How Should We Define Value in Cancer Care: Summary of the 2009 NCPF Workshop, Assessing and Improving Value in Cancer Care

Scott Ramsey MD, PhD | PUBLIC HEALTH SCIENCES

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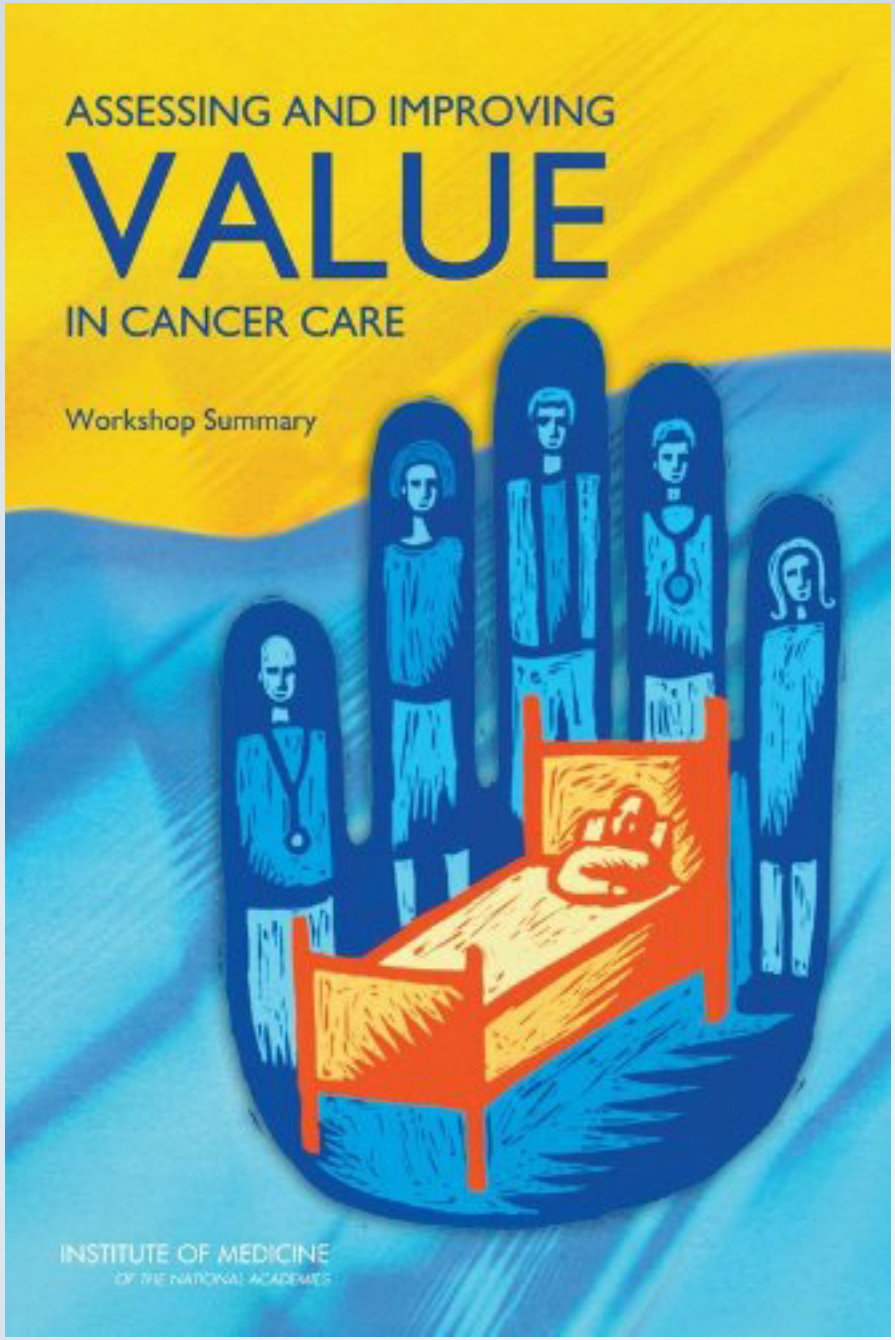

