

Appropriate Use of Advanced Technologies for Radiation Therapy and Surgery in Oncology

July 20-21, Washington DC



INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

Advising the nation • Improving health



OVERVIEW

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THE UNIVERSITY OF TEXAS

MD Anderson
Cancer Center

Making Cancer History®

NCPF's Long Term Interests in 'Value'

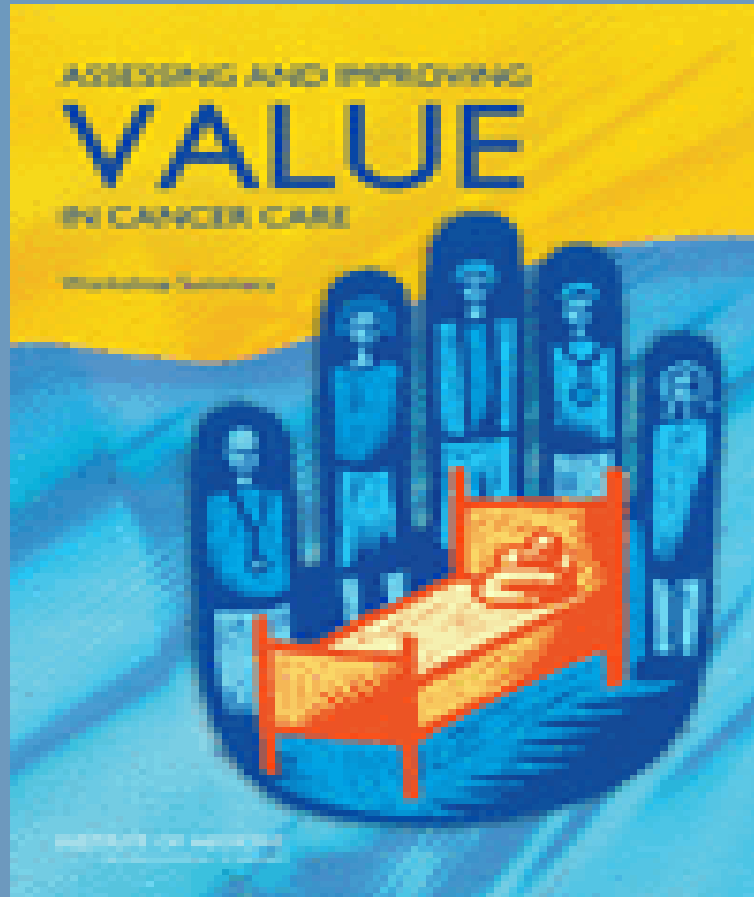
- **Motivation:**

- Exceedingly high cost of new cancer treatments
- Unsustainable increase in the cost of cancer care
- Substantial financial burden to patients and their families
- An aging society, with age being a prominent risk factor for cancer

New Technology and Value Discussions

- New technology often takes the center stage of 'value' discussions
 - Almost always cost more
 - May or may not lead to better health outcomes
 - Utilization influenced by nonclinical factor:
 - Provider-induced demand
 - Consumer-induced supply
- Goal: to find the best treatments that are affordable to patients and healthcare system through appropriate use of advanced technologies

