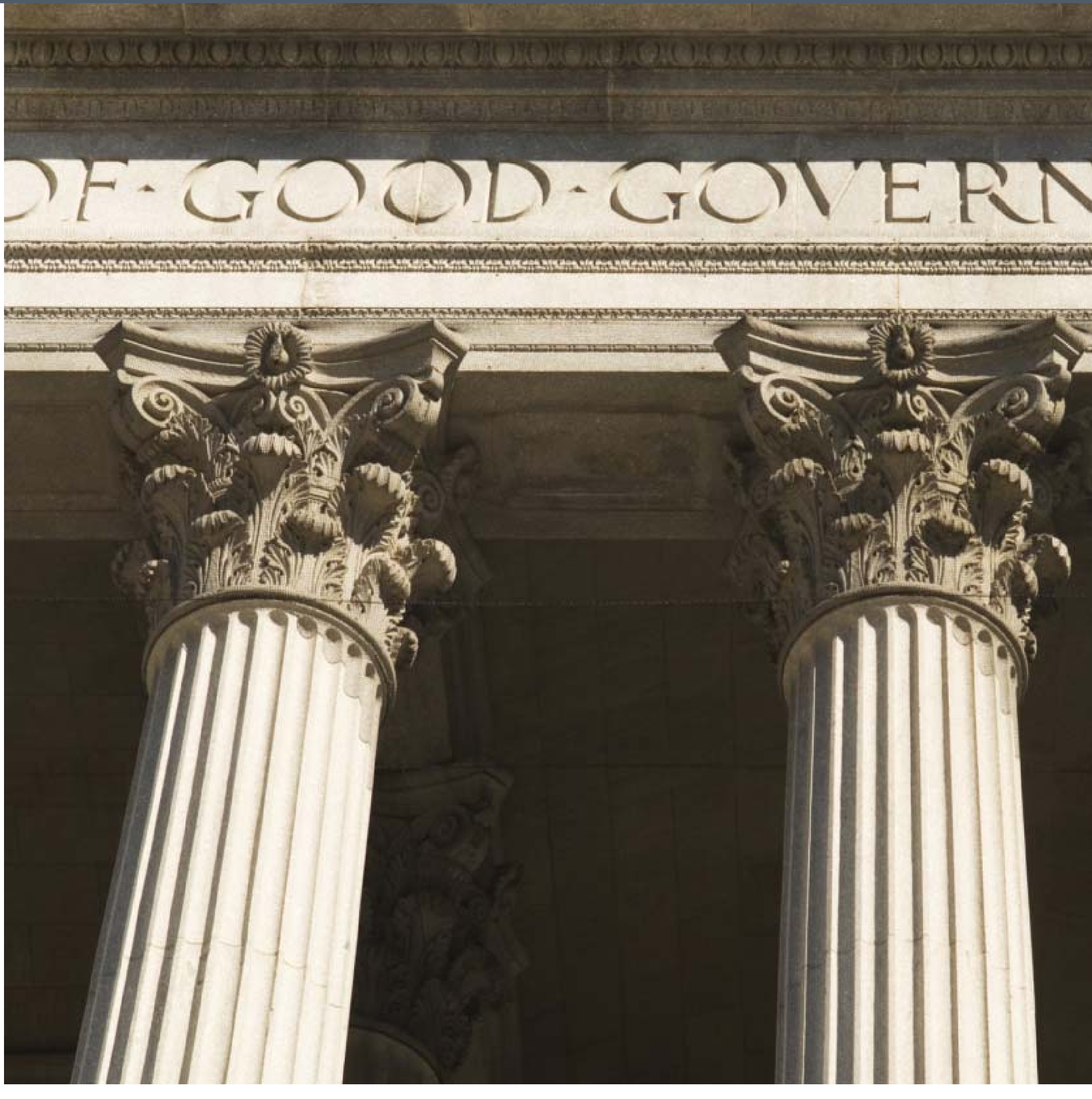
CALIFORNIA HEALTHCARE FOUNDATION



Leveraging the California Cancer Registry to Measure & Improve the Quality of Cancer Care

Robert A. Hiatt, MD, PhD
Chair, Department of
Epidemiology & Biostatistics
University of California
San Francisco
October 30, 2013

Take-Away Points

- What the California Cancer Registry does
- What it *could* do based on the assessment of our workgroup
- The issues that need to be addressed to leverage this great California resource to improve the quality of cancer care

Rationale

Patients navigate uncertain waters in choosing a cancer provider….but there are opportunities now to help.