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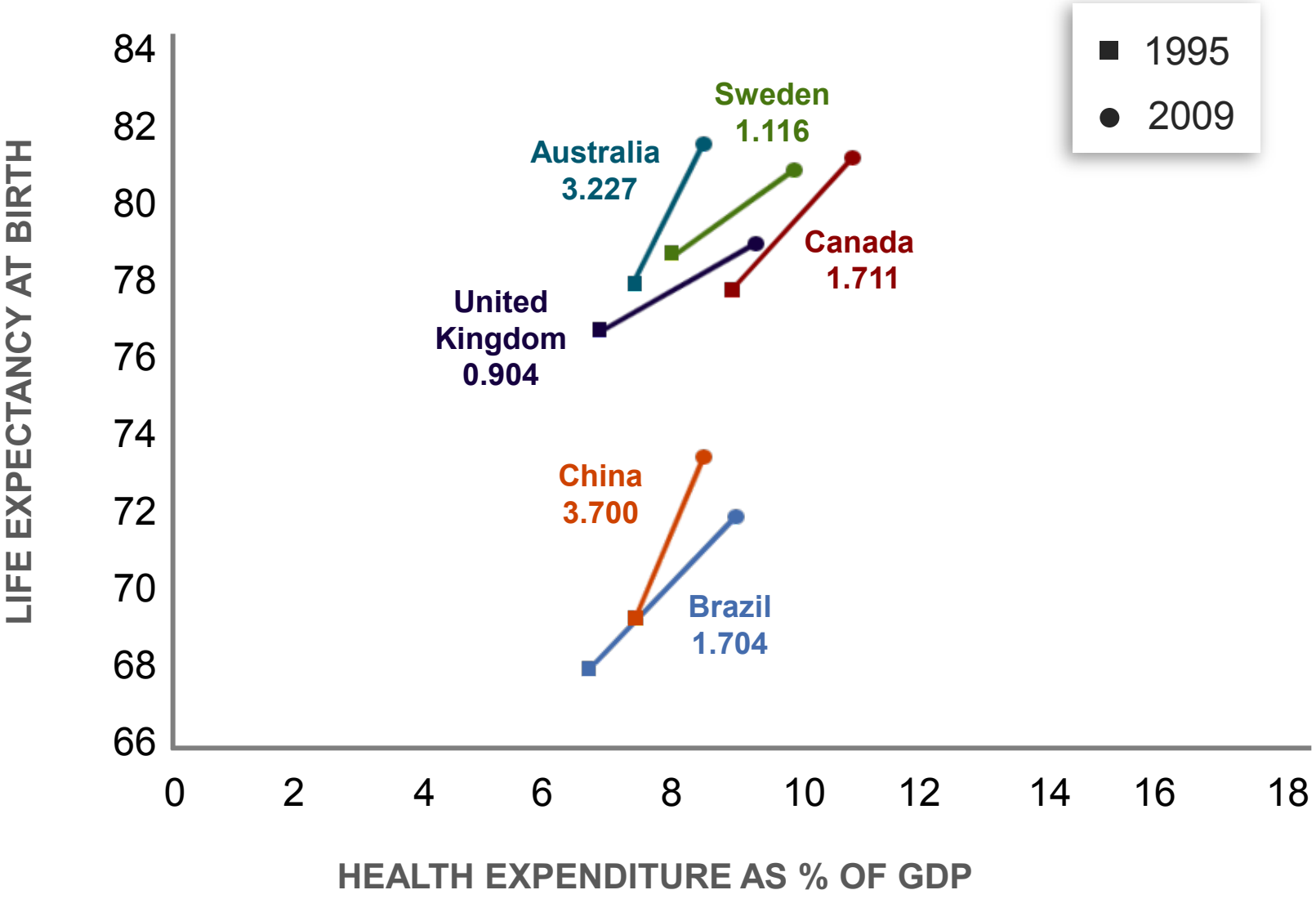