Assessing and Improving Value in Cancer Care



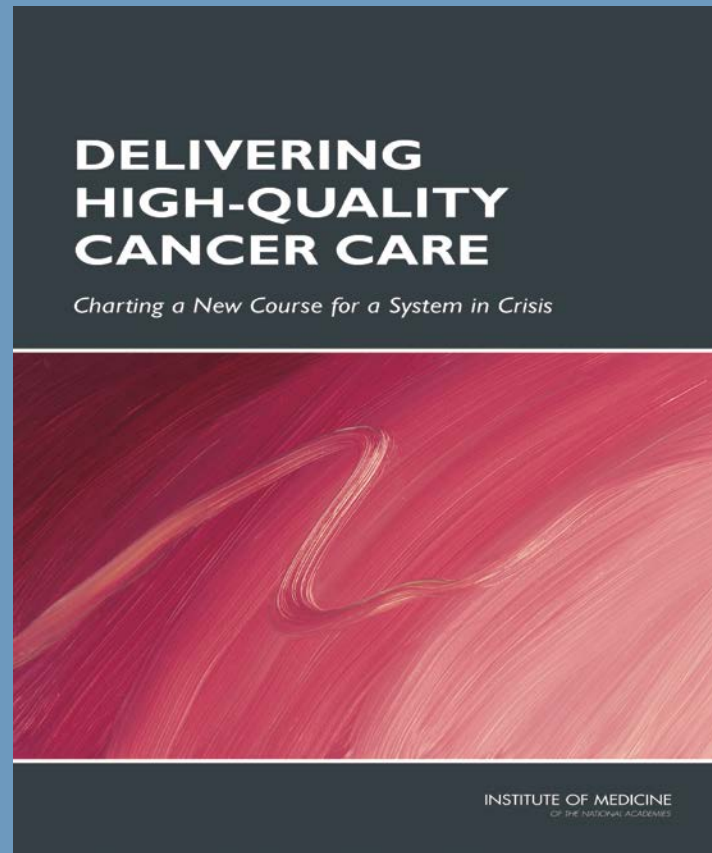
October 2009

Delivering Affordable Cancer Care in the 21st Century



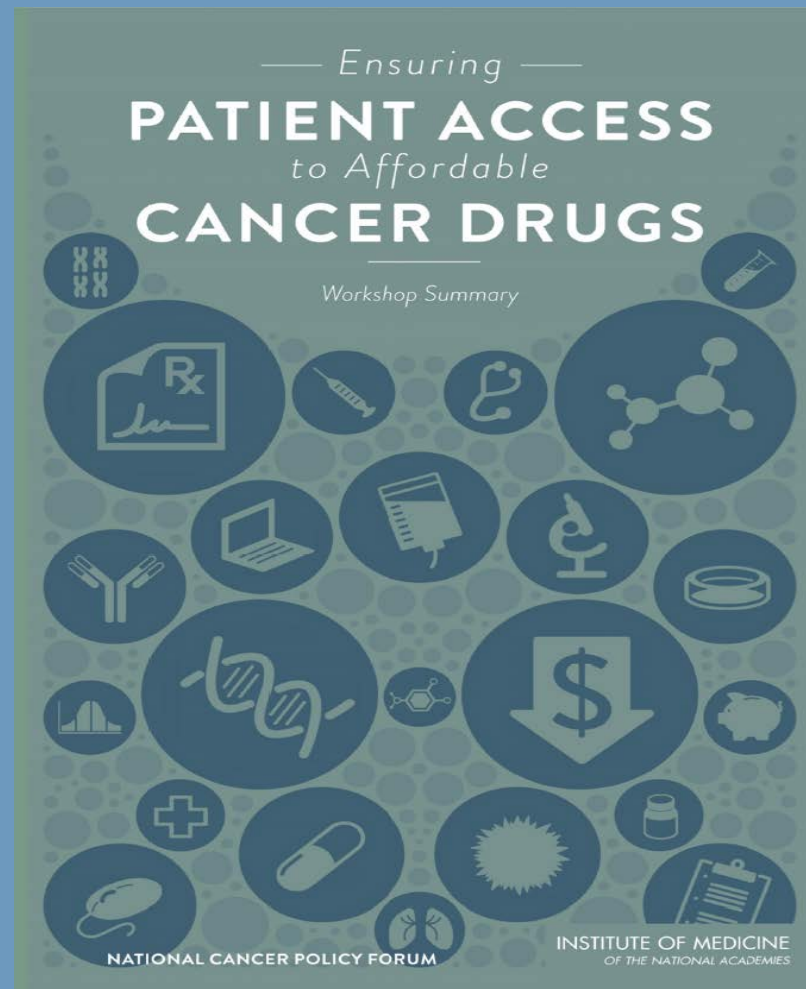
October 2012

IOM Report on Quality of Cancer Care



September 2013

Ensuring Patient Access to Affordable Cancer Drugs



June 2014

Why Today's Workshop?

