Opportunity Awaits: Are We Ready to be Disruptive Innovators in Healthcare?

Richard Ricciardi, PhD, CRNP Professor and Director of Strategic Partnerships, Center for Health Policy and Media Engagement The George Washington University School of Nursing

Purpose and Goal of this Presentation

Are you prepared to lead disruptive innovations in healthcare? The goal of the presentation is to discuss ways that DNP prepared nursing professionals can lead efforts to influence improvements to the quadruple aim¹ via public policy.

1. Bodenheimer, T., & Sinsky, C. (2014). From triple to quadruple aim: Care of the patient requires care of the provider. Annals of Family Medicine, 12(6), 573-576. doi:10.1370/afm.1713 [doi]

Disruptive Innovation

A disruptive innovation is a technology that brings a more affordable product or service that is simpler to use into a market. And so it allows a whole new population of consumers to afford to own and have the skill to use a product or service, whereas historically, the ability to access was limited to people who have a lot of money or a lot of skill. Clayton M. Christensen

Christensen, C. M. (2007). Disruptive innovation: Can health care learn from other industries? A conversation with Clayton M. Christensen. interview by Mark D. Smith. Health Affairs, 26(3), 288.

What is a Disruption?

"Disruption" describes a process whereby a smaller company with fewer resources is able to successfully challenge established incumbent businesses.

Christensen, Clayton; Raynor, Michael; McDonald, Rory (2015). What is Disruptive Innovation. Harvard Business Review. Dec2015, Vol. 93 Issue 12, p44-53.





"We've got the disruptive part down, now we just need to innovate."

Towards a multidisciplinary definition of innovation

Anahita Baregheh Bangor University, Bangor, UK **Jennifer** Rowley Manchester Metropolitan University, Manchester, UK, and Sally Sambrook Bangor University, Bangor, UK

Innovation is the multi-stage process whereby organizations transform ideas into new/improved products, service or processes, in order to advance, compete and differentiate themselves successfully in their marketplace.

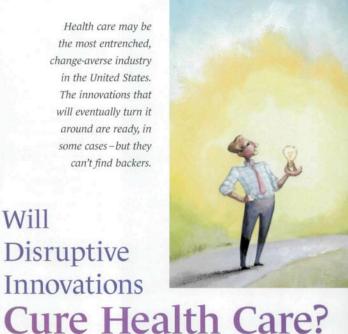
Baregheh, A., Sambrook, S., & Rowley, J. (2009). Towards a multidisciplinary definition of innovation. Management Decision, 47(8), 1323-1339.

Health care may be the most entrenched, change-averse industry in the United States. The innovations that will eventually turn it around are ready, in some cases – but they can't find backers.

Will

Disruptive

Innovations



Christensen, C. M., Bohmer, R., & Kenagy, J. (2000). Will disruptive innovations cure health care? Harvard Business Review, 78(5), 12, 199.

by Clayton M. Christensen, Richard Bohmer, and John Kenagy

12th National Doctors of Nursing Practice Conference Washington, D.C.

7 August 2019

Disruptive Innovators











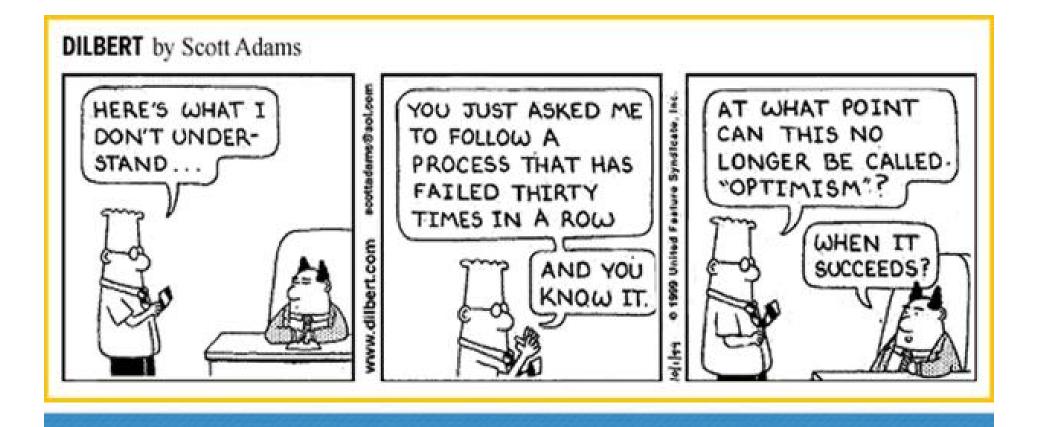
Policy

"Policy" is defined as a law, regulation, procedure, administrative action, incentive, or voluntary practice of governments and other institutions.