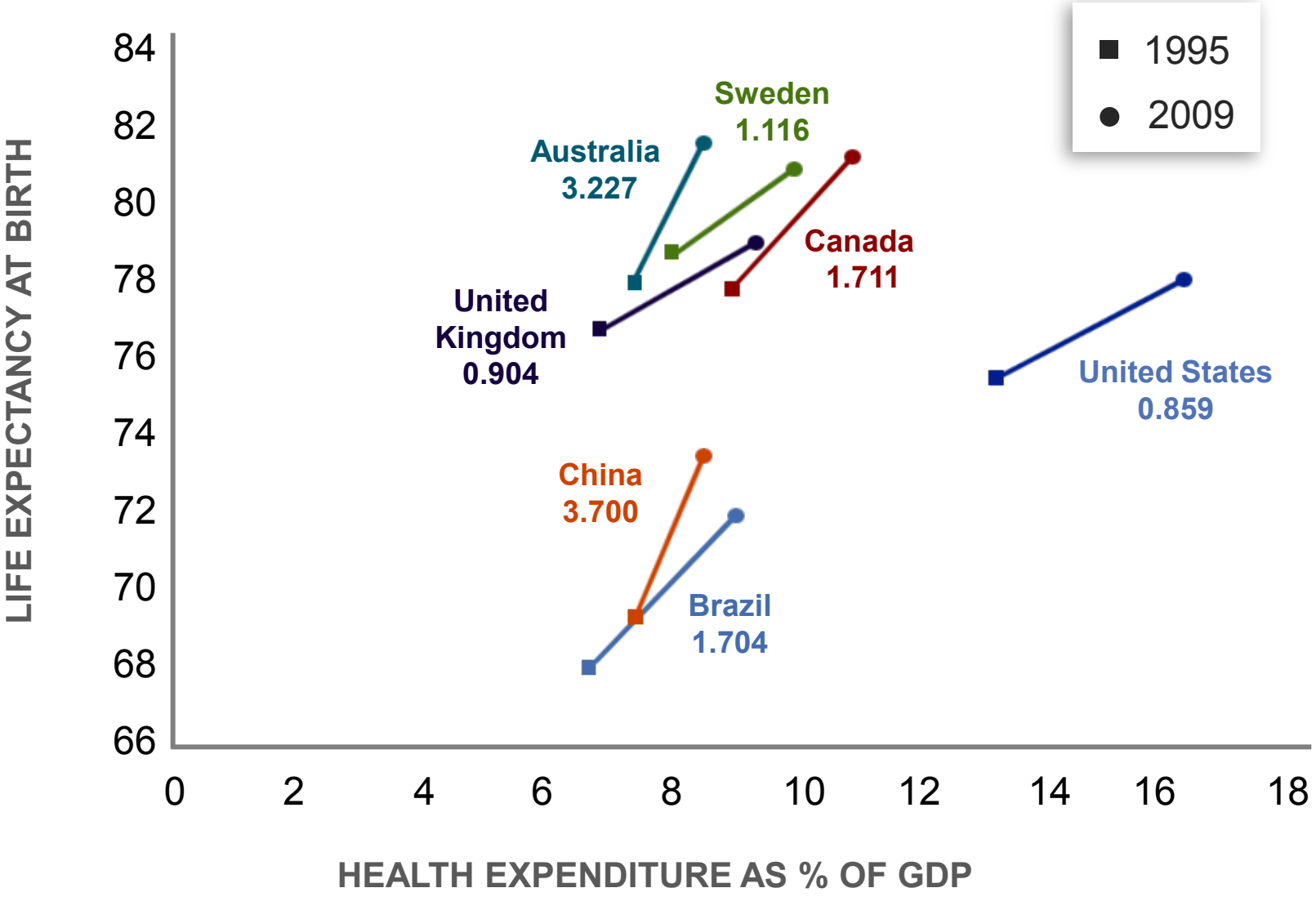
HEALTH EXPENDITURE AND HEALTH RETURN WORLDWIDE