- Important differences between drugs and devices

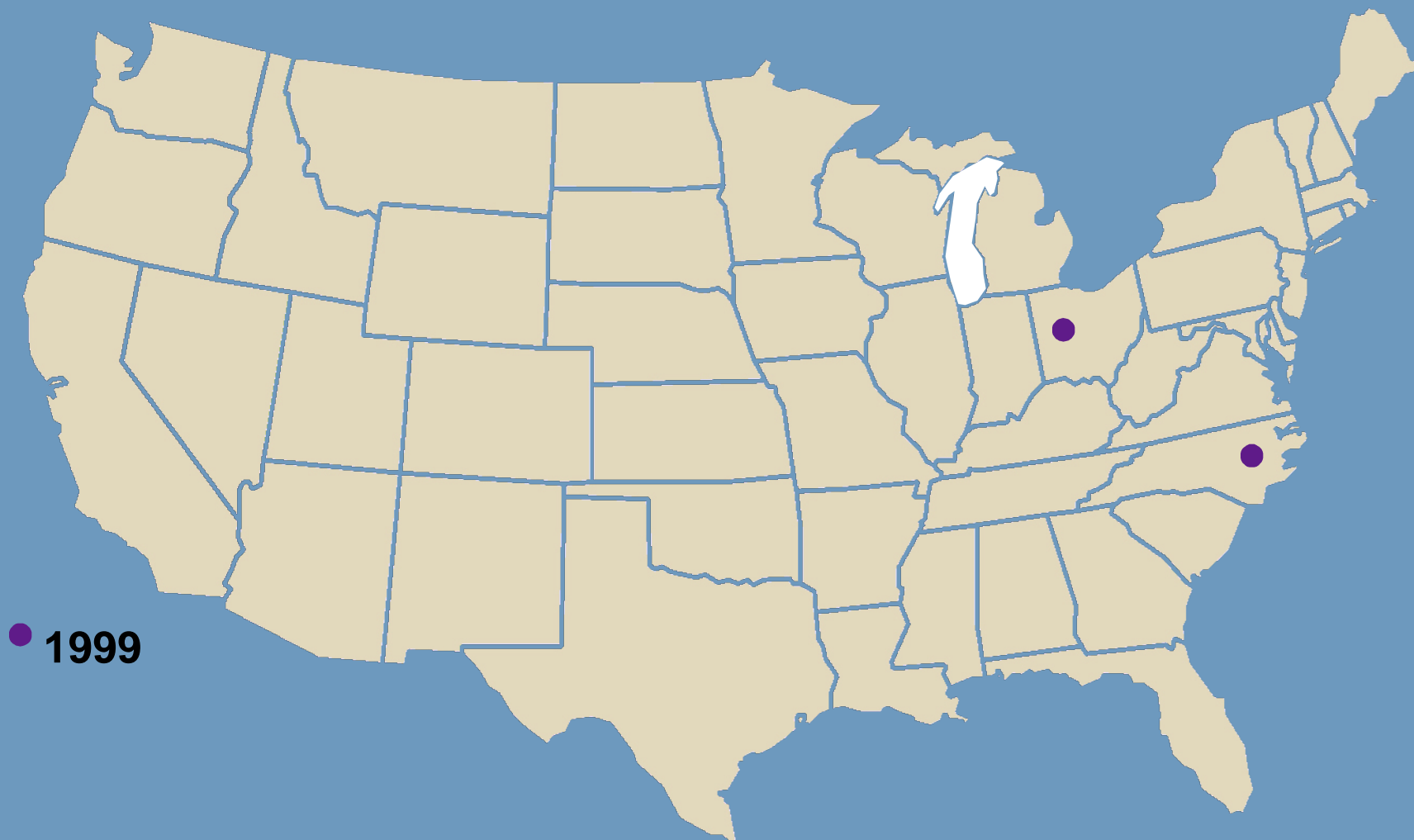
Drugs vs. Devices for Oncology Care

	Drugs	Devices
Clinical trials for approval	✓	X
Post-marketing surveillance	✓	✓
Price set by manufacturers	✓	?
Patent protection & generic entry	✓	X