Centers for Disease Control and Prevention. Overview of CDC's Policy Process. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2012.

The Journey to Quality Care





12th National Doctors of Nursing Practice Conference Washington, D.C.

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What is on the Horizon?

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Disruptors – Remaking the Healthcare System

Vertical integrators: CVS and Aetna partnership

Employer activists: Amazon-Berkshire Hathaway–JP Morgan Chase Alliance

Technology invaders: Apple, Google, Uber, and Lyft

Health retailers: Walmart, CVS Health, Albertson Companies/Rite Aid

The New Health Economy in the age of disruption, PwC Health Research Institute (2018). <u>https://www.pwc.com/us/en/health-industries/health-research-institute/pdf/pwc-hri-the-new-health-economy-in-the-age-of-disruption.pdf</u>

Integrating Data Analytics and Decision Support Into the Workflow



Data Analytic Tools

Generate new knowledge about prevention, treatment and delivery models

Timely determination of the relevance of new improvement evidence to your patient and provider population

Apply evidence consistently and systematically

Evaluate variation in how knowledge is applied to patients and providers in your health system



Harper, F. (2016). Operationalizing and Embedding Analytics for Action. White Paper. TDWI.

12th National Doctors of Nursing Practice Conference Washington, D.C.

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Clinical Decision Support (CDS)

Process for enhancing healthrelated decisions and actions with pertinent, organized clinical knowledge and patient information to improve healthcare outcomes and healthcare delivery





The CDS Five "Rights" Framework

CDS delivers:

- 1. The right information
- 2. To the right person
- 3. In the right format
- 4. Through the right **channel**
- 5. At the right **time**

Osheroff J.A., Pifer E.A. Teich J.M. et. al. Improving Outcomes with Clinical Decision Support: An Implementer's Guide, 2 Ed. Danvers, MA: HIMSS Publishing, Taylor & Francis Group/CRC Press, 2012.

7 August 2019 12th National Doctors of Nursing Practice Conference Washington, D.C.

Eye

Glucose-sensing lens Digital fundoscope Smartphone visual-acuity tracking Automated refractive error Noninvasive intraocular pressure **Ear** Smart hearing aids Digital otoscope

Lung

Home spirometry Pulse oximetry Inhaler use Breath-based diagnostics Breathing sounds Environmental exposure

Blood

Continuous glucose Transdermal Hb Pathogens (genomics-based) PoC blood tests

Skin

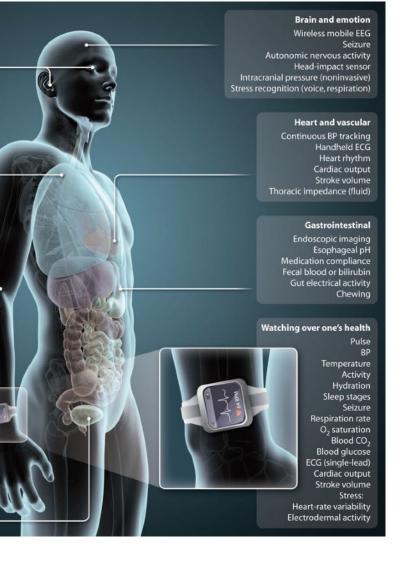
Temperature Gross lesions Pressure sensor (wound care) Sweat chemistry Cutaneous blood flow