Background

Cancer presents a unique opportunity to inform decisionmaking…

- Cancer registries are an established and invaluable resource (other diseases struggle with accurate case identification)
- New health care informatics and technology
- Multidisciplinary cancer care teams looking for ways to improve the quality of cancer care

Workgroup Members

A Project of the California HealthCare Foundation

Medical Oncologist	**Douglas W. Blayney, MD**	Stanford University
Registry Director	**Dennis Deapen, DrPH**	University of Southern California
Epidemiologist	**Robert A. Hiatt, MD, PhD**	UC San Francisco
Medical Informaticist	**Michael Hogarth, MD, FACP**	UC Davis
Health Quality Expert	**Kenneth W. Kizer, MD, MPH**	UC Davis
Health Economist	**Joseph Lipscomb, PhD**	Emory University
Cancer Outcomes Researcher	**Jennifer Malin, MD, PhD**	WellPoint, Inc.
Legal Counsel	**Stephen K. Phillips, JD**	Hooper, Lundy & Bookman, P.C.
Patient Advocate	**John Santa, MD, MPH**	Consumer Reports Health
Medical Oncologist	**Deborah Schrag, MD, MPH**	Harvard University

Workgroup’s Charge

- To examine the barriers and opportunities for leveraging the California Cancer Registry for measuring and improving the quality of cancer care
- This vision specifically includes the public reporting of cancer quality metrics by provider to allow for improved decisionmaking by patients, plans, providers, and others

What Do Cancer Registries Do?

The California Cancer Registry:
A Public Service & Research Tool

Welcome to California Cancer Registry (CCR)

CCR is a program of the California Department of Public Health's Chronic Disease Surveillance and Research Branch (CDSRB). The CCR is California's statewide population-based cancer surveillance system. We collect information about almost all cancers diagnosed in California. This information furthers our understanding of cancer and is used to develop strategies and policies for its prevention, treatment, and control. The availability of data on cancer in the state allows health researchers to analyze demographic and geographic factors that affect cancer risk, early detection, and effective treatment of cancer patients. The data also help determine where early detection, educational, and other cancer-related programs should be directed.

The CCR is recognized as one of the leading cancer registries in the world, and has been the cornerstone of a substantial amount of research on cancer in the California population. To date the CCR has collected detailed information on over 3.4 million cases of cancer among Californians diagnosed from 1988 forward, and more than 162,000 new cases are added annually.

California Cancer Registry website (www.ccrcal.org)