Sources: WHO, CIA world facts, Gapminder

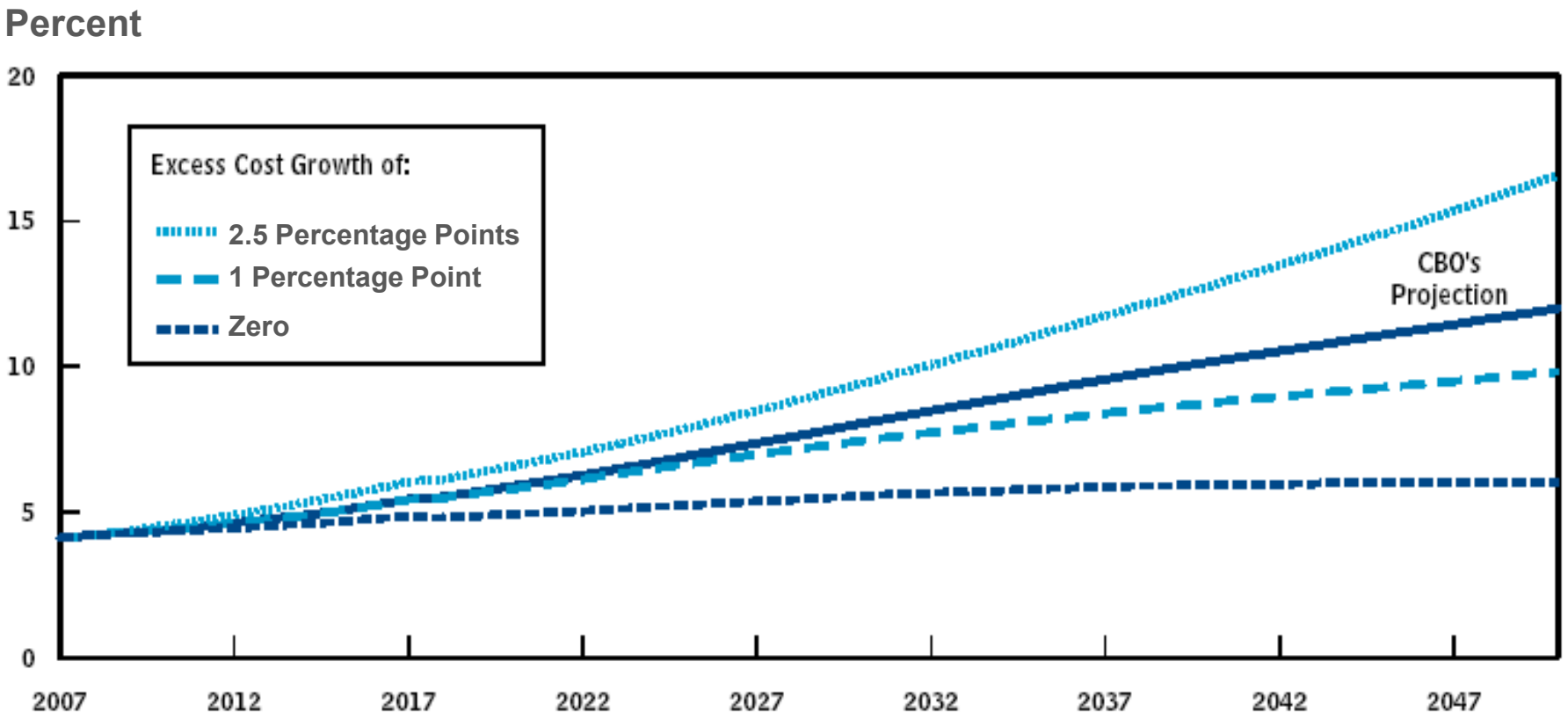
HEALTH EXPENDITURE AND HEALTH RETURN WORLDWIDE



Sources: WHO, Gapminder

CMS SPENDING: UNSUSTAINABLE

Federal Spending for Medicare and Medicaid as a % of GDP
Under Different Assumptions About Excess Cost Growth



Source: US Congressional Budget Office
Note: Excess cost growth refers to the number of percentage points by which the growth of annual health care spending per beneficiary is assumed to exceed the growth of nominal GDP per capita.

