Future of Cancer Health Economics Research: Conference Synthesis

Robin Yabroff
Scientific Vice President, Health Services Research
Robin.Yabroff@cancer.org
Goals of the Conference

• Identify challenges, gaps, and unmet needs for conducting cancer health economics research

• Develop suggestions/ideas to address the identified challenges and to support the development of the field of cancer health economics research
Portfolio Analysis and Literature Review

- Small proportion (<1%) of NCI-funded grants discussed economic outcomes/analyses in their specific aims or abstract
  - May not have been primary focus of grant
- Grants and published reviews focus primarily on CEA and cost of care studies
- Breast cancer is commonly studied
- Opportunities across the cancer control continuum
Framework of Cancer Health Economics Research

Cancer Control Continuum

- Risk Assessment and Prevention
- Screening and Detection
- Diagnosis
- Treatment
- Survivorship
- End-of-Life Care
Common Themes: Data Limitations

- Fragmentation of data systems
  - Limited generalizability
  - Lack of longitudinal data
- Absence of key measures
  - Exposures/risk factors
  - Patient and provider characteristics
  - Treatment eligibility and preferences
  - Outcomes (e.g., HRQoL, recurrence, survival)
  - Caregivers, including multiple caregivers
- Timeliness
- Necessary trade-offs
Opportunities: Data Resources

- Novel linkages
- Enhancements to existing data
- New uses of data (e.g., social media, consumer spending patterns) and technologies
- Sources of direct non-medical and indirect costs
- APCD and multiple payer linkages within states
- Addition of standardized economic measures to prospective observational studies and trials
Opportunities: Methods

• Microsimulation models and modelling networks (i.e., CISNET)
• Randomization of volunteer practices in policy studies, esp. value-based payment models
• Econometric methods for observational and quasi-experimental studies
• Application of evolving data science methodologies (e.g. machine learning)
• Perspectives and timelines of decision makers (e.g., state health departments, policy makers)
• Value of information to inform priorities
Opportunities: Structural and Policy Factors

- Organization of care
  - Value-based payment models
  - Policy and market factors
- Care delivery
  - Quality of care: overuse, underuse, and misuse of services
  - Diffusion of innovation and discontinuation of ineffective care and de-implementation
- Local context
- Focus on underserved populations (e.g., uninsured, low-income, minority, rural) and interventions, not just descriptive studies, to improve health outcomes
Opportunities: Collaboration and Training

- Health economists/health services researchers, clinicians, data scientists, policy makers, advocacy and patient stakeholders
- Existing and new networks and consortia
- Cooperative groups
- Dissemination and Implementation
- Meetings and Seminars/Webinars to increase interactions
- Cross-disciplinary training – more people AND more training
- Science Communication [https://www.aldacenter.org/](https://www.aldacenter.org/)
What do we need to be successful?

- Communication and Dissemination
- New data infrastructures, resources, and linkages
- Reducing disparities and enhancing health equity
Communication and Dissemination

- Highlighted by survey
- Thinking beyond peer-reviewed publications, editorials, and citation-based metrics/H-index
  - Altmetric score (news outlets, twitter, citation)
  - Social media, YouTube, podcasts
  - Lay press coverage and Op-Eds
  - Other practice- and policy-relevant measures
- Considerations for scientific, policy, health system/delivery, and lay audiences
- “Life-cycle” of research and timeliness
New data infrastructures, resources, and linkages

• Strongly endorsed in survey
• SEER-CMS linkage enhancements: new measures, new files (e.g., OASIS), timeliness
• SEER-LexisNexis: financial toxicity
• NCI Observational Research in Oncology Toolbox
• Social media: emergent themes, lay discourse
• PCORnet EHR and Medicare claims for prescribed drugs
• Protection of PHI/patient privacy
• Opportunities for sharing lessons learned
• Reuse of data/data sharing for novel projects
Reducing disparities and enhancing health equity

- Longstanding disparities have adverse economic consequences
- Health insurance necessary, but not sufficient
- Central role of federal, state, employer, health care system policies
  - Medicaid expansion, coverage gaps
  - Paid sick leave and workplace protections
- Clinical trial participation -
  - Ethical issue, potential for rationing by ability to pay
  - Financial interventions increase enrollment
- Natural experiment and policy simulations
Opportunities: Funding

• Strongly endorsed in survey
• Trans-NIH RFAs for health economic methods
• Career development awards and training grants
• Centers of Excellence for Health Economics Research
• New and enhanced networks (e.g., PROSPR) with key measures for addressing health economics research questions
• Targeted supplements for health economics questions
• Enhancement of CISNET for policy-relevant questions
• Economic analyses alongside clinical trials
Next Steps to Support the Development of Cancer Health Economics Research

• Development, organization, and structure of training programs for cancer health economics research
• Fostering interdisciplinary/transdisciplinary collaborations in cancer health economics research
• Improving data accessibility for health economics research without compromising data security
• Methods and study design for cancer health economics research