Off-label use	✓	?
Capital investment	X	✓
Payment innovation	tiered-formulary bundle payment pathway ...	guideline bundle payment ...
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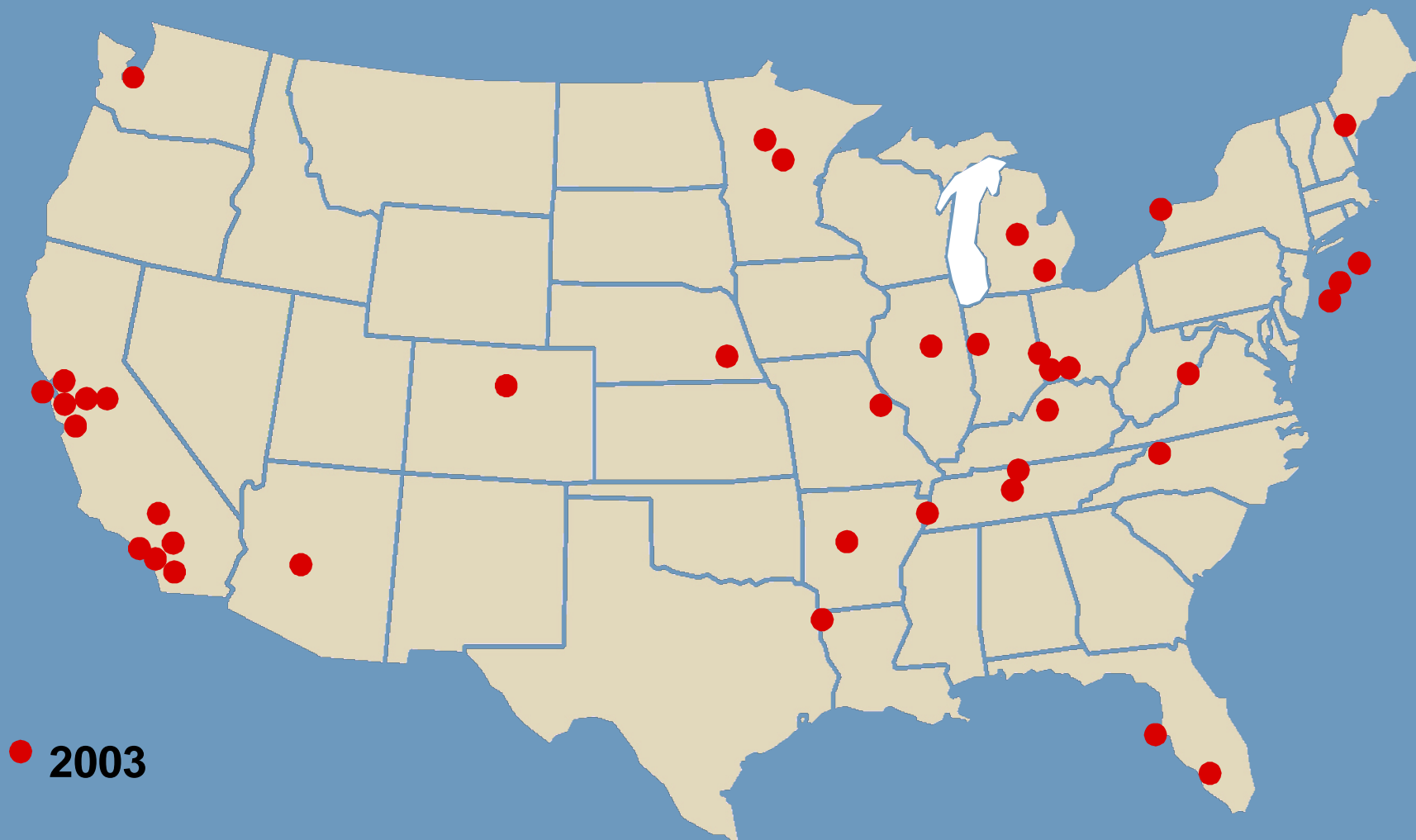
Why Today's Workshop?

