Improving the Quality of Cancer Care in an Aging Population: Challenges and Opportunities Through Research

Steven Clauser, PhD
Chief, Outcomes Research Branch
Applied Research Program
Division of Cancer Control and Population Sciences

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What is quality?

- Knowledge-based
- Patient-Centered
- Systems-minded

The degree to which health services for patients and populations:
- Increase the likelihood of desired health outcomes,
- Are consistent with current professional knowledge, and
- Provide coordination and continuity of care throughout the entire cancer experience.

What is quality?
**SEER-Medicare Data Inform Research on Quality of Care Across the Cancer Continuum**

<table>
<thead>
<tr>
<th>Screening/ Detection</th>
<th>Diagnosis/ &amp; Treatment</th>
<th>Survivorship</th>
<th>Secondary Occurrence</th>
<th>Terminal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of PSA testing, mammography, sigmoidoscopy/ colonoscopy</td>
<td>Patterns of care Peri-operative complications Volume outcomes studies Comorbidities Health disparities</td>
<td>Late effects of treatment Post-diagnostic surveillance Treatment of prevalent cancers Survival</td>
<td>Rates of recurrence/ second primaries Relationship of second events to initial treatment and ongoing surveillance</td>
<td>Use of hospice End-of-life patterns of care</td>
</tr>
</tbody>
</table>

Over 450 SEER-Medicare articles in print
NCI Consortium-based Research Platforms

PROSPER

Population-based Research Optimizing Screening through Personalized Regimens (PROSPR)

Cancer Research Network

Using Electronic Medical Records to Help Your Patients Quit Smoking

NCI Community Cancer Centers Program

The NCI Community Cancer Centers Program (NCICCP) is a three-year pilot program to test the concept of a national network of community cancer centers to expand cancer research and deliver the latest, most advanced cancer care to a greater number of Americans in the communities in which they live.

The pilot program is designed to encourage the collaboration of private-practice medical, surgical, and radiation oncologists, with close links to NCI research and to the network of 63 NCI-designated Cancer Centers principally based at large, research universities.

The NCICCP seeks to:

- Bring more Americans into a system of high-quality cancer care
- Increase participation in clinical trials
- Reduce cancer healthcare disparities
- Improve information sharing among community cancer centers

CanCORS

Share Thoughts on Care

The National Cancer Institute is examining Share Thoughts on Care, which includes measurements from 14 hospitals, managed care organizations, and research organizations across the country. Elmhurst Hospital Centers are also participating in the project, the Department of Veterans Affairs implemented the system.
The Evidence Gap in Genomic Medicine

We need a roadmap for the appropriate integration of genomic discoveries into clinical practice.

by Muin J. Khoury, Al Berg, Ralph Coates, James Evans, Steven M. Teutsch, and Linda A. Bradley

ABSTRACT: An ongoing dilemma in genomic medicine is balancing the need for scientific innovation with appropriate evidence thresholds for moving technology into practice. The current low threshold allows unsubstantiated technologies to enter into practice, with the potential to overwhelm the health system. Alternatively, establishing an excessively high threshold for evidence could slow the integration of genomics into practice and present disincentives for investing in research and development. Also, variable coverage and reim-

Perspective

The Human Genome And Translational Research: How Much Evidence Is Enough?

Given the lack of a robust translational infrastructure, conflict between those developing new technologies and those who must use or pay for them seems inevitable.

by Janet Woodcock

ABSTRACT: Multiple new genomic diagnostic tests are currently under development. Given the lack of an efficient translational infrastructure, it is not clear how, or whether, robust evidence for their clinical value will be generated. [Health Affairs 27, no. 6 (2008): 1616–1618; 10.1377/hithaff.27.6.1616]
Conceptual Framework: PCC Monograph

Six Functions

• Exchanging Information
• Facilitating Decision-making
• Managing Uncertainty
• Responding to Emotions
• Enabling Self-management
• Fostering Healing Relationships

Patient-Centered Care Tools for Patients and Providers

- Measuring and Assessing PCC in Practice
  - Cancer Research Network recently conducted formative research with patients, clinicians, administrators, and IT leaders in HMOs to develop a blueprint for an electronic system to track and assess patients’ communication experiences over time.

- AHRQ/NCI Collaboration on cancer CAHPS
  - Developed and currently testing a cancer version of the CAHPS survey to measure patient experiences with care while receiving surgery, chemotherapy, or radiation.
Patient-Centered Surveillance Research

SEER-MHOS links SEER cancer registry data with health-related quality of life data from CMS’ Medicare Health Outcomes Survey (MHOS):

  - Over 280,000 completed MHOS surveys in SEER-MHOS
  - 62,113 cancer patients/survivors linked to SEER

In Spring 2011, NCI launched a public research resource similar to SEER-Medicare to stimulate extramural research

SEER-CAHPS links SEER cancer registry with patient experience data from CMS’ Consumer Assessment of Healthcare Providers and Systems Survey (CAHPS)

- Linkages underway to inform cancer patient and survivor experience with care in both managed care and fee-for-service.
Patient Reported Outcomes Measurement Information System - Multiple Delivery Platforms

- Personal Interview
- Dynamic Assessments
- Hand-held Device
- Internet Administered
- Interactive Voice Recognition
- Self Administered
- Telephone Interview
The outcomes of care are function of health care system properties: care processes

Processes of Care Across the Cancer Care Continuum

Types of Care
- Risk assessment
- Primary prevention
- Detection Screening Symptomatic
- Diagnosis
- Cancer or precursor RX
- Post-treatment survivorship
- End-of-life care

Transitions in Care

Process of care impacts

Patient & population outcomes

Efficiency
Equity
Safety
Timeliness
Patient-centeredness
Sub-process effectiveness

Patient
Risk status
Biologic outcomes
Health related quality of life & well-being
Quality of death
Financial burden
Patient experience

Population
Mortality
Morbidity
Cost-effectiveness

Each type and transition in care offers opportunities for improvement. Within and between types of care there are interfaces and steps which may be articulated to identify more opportunities.

Evidence Integration Triangle (EIT)

Intervention Program/Policy
(Prevention or Treatment)
(e.g., key components; principles; guidebook; internal & external validity)

Participatory Implementation Process
(e.g., stakeholder engagement; CBPR; team-based science; patient centered)

Practical Progress Measures
(e.g., actionable & longitudinal measures)

Multi-Level Context
- Intrapersonal/Biological
- Interpersonal/Family
- Organizational
- Policy
- Community/Economic
- Social/Environment/History

Feedback

Bringing Practice and Research to Communities

Building Research Platforms one project at a time is expensive and may not be sustainable.

Options for leveraging

- Collaborate with established learning communities
  - ASCO Quality Oncology Practice Initiative
  - Commission on Cancer Rapid Quality Reporting Initiative
- Extend community-based clinical trial infrastructures
  - Community Clinical Oncology Program
  - NCI Community Cancer Centers Program
- Leverage experience/capacity of federal health care delivery/policy agencies – VA, HRSA, IHS, CMS