The California Cancer Registry

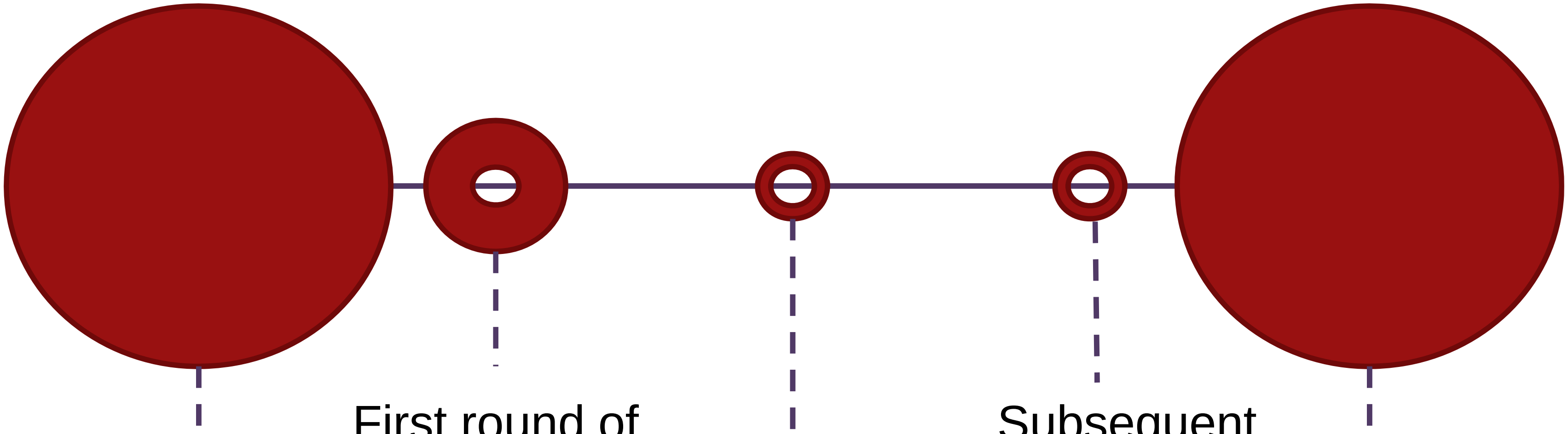
- *Monitors* new cancers to reveal trends, good and bad, for the whole population
- *Documents disparities* by geographic region, age, gender, and racial and ethnic background
- Provides the ultimate basis for judging the *population health impact* of therapeutic or preventive interventions
- Serves as an essential *tool for research*

What Registries Could Do…

Cancer Registries Could…

- Be used for quality of cancer care assessment
- Be merged with other existing data sources like claims data and electronic medical records (EMRs) to get at medical care utilization, medication use, and imaging
- Provide better and more transparent information for patients, providers, payers, and other stakeholders to inform decisionmaking and the quality of cancer care