Tax Rate Implications: Untenable

SCENARIOS		PROJECTIONS FOR 2050	
		Effect on Economy	**Effect on Taxes**
Tax code is indexed for inflation and growth in real income.	**1% Gap**	Real GDP reduced by 3% to 16%.	**Highest Bracket (35 → 60%)**
	2.5% Gap	Substantial reductions in real GDP.	**Highest Bracket (35 → 92%)**

Source: CBO. Financing Projected Spending in the Long-Run. July 2007

“If we solve our health care spending, practically all of our fiscal problems go away”

And if we don’t? “Then almost anything else we do will not solve our fiscal problems.”

Victor Fuchs, Health Economist
Stanford University

THE LANDSCAPE OF CANCER IN THE UNITED STATES IS CHANGING

- More cancers
  - Population growth
  - Aging population
- Risk factor profiles are changing
  - Increase in cancers linked to diet, physical activity and weight
  - Fewer cancers due to smoking
- Longer survival turning cancer into a “chronic disease”

Challenges to Improving Value in Oncology Care

- Incentive structure encourages:
  - Substituting less expensive treatments/regimens with more expensive treatments
  - More aggressive use of
    - Diagnostics
    - Treatment and treatment combinations
    - Use of surveillance procedures
- Survival gains magnify the cost increases
  - "Test and treat imperative" cascades throughout the survivorship period

Assessing and improving value in cancer care
IOM Workshop Summary 2009

ISSUES THAT REDUCE THE LIKELIHOOD OF PROVIDING HIGH VALUE CANCER CARE (TOM SMITH)

- Unrealistic or Uneducated Demands for Benefit
- Income expectations
- Low reimbursement for cognitive care
- High reimbursement for chemotherapy
- Stress and burnout
- Variable quality of care

