto FA, Alexander CJ, Bailit H, et al. Improving the oral health status of all Americans: roles and responsibilities of academic dental institutions: the report of the ADEA President's Commission. J Dent Educ 2003;67:563-583.

Haden NK, Andrieu SC, Chadwick DG, Chmar JE, et al. The dental education environment. J Dent Educ 2006;70:1265-1270.

Healthcare 2015: Win-win or lose-lose? A portrait and a path to successful transformation. New York: IBM Corporation, 2006.