- Important difference between drugs and devices
- Proliferation of devices

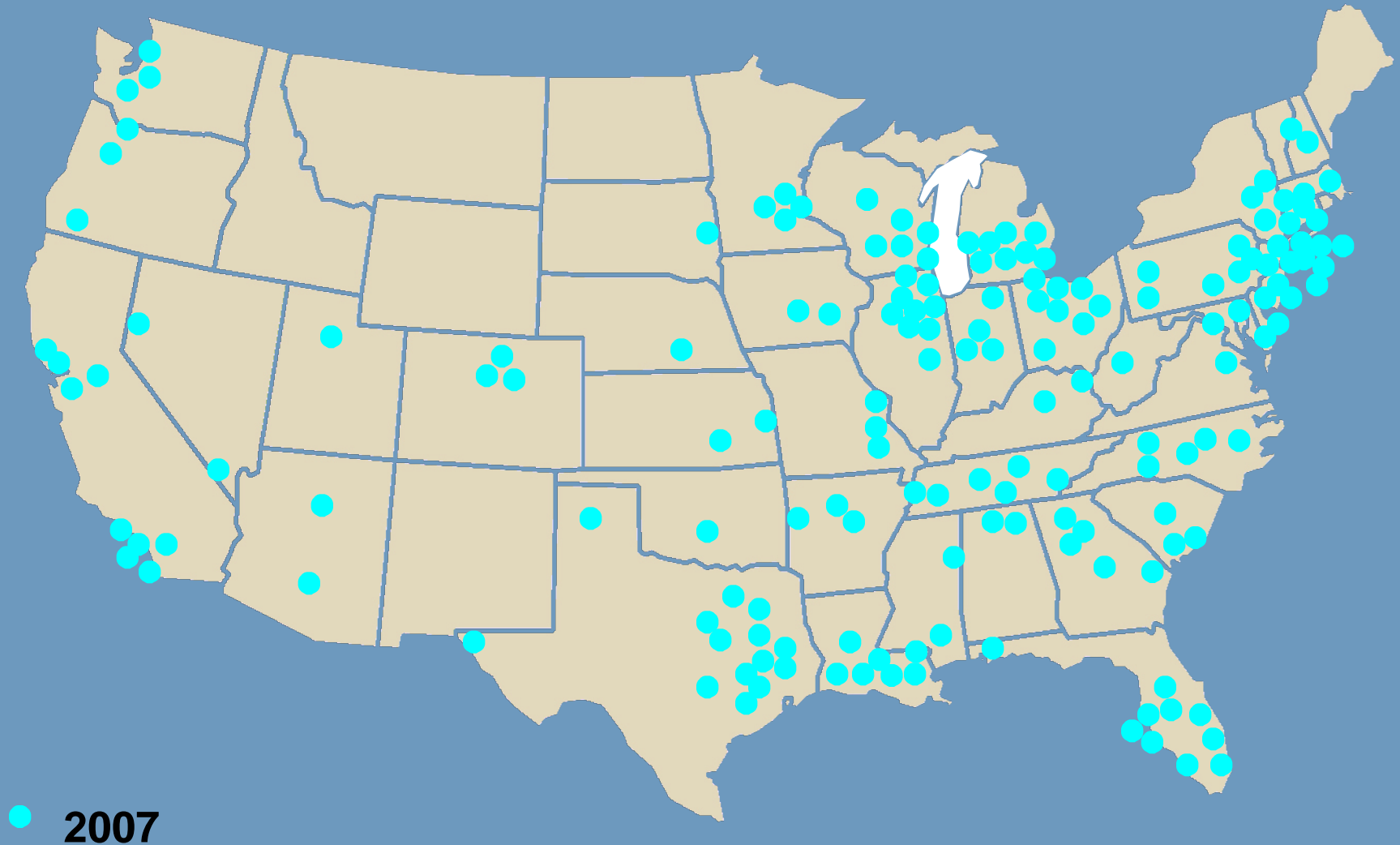
Da Vinci® Surgical System U.S. Installed Base 1999