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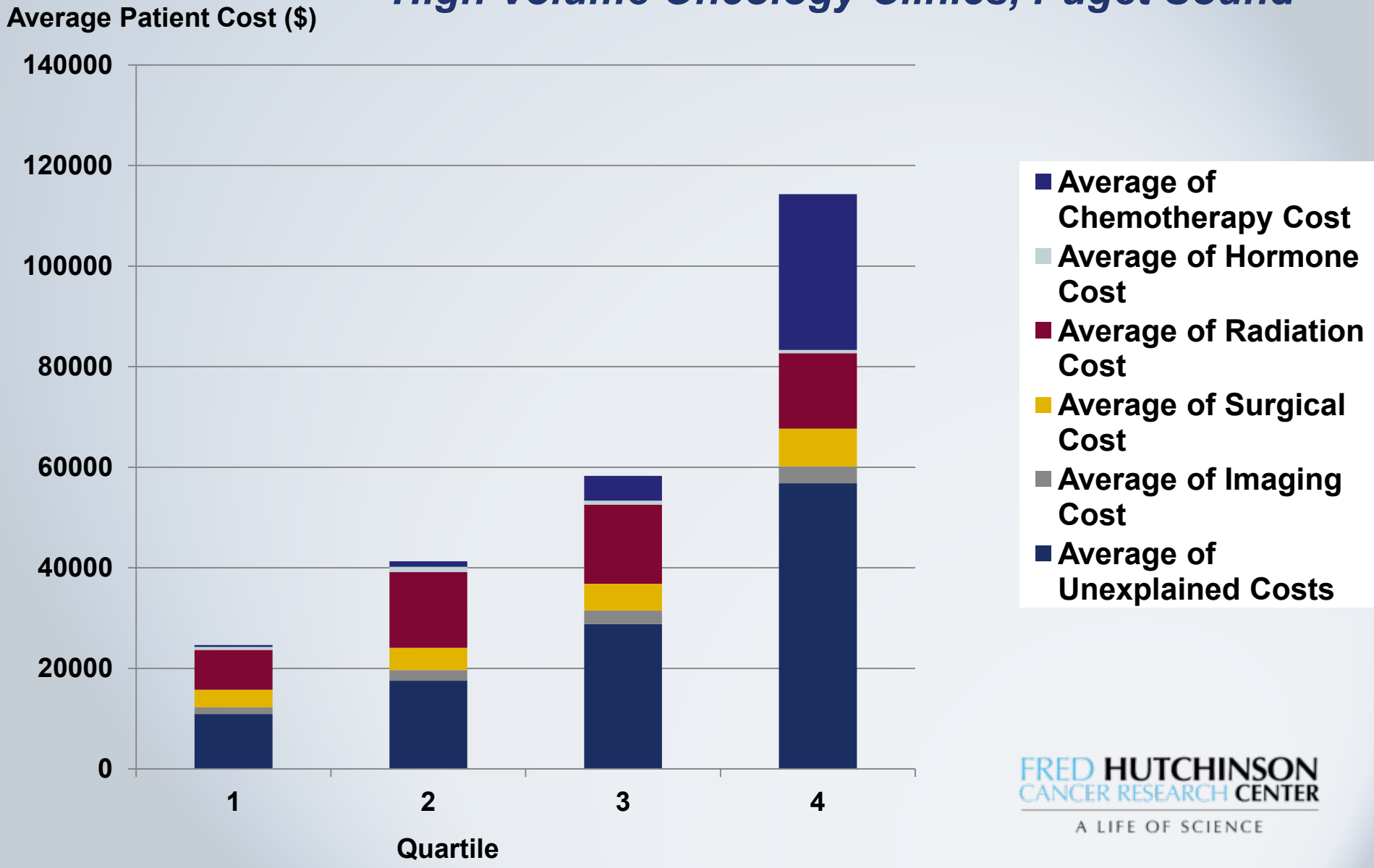
Commercial Insurer Reimbursements
Local Stage Breast Cancer, Age <65, 0-1 Comorbidity
First Year of Diagnosis
High Volume Oncology Clinics, Puget Sound



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PROPOSED SOLUTIONS

- Capitated, illness-based payments (Newcomer)
- Value-based insurance designs (Chernew)
- Use of cost-effectiveness thresholds to set oncology prices (Lerner, Bach)
- Tools to improve doctor-patient communication (Back)
- Incentives to improve use of palliative care (Ganz)
- Quality of care initiatives with incentives (Smith)

An initiative of the ABIM Foundation

and Patients Should Question

The American Society of Clinical Oncology (ASCO) is a medical professional oncology society committed to conquering cancer through research, education, prevention, and delivery of high-quality patient care. ASCO recognizes the importance of evidence-based cancer care and making wise choices in the diagnosis and management of patients with cancer. After careful consideration by experienced oncologists, ASCO highlights five categories of tests, procedures and/or treatments whose common use and clinical value are not supported by available evidence. These test and treatment options should not be administered unless the physician and patient have carefully considered if their use is appropriate in the individual case. As an example, when a patient is enrolled in a clinical trial, these tests, treatments, and procedures may be part of the trial protocol and therefore deemed necessary for the patient's participation in the trial.

1 Don't use cancer-directed therapy for solid tumor patients with the following characteristics: low performance status (3 or 4), no benefit from prior evidence-based interventions, not eligible for a clinical trial, and no strong evidence supporting the clinical value of further anti-cancer treatment.

- Studies show that cancer directed treatments are likely to be ineffective for solid tumor patients who meet the above stated criteria.
- Exceptions include patients with functional limitations due to other conditions resulting in a low performance status or those with disease characteristics (e.g., mutations) that suggest a high likelihood of response to therapy.
- Implementation of this approach should be accompanied with appropriate palliative and supportive care.

