Overview

Identifying the Opportunity

- Planning meeting San Diego, June 13, 2014. General topic was “Cancer Communication in the Digital Era: Opportunities & Challenges”
- First focused workshop held in Boston, December 11, 2014: “Engaging Patients with Connected Health Technologies”
- Second focused workshop San Francisco, March 26, 2015. “The Personal Health Data Revolution, Connected Health in Cancer”

Vision and Recommendations for the Future

- Next meeting: Chicago, July 9, 2015
- Objective 1: Review and develop agreement on a reasonably attainable future state.
- Objective 2: Identify concrete recommendations for achieving future state for the benefit of patients and the public.
Identifying the Opportunity
Fractures in Cancer Care

Primary Prevention:
e.g., “70% of smokers visit healthcare, but few receive adequate follow-up.” Fiore (2013)

Survivorship
Communication problems have devastating consequences for cancer survivors. (IOM, 2005)

Secondary Prevention:
e.g., 56% of late stage cervical cancer cases in community hospital had not been screened. (Zapka et al, 2010)

Treatment Adherence:
e.g., “63% of teens & young adults do not adhere to cancer Rx regimens,” Kondryn et al. (Lancet Onc, 2011)
Stresses that will likely exacerbate fractures, obstruct progress:

- Aging demographics
- Increasing incidence overall
- Complexity in oncology care
- Increasing number of survivors (18 million by 2022)
- Shrinking work force
- Rise in treatment costs

[Link to report](http://www.iom.edu/Reports/2013/Delivering-High-Quality-Cancer-Care-Charting-a-New-Course-for-a-System-in-Crisis.aspx)
The Healthcare Communication Revolution: Bridging Disconnects

1. Make Effective Communications An Organizational Priority to Protect the Safety of Patients

- Fix patient handoffs (50% of errors).
- Provide asynchronous channels (to ensure reliable communication).
- Use smart scheduling, issue routing (as preemptive error control).
- Offer secure messaging (to preserve privacy and confidentiality).
- Leverage eHealth, telemedicine apps (to move care to patient).

*See http://medarchon.com/*
Unleashing the “Power of Connectivity”* in Oncology

Meaningful Use Incentives:

- Safety, effectiveness
- Patient engagement
- Continuity of care
- Population health
- Private, secure

Workshop 1: Engaging Patients with Connected Health Technologies

Cambridge, MA
December 11, 2014

- Connected healthcare led to 50% drop in gen readmissions, 69% drop in BP. (Kvedar)
- Wrist-worn devices showed 94% rate for accurate convulsive seizure control. (Piccard)
- Connected infrastructures are needed for team care; ecosystem of apps needed to enable CDS & data sharing. (Mandl)
- Precision medicine is predicated on the integration of research, care, and data. (Kibbe)
- Improving access is needed to remove disparities. (Gibbons)
Open data, patient wisdom and public involvement in research (Friend)

Patient-centered, data-driven, coordinated, & continuous (Middleton)

The Internet of things & mobile leave digital traces of everyday life. (Patrick)

Use connected data to improve quality, and support decisions in oncology. (Schilsky)

Connected care in cancer: 6 X Pap, 6 X Mam, 10 X CRC & 100% equity. (Shah)
Vision and Recommendations for the Future
Objective 1: Review, discuss and agree on a reasonably attainable future state.

Objective 2: Identify concrete recommendations for achieving future state that benefits patients and the public.

From the ASCO Blueprint
Four Primary Dimensions to Consider

- Personal Health Information & Data Sharing
- Person & Family Centered Care
- Devices, Sensors, & Apps
- National Health Information Infrastructure
Personal access to physiologic and clinical data contributes to a culture of health and better self-management.

Personal health data are massively generated and collected from devices attached to and within the body under control of the individual.

Patients are secure with informed consent in sharing data with designated health care professionals and researchers.
Healthcare has transformed to a fully patient and family-centric system with patient and family values as core components to any care plan for cancer.

Patients report feeling more “connected” to their cancer care providers; that help is just a mouse click or smartphone call away, and that most providers have equal access to vital life-saving information available in their records.
Mobile computing reaches 85% of the US population by 2020 with broad adoption across race, ethnicity, region, or literacy level.

Just-in-time, adaptive interventions become ubiquitous and accessible through a vibrant ecosystem of evidence-based, interoperable apps.
ONC reaches its 2020 goal of an interoperable infrastructure for data flow controlled by individuals.

Cancer prevention, control, treatment, and survivorship improve, with greater connectivity and fewer discontinuities.
On Behalf of Patients, Families, and the Public:

Thank You!
Commentary: Don Berwick

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