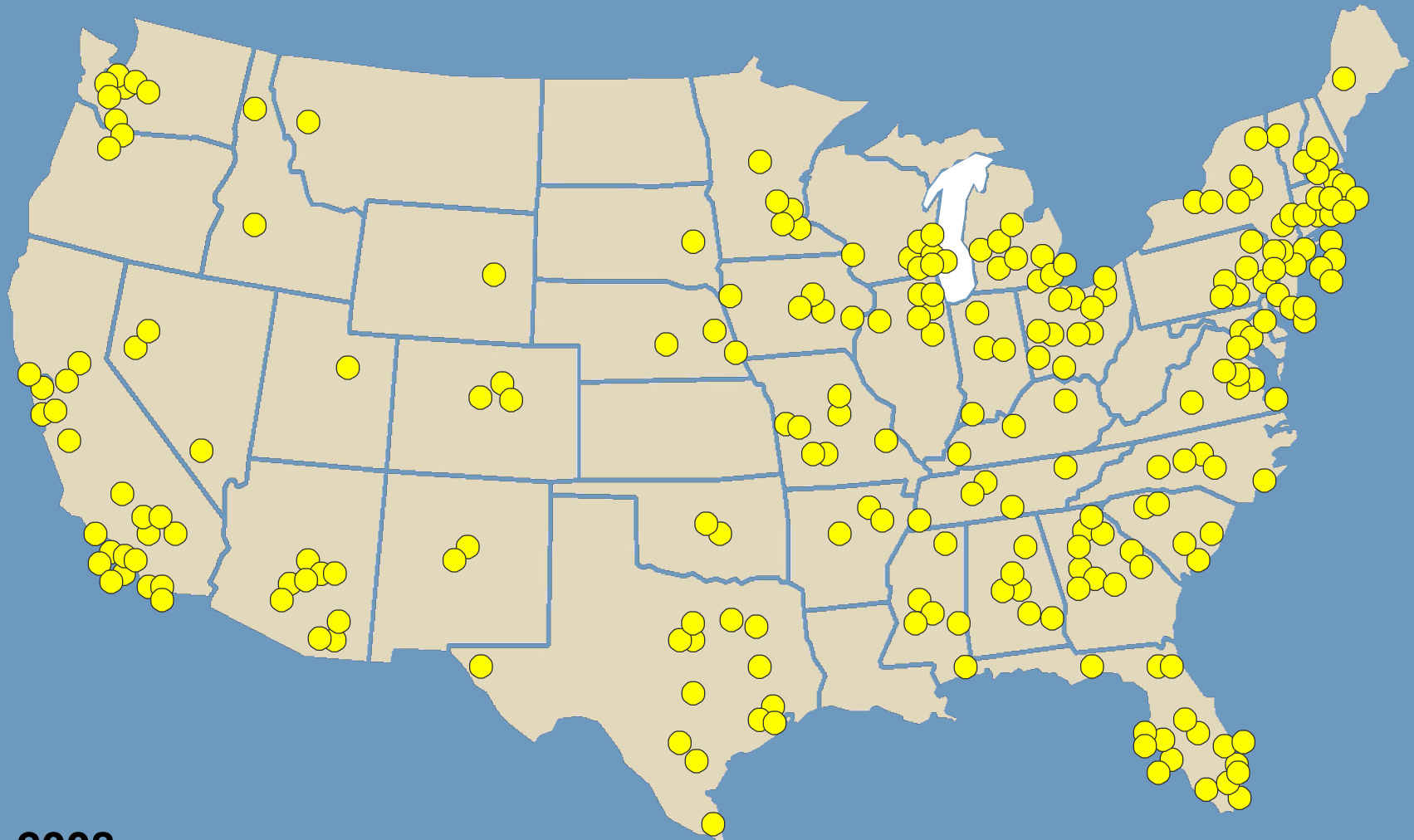
Da Vinci® Surgical System U.S. Installed Base 2003