2 Don't perform PET, CT, and radionuclide bone scans in the staging of early prostate cancer at low risk for metastasis.

- Imaging with PET, CT, or radionuclide bone scans can be useful in the staging of specific cancer types. However, these tests are often used in the staging evaluation of low-risk cancers, despite a lack of evidence suggesting they improve detection of metastatic disease or survival.
- Evidence does not support the use of these scans for staging of newly diagnosed low grade carcinoma of the prostate (Stage T1c/T2a, prostate-specific antigen (PSA) <10 ng/ml, Gleason score less than or equal to 6) with low risk of distant metastasis.
- Unnecessary imaging can lead to harm [illegible] radiation exposure, and misdiagnosis.

3 Don't perform PET, CT, and radionuclide bone scans in the staging of early breast cancer at low risk for metastasis.

- Imaging with PET, CT, or radionuclide bone scans can be useful in the staging of specific cancer types. However, these tests are often used in the staging evaluation of low-risk cancers, despite a lack of evidence suggesting they improve detection of metastatic disease or survival.
- In breast cancer, for example, there is a lack of evidence demonstrating a benefit for the use of PET, CT, or radionuclide bone scans in asymptomatic individuals with newly identified ductal carcinoma in situ (DCIS), or clinical stage I or II disease.
- Unnecessary imaging can lead to harm through unnecessary invasive procedures, over-treatment, unnecessary radiation exposure, and misdiagnosis.

4 Don't perform surveillance testing (biomarkers) or imaging (PET, CT, and radionuclide bone scans) for asymptomatic individuals who have been treated for breast cancer with curative intent.

- Surveillance testing with serum tumor markers or imaging has been shown to have clinical value for certain cancers (e.g., colorectal). However for breast cancer that has been treated with curative intent, several studies have shown there is no benefit from routine imaging or serial measurement of serum tumor markers in asymptomatic patients.
- False-positive tests can lead to harm through unnecessary invasive procedures, over-treatment, unnecessary radiation exposure, and misdiagnosis.

5 Don't use white cell stimulating factors for primary prevention of febrile neutropenia for patients with less than 20 percent risk for this complication.

- ASCO guidelines recommend using white cell stimulating factors when the risk of febrile neutropenia, secondary to a recommended chemotherapy regimen, is approximately 20 percent and equally effective treatment programs that do not require white cell stimulating factors are unavailable.
- Exceptions should be made when using regimens that have a lower chance of causing febrile neutropenia if it is determined that the patient is at high risk for this complication (due to age, medical history, or disease characteristics).