Cancer Registries: A Wealth of Information



Diagnosis

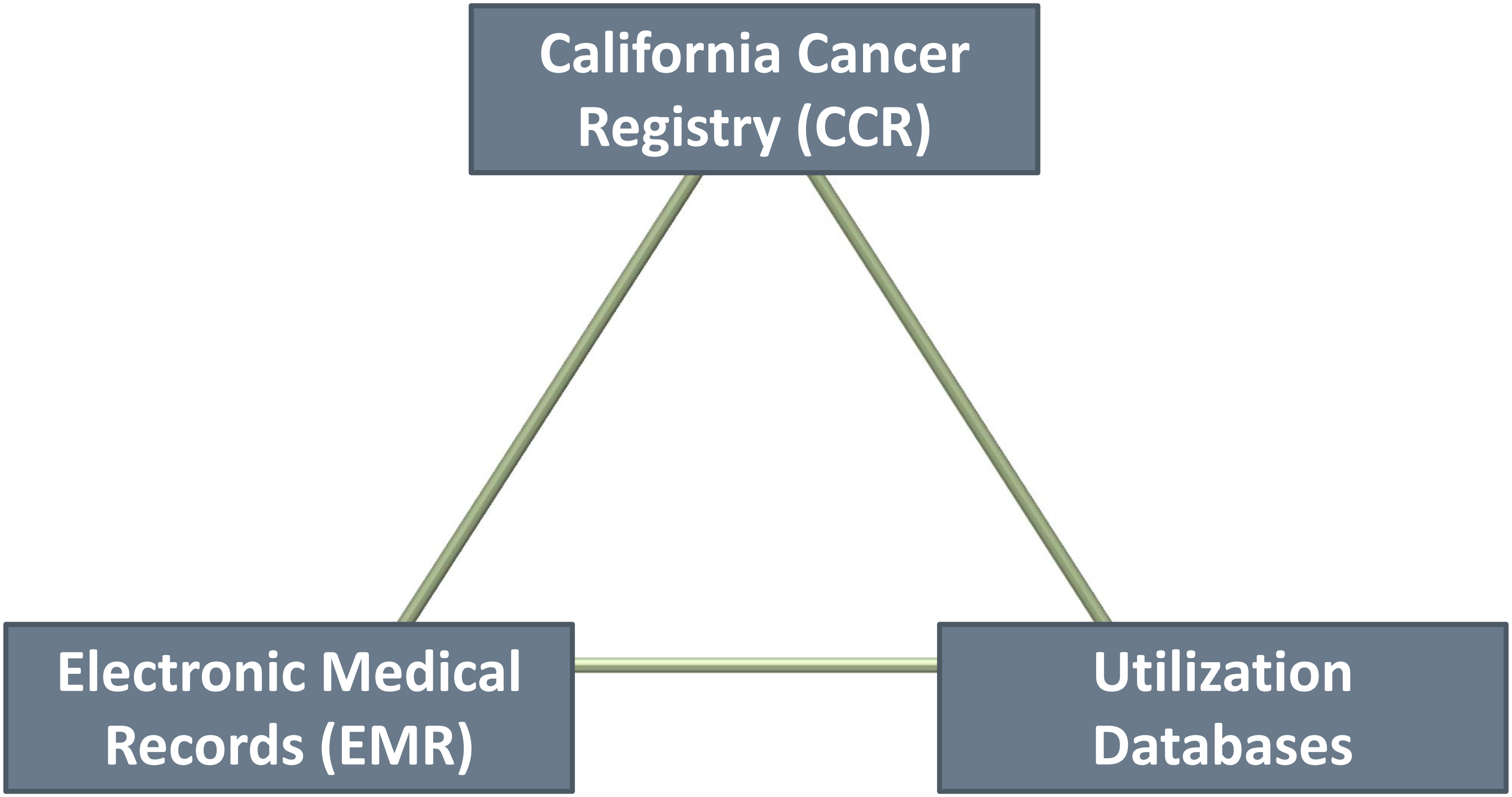
First round of treatment / surgery

Recurrence

Subsequent treatments / surgery

Death

Vision of New System



California Cancer Registry (CCR)

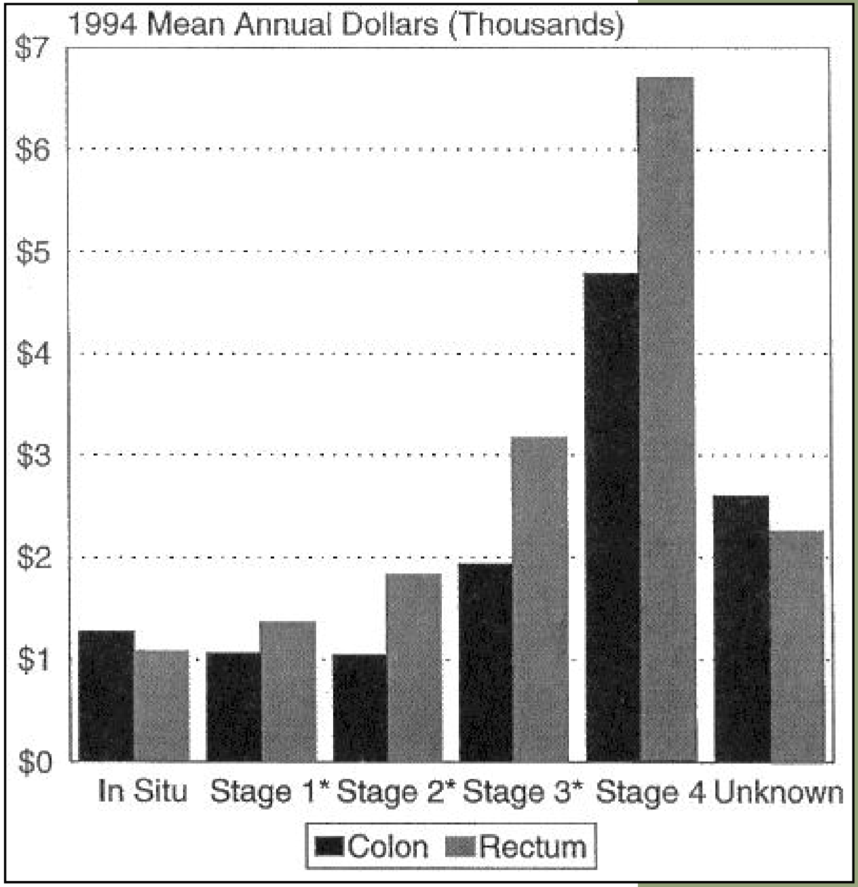
Electronic Medical Records (EMR)

Utilization Databases

Capacity for Linkage Already Exists

SEER-Medicare Database: What Have We Learned?