Da Vinci® Surgical System U.S. Installed Base 2007



Da Vinci[®] Surgical System U.S. Installed Base 2008



● 2008

Da Vinci® Surgical System U.S. Installed Base 2015

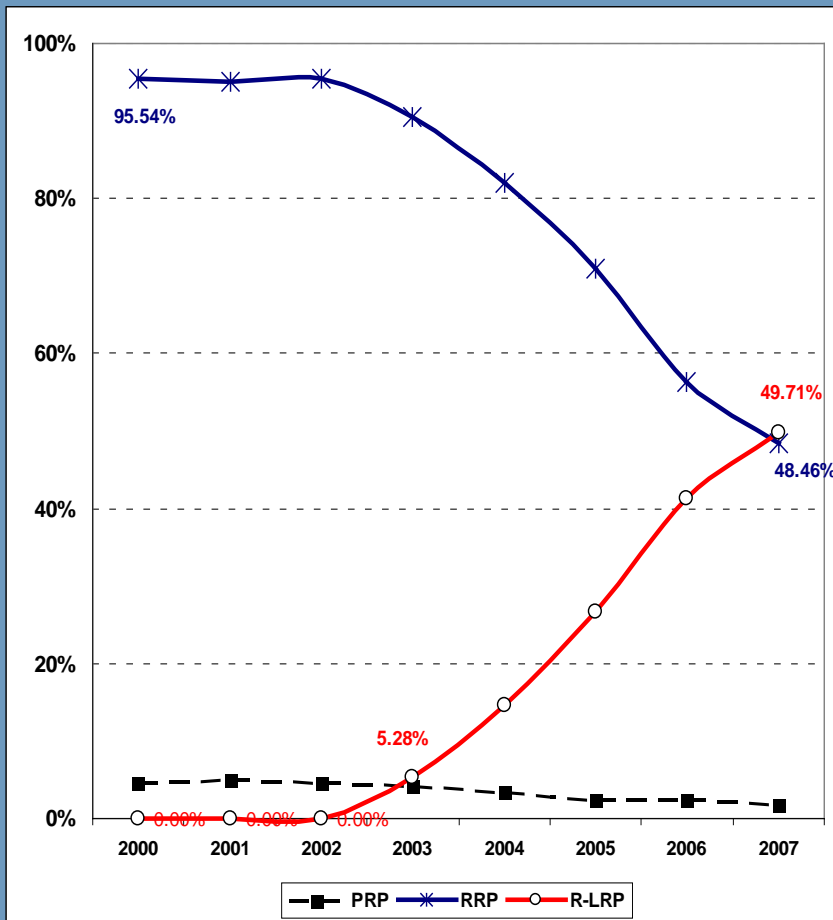


Why Today's Workshop?

- Important difference between drugs and devices
- Proliferation of devices
- Fast uptake of new technologies