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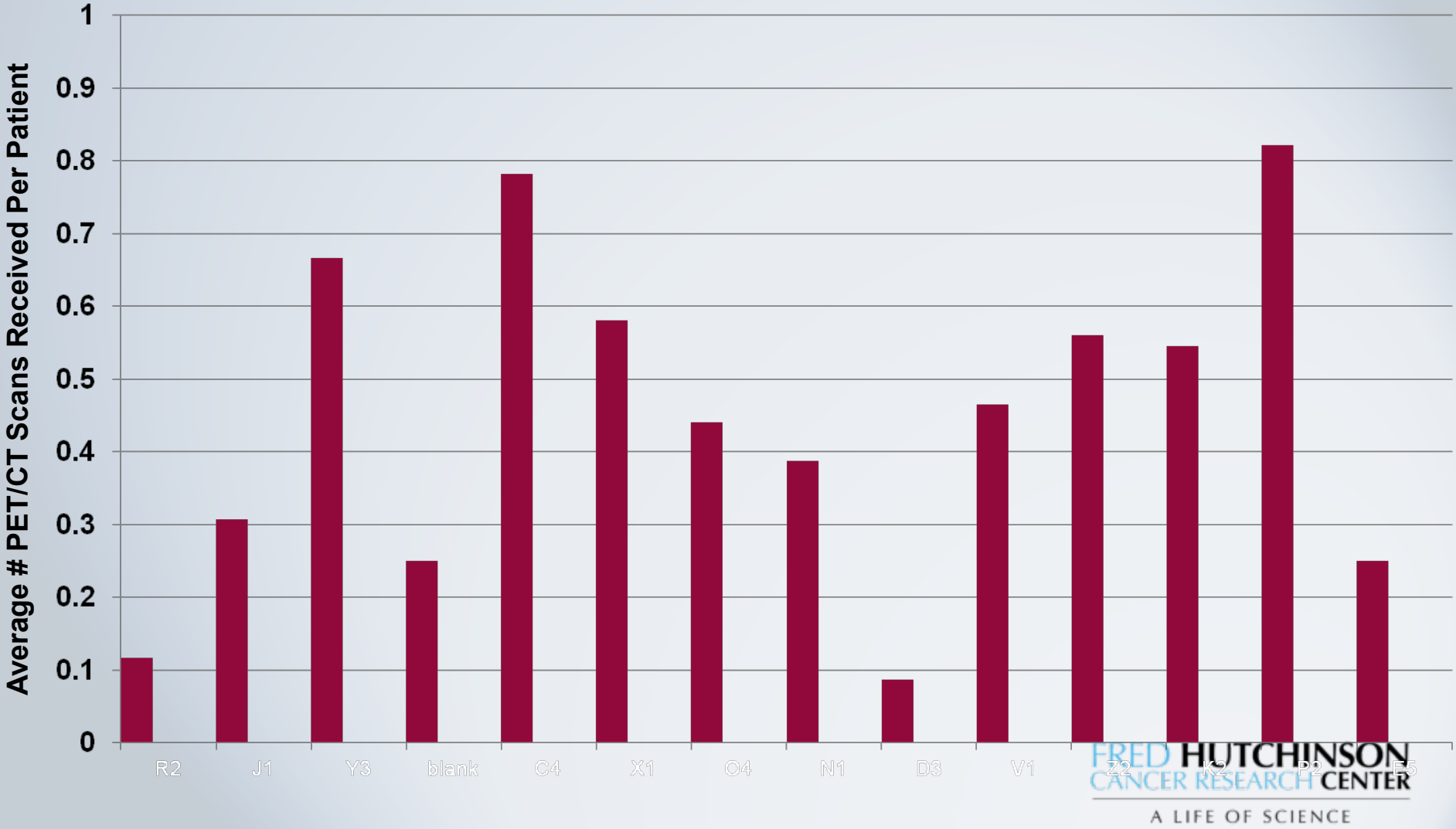
PET/CT scans ordered during diagnosis and staging
Local stage breast cancer, 0-1 comorbidity
High volume oncology clinics, Puget Sound



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Toward a Shared Understanding of Value in Cancer Care

"An intervention in cancer care can be described as having value if patients, their families, physicians, and health insurers all agree that the benefits afforded by the intervention are sufficient to support the total sum of resources expended for its use."

Ramsey S Schickendanz A. Oncologist 2010:S1:1

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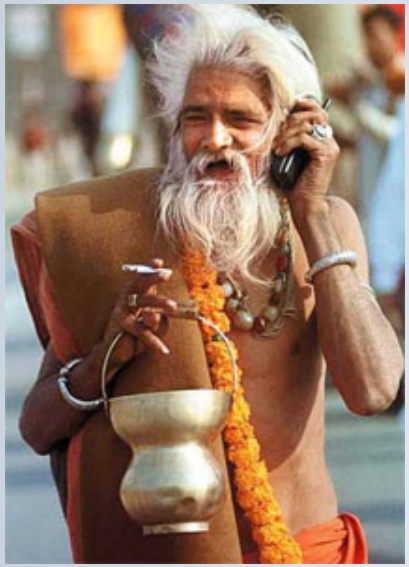
Cultural Transitions: Sometimes Easy, Sometimes Not



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