Other sensors and monitors

Pill-box and -bottle Posture Body position Activity Sleep

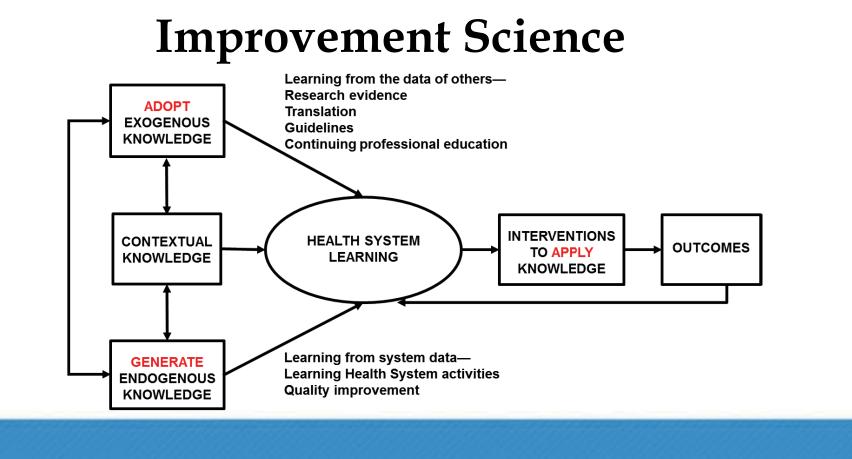
Bladder and urine

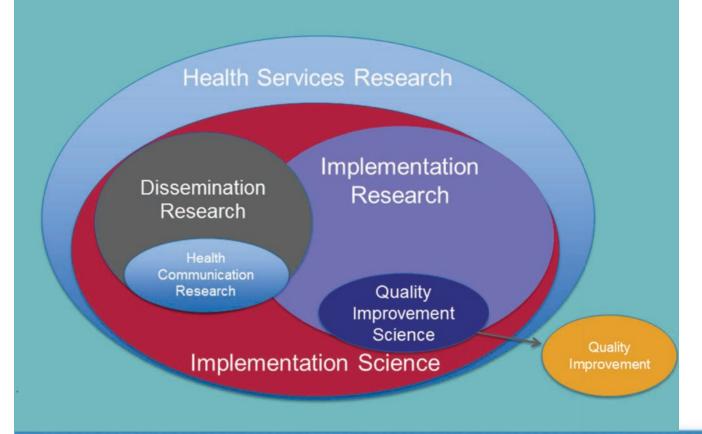
Comprehensive urinalysis STDs (genomic detection) Diaper-based sensors



Mobile Health

Steinhubl, S. R., Muse, E. D., & Topol, E. J. (2015). The emerging field of mobile health. Science Translational Medicine, 7(283), 283rv3. doi:10.1126/ scitranslmed.aaa3487





Mitchell, S. A., & Chambers, D. A. (2017). Leveraging Implementation Science to Improve Cancer Care Delivery and Patient Outcomes. J Oncol Pract, 13(8), 523-529.

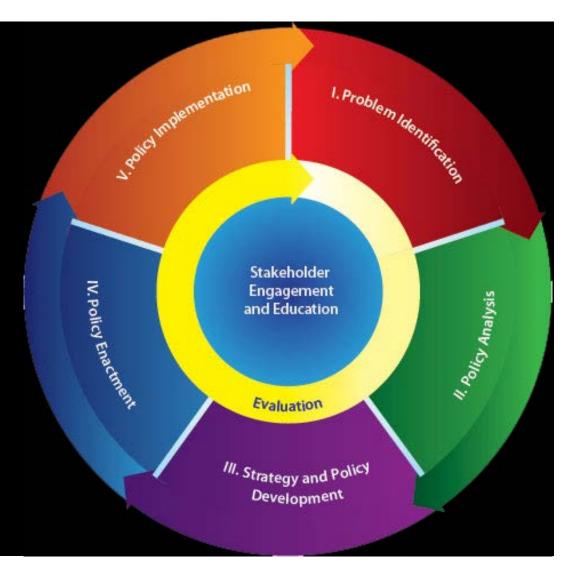
Other Areas Ripe for Disruptive Innovations

Patient Care Coordination New Models of Primary Care New Models of Acute Care New Models of Long-Term Care Aging in Place Role of the Registered Nurse **Team-Based** Care Research Methodologies **Robotics**

ACOs – Value Based Care Managed care of MCC population Quality and Safety Implementation Science System Science Formative and Summative Educational Models Simulation **Telehealth**

The Policy Process -Centers for Disease Control and Prevention.

CDC 2012



Tools to be Disruptive Innovators in Advocacy for Public Policy

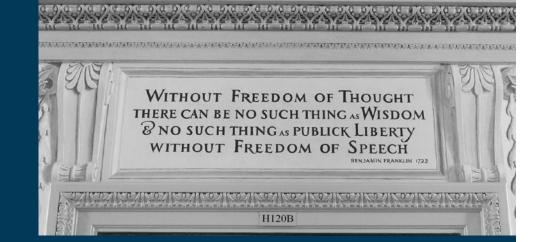
Hill Visits **Oral Testimony** Written Testimony **One-Pager Talking Points**

Grass Roots Relationship Building PAC Awards and Recognitions Coalitions Fly-In



Dream Big

Follow Your Passion



Thank You

ricricciardi@gwu.edu