Rise of the Mobile Culture
Mobile Healthcare

Modified from: https://www.learningresources.com
What is mHealth?

- Set of apps, devices and connections that allow the user to be mobile.

- World Health Organization
  - use of mobile and wireless technologies to support the achievement of health objectives.

- National Institutes of Health
  - to improve health outcomes, health care services, and health research.

- Mobile ‘self-care’ using mobile communication devices, such as mobile phones, tablet computers and wearable devices.
Why do we care about mHealth data?

- Contributor to PGHD
- Creates efficiencies in the health care system
- Promotes prevention
- Improves availability, access
- Contributes to a learning health care system
- Helps make better decisions
Case Study
5 Navigating Insights

1. Problem of Plenty
2. Fall in love with the problem, not the solution
3. Make it mainstream
4. Discern signal from noise
5. Engage with empathy
Insight #1

Problem of plenty

- Over 320K health apps
- ~ 200 added per week
- 340 wearables on the market
- Environmental sensors
No official certification process
Concerns with distribution and dissemination
Digital evidence is lacking but starting to mount
Summary of Insight #1

- Continued growth of mobile applications
- Measure, appraise, build up the evidence
- Understand the quality of the data
Insight #2

Fall in love with the problem, not the solution

- 2% of patients using healthcare apps
- Most desired functions
  - Access data
  - Change/Cancel appointments
  - Prescription data
Noom Health Pilot

- National Diabetes Prevention Program
- Includes health coaching

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<th>Avg. Age</th>
<th>Language</th>
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Weekly Engagement

Most Valuable Features
n=19

- Meal Logging: 16%
- Coach Calls: 37%
- Articles: 21%
- Exercise: 26%
First ask the right question

DIGITAL ‘HEALTHY FORK’
Summary of Insight #2

- Understand what patients want
- Collect most relevant data
- Consider the outcomes
Insight #3

Make it mainstream

- Deploy in a lastable way – similar to EHR
- Examine workflows and practices
- Fit to existing architecture
Clinician Preparedness

- Identify data needs
- Training and support
- Critique the data
Study on Nurses' Perceptions

- Created and validated a 10 question app based survey tool
- Measure nurses’ perceptions of the use of HIT tools for patient and family engagement in their nursing practice

Findings
- Understanding of the goals for using HIT tools
- Possible lack of confidence in answering questions

*I am confident that I can answer patient and family questions regarding the use of specific health IT tools such as PHRs.* 2.57(1.28)
Summary of Insight #3

- Utilize implementation science
- Identify valuable use cases
- Engage nurses with developers and manufacturers
- Incorporating into training and foster confidence
Insight #4

Discern signal from noise

- Allow for visualization and manipulation
- Summarize and identify patterns
- Incorporate contextual awareness
UC Davis Health
“Patient-Generated Data Gets Real”

- Better Blood Pressure initiative
- Incorporate patient-reported blood pressure readings via connected devices into the EHR (not a separate care management portal)
- Collaborate with patients using real-time personalized data points
- 300 patients in 3 clinics over 6 months
Summary of Insight #4

- Need for technological innovations
- Think about tradeoffs
- Focus on data that matter
Insight #5

Engage with Empathy

- Empower patients to proactively manage
  - self-management of chronic disease
  - lifestyle adjustment
  - health promotion

- Support active participation
CONGRATS, NURSES!

#1 MOST HONEST AND ETHICAL PROFESSION

16 years straight at the top of Gallup's poll of America's Ratings of Honesty and Ethical Standards in Professions.

NewYork-Presbyterian
Is it all Hype?

• Not intended to replace human interaction
• Nurses can keep at forefront of conversation

Modified from: https://www.wsj.com/articles/the-hype-of-virtual-medicine
Summary of Insight #5

- Opportunity to empower, engage in new ways
- Participatory role of nursing
- Increase awareness and usability of mHealth
Future of mHealth

- Gamification
- Social Networks
- Biometrics
- Environmental Sensors

Modified from: https://www.omron.com/
Summary Points

- Abundance of mHealth
- Need a systemic, scientific base
- Understand the problem
- Data, data, data
- Value of nursing
Short Term Takeaways

1. Start conversations with staff, with patients
2. Know your policies and procedures
3. Get involved with pilots
“85% of a population’s well-being, its quality of life, is due to factors other than medical care”

Dr. David Nash, Dean of the College of Population Health

Thomas Jefferson University
Thank You!

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