- Mammography is underutilized in older breast cancer survivors who are at high risk of recurrence[1]
- The number of procedures performed by a surgeon is related to their patients experiencing urinary complications[2]
- Can estimate medical costs associated with colorectal or rectal cancer by stage (graph at right)[3]

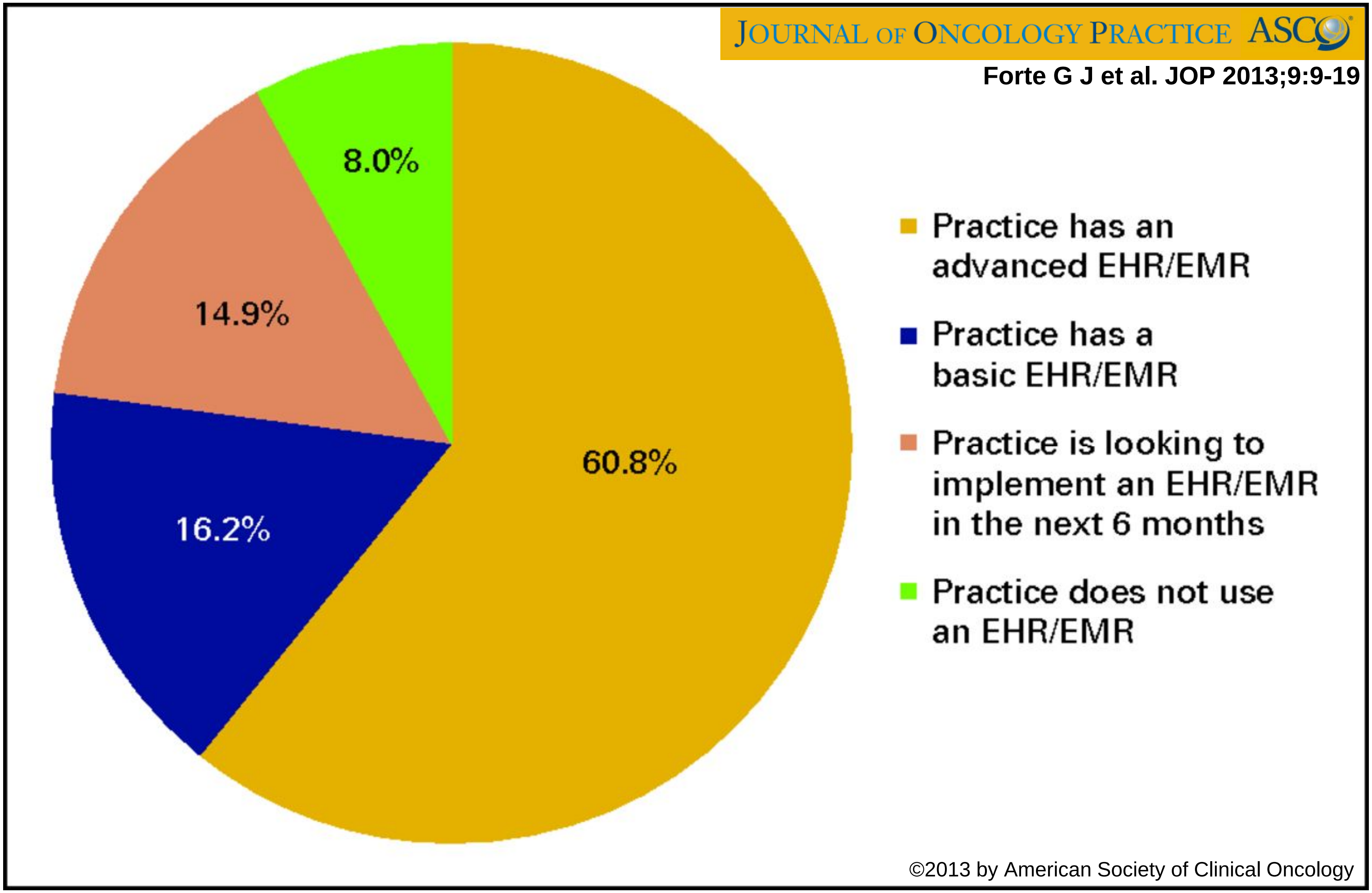


1. Schapira MM, McAuliffe TL, Nattinger AB. Underutilization of mammography in older breast cancer survivors. Med Care. 2000 Mar;38(3):281-9.
2. Begg CB, Riedel ER, Bach PB, Kattan MW, Schrag D, Warren JL, Scardino PT. Variations in morbidity after radical prostatectomy. N Engl J Med. 2002 Apr 11;346(15):1138-44.
3. Brown ML, Riley GF, Potosky AL, Etzioni RD. Obtaining long-term disease specific costs of care: application to Medicare enrollees diagnosed with colorectal cancer. Med Care. 1999 Dec;37(12):1249-59.

Limitations of Medicare Data

- Limited clinical information about treatment dosage and regimen
- Persons < 65 not included
- Radiation and chemotherapy treatment data incomplete

Uptake of EMRs



JOURNAL OF ONCOLOGY PRACTICE ASCO

Forte G J et al. JOP 2013;9:9-19

Practice electronic health record (EHR)/electronic medical record (EMR) use (n = 597 practices).

Issues for Consideration

- Technical
- Stakeholder concerns
- Legal and regulatory

