

# Harnessing the Power of Big Data to Improve the Patient Experience

Monday, October 23, 2017

Toronto, Ontario



Industrial Age Medicine

‘Mass production’



Information Age Health  
Care

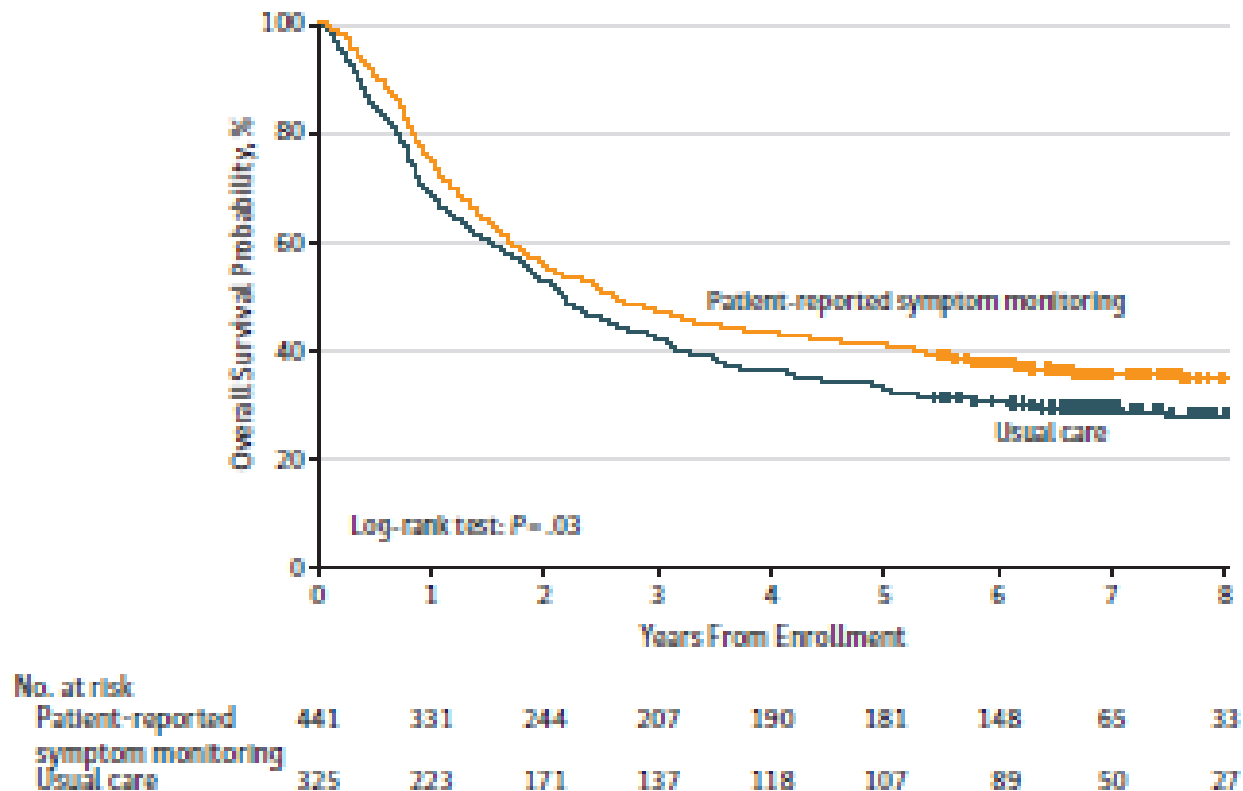
‘Big Data and Patient  
Engagement /  
Activation’

# Shift to Patient-Centered Care Enabled by Big Data

- ▶ Patient-centered care is at the foundation of transforming the health care system towards improved quality, efficiency and outcomes.
- ▶ eHealth has demonstrated the ability to drive patient-centered care, improving shared decision making, patient clinician communication and patient access to information.



# Improved Survival with ePatient-Reported Symptom Monitoring vs Usual Care in Metastatic Cancer



- Basch E. et al. Overall Survival Results of a Trial Assessing Patient-Reported Outcomes for Symptom Monitoring During Routine Cancer Treatment. *JAMA*. 2017;318(2):197-198. doi:10.1001/jama.2017.7156

EVIDENCE & POTENTIAL

By Judith H. Hibbard and Jessica Greene

# What The Evidence Shows About Patient Activation: Better Health

DOI: 10.1377/hlthaff.2012.1061  
HEALTH AFFAIRS 32,  
NO. 2 (2013): 207–214  
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The People-to-People Health  
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EVIDENCE & POTENTIAL

By Judith H. Hibbard, Jessica Greene, and Valerie Overton

DOI: 10.1377/hlthaff.2012.1064  
HEALTH AFFAIRS 32,  
NO. 2 (2013): 216–222  
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# Patients With Lower Activation Associated With Higher Costs; Delivery Systems Should Know Their Patients' 'Scores'

# Mobile Remote Patient Monitoring (RPM) for Patients with Chronic Heart Failure (CHF) Reduces Hospital Readmissions, Length of Stay and Mortality

- ▶ RPM platform, Medly, enables CHF patients to monitor their vitals and symptoms using medical grade digital devices connected with a mobile device directly from their homes.
- ▶ A smart algorithm provides self-care support messages to the patient and alerts the clinician if the situation requires clinical attention.
- ▶ RPM has been shown to reduce hospital readmissions, total length of stay and mortality.
- ▶ Furthermore, patients are able to gain access to coordinated care directly from their homes.
- ▶ The advantages of RPM can be realized to almost any condition that requires on-going patient monitoring and coordination of clinical care.

- Lin M-H et al. *Clinical effectiveness of telemedicine for chronic heart failure: a systematic review and meta-analysis J Invest Med* 2017; 65:899-911.



# Objectives

- ▶ Identify the current state of big data utilization to improve patient experience in health care and health-related research
- ▶ Identify the future directions of big data utilization to improve patient experience in health care and health-related research
- ▶ Identify facilitators and barriers of utilization of big data to improve patient experience in health care and health-related research

# Meet the Panelists

Moderator: Deborah Marshall, Professor, University of Calgary

- ▶ Panelist 1: Michael Duong, Head of Evidence Generation Department in Medical Affairs, Hoffmann-La Roche
- ▶ Panelist 2: Lesley Moody, Person Centred Care, Cancer Care Ontario
- ▶ Panelist 3: Rodney Burns, Association of Ontario Health Centres