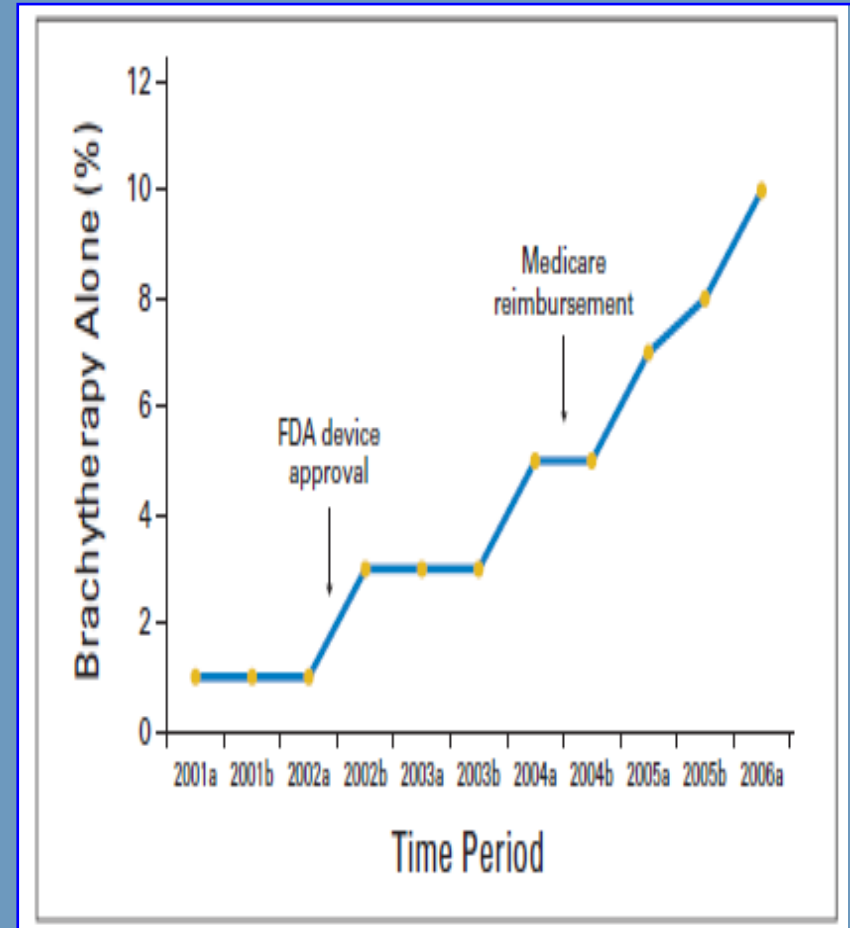
Fast Diffusion of New Technology

- Minimally Invasive RP



Shih et al. *Value in Health* 2012

- Breast Brachytherapy



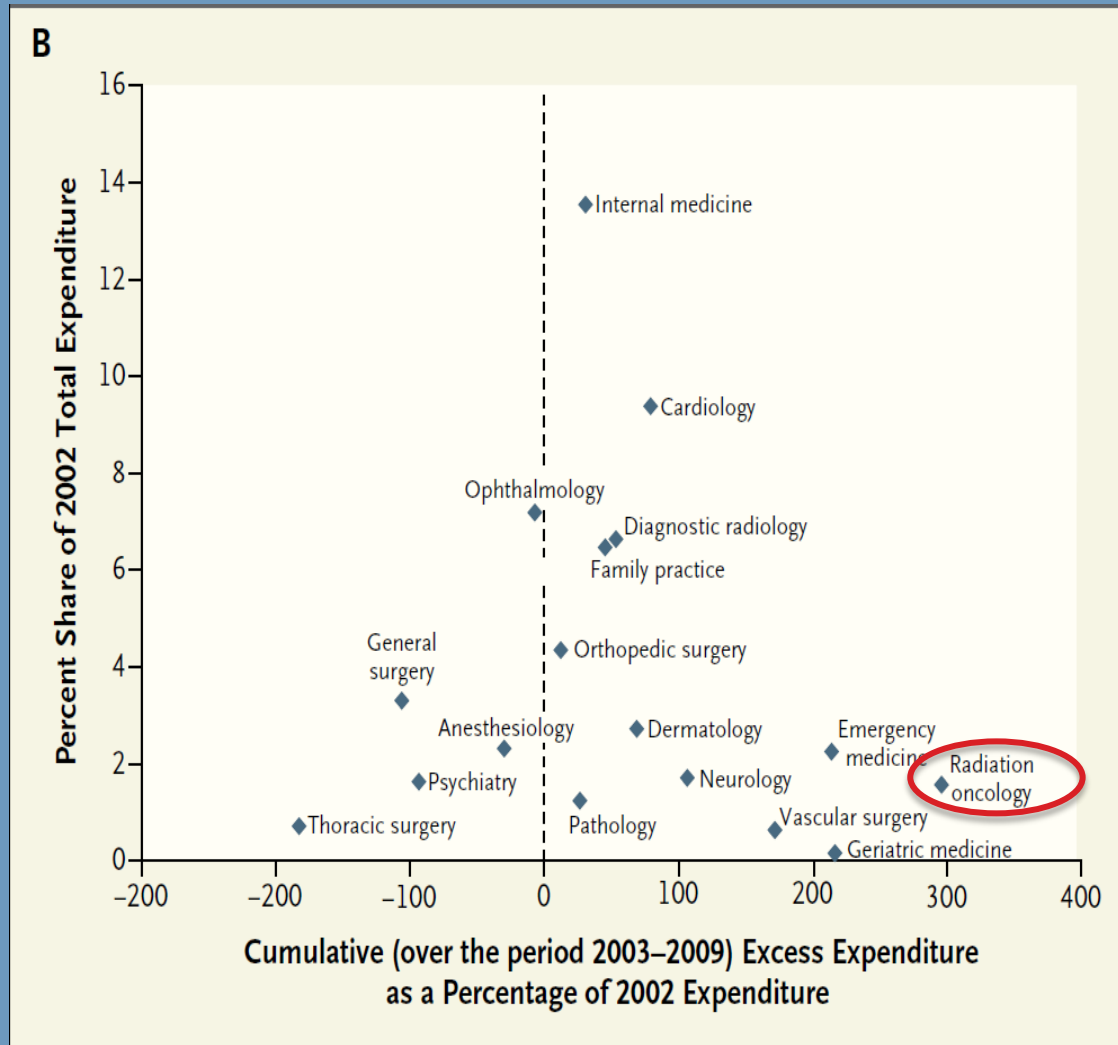
Smith et al. *JCO* 2011

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- Fast uptake of new technologies
- Financial consequences

Financial Consequences

- Use of robotic surgery increases the cost of surgery by 13%⁽¹⁾
- Radiation oncology has the highest excess growth in Medicare among all specialties⁽²⁾



Workshop Agenda

- Session 1A/B: science and comparative effectiveness
- Session 2A/B: from discovery to marketplace
- Session 3A/B: assess value and define optimal use

Planning Committee

- Ralph Weichselbaum (co-chair), U Chicago
- Monica Bertagnolli, Harvard/Dana-Farber
- Oles Brewley, ACS
- Robert Carlson, MOCN
- Patricia Ganz, UCLA
- Carol Hahn, Duke
- Lori Hoffman Hogg, Office of Nursing Services
- Jim Hu, Cornell
- Ted Lawrence, U Michigan
- Steve Piantadosi, Cedars-Sinai Medical Center

THANK YOU!!!