Issues for Consideration

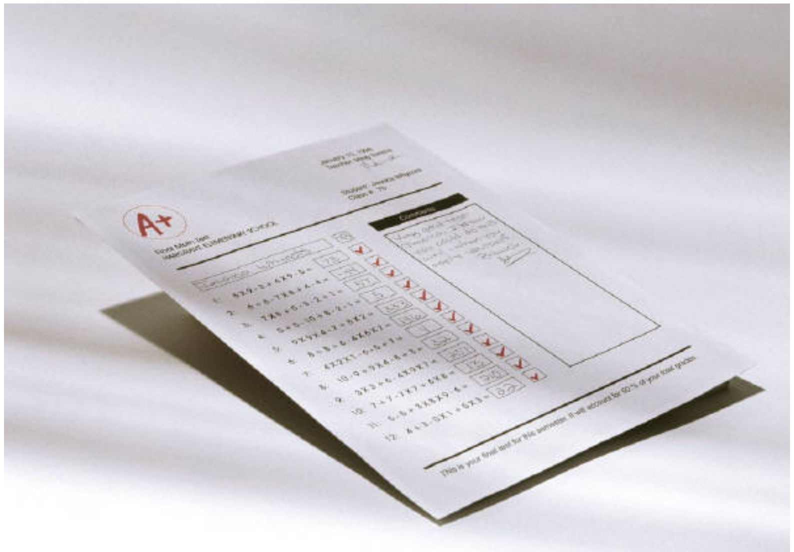
Technical

- Timeliness and rapidity of reporting
- Data capture and physician workflow
- Relevant domains of quality of care measures
- Costs

Issues for Consideration

Stakeholder Concerns

- Provider entities may be sensitive about making quality of care/performance data available to public



- Patients are concerned about their privacy

Issues for Consideration

Legal and Regulatory

- Current California Cancer Registry Statute prohibits public release of provider names

Vision for California

… in progress.

- Improved timeliness of data release through automation of data processing
- Additional data linkages to California Cancer Registry
- Bi-directional flow of useful information between registry and providers
- Metric to quantify quality of care among provider entities

Projected Impact

- Improved transparency of the quality of care
- Better information for patient to make choices
- Opportunity for patients to be engaged in decisionmaking
- Added value to cancer registry program, where investments have already been made
- Addresses health disparities

Our Goal

Better information for patients, providers, payers, and other stakeholders to inform decisionmaking and the quality of cancer care.

Thank you.

Questions?