Inclusion of Economic Outcomes in NCI Grants: A Portfolio Analysis

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NCI Health Economics Portfolio Analysis

- **Goal:** Analyze the portfolio of recently-funded NCI grants to assess characteristics of those including economic analyses
  - Information on funded NIH grants is public
  - Portfolio analysis used the NIH Query/View/Report (QVR) System to identify competitive grants funded by NCI 2015-2020 (2020 partial year only) that included economic analyses

- Economic analyses included economic outcomes (e.g., costs, cost-effectiveness, financial hardship); studies related to the economics of cancer care delivery; and studies of the impacts of health economic policies, insurance, and health care reforms
Identification of NCI Funded Grants with Economic Analyses

- QVR System allows search of text phrases in grant titles, abstracts, and specific aims as well as NIH Research, Condition, and Disease Categorization (RCDC) terms for each grant
  - RCDC is a computerized process NIH uses to categorize its funding in medical research (https://era.nih.gov/about-era/nih-and-grantor/other/rcdc.htm)
- Our portfolio analysis search included 24 RCDC terms related to economic analyses and 23 text phrases searched for in grant titles, abstracts, and specific aims.
System Scan
Iterative test searches to inform keyword and text field coding selection.
- Search results ranged from n=417 to n=1,110

Search Strategy
Searched informed set of keywords/text terms (in title, abstract, and specific aims) relevant to health economics research; N=149 grants identified

Scientific Review
Scientific review for inclusion, N=102
Additional RCDC and text terms identified, 12 additional grants included (N=114)
Exclude one L30-award; final set: N=113 grants

Scientific Curation
Scientific curation and coding of each record.
Analysis based on NIH grant attributes and custom scientific coding, focusing on R01/21/03 grants (N=86).
Proportion of NCI-Funded Grants with Economic Analysis

- Among new or competing renewal grants awarded by NCI 2015-2019, 0.84% included economic analyses.
- **R01 grants only**: Among R01 grants awarded by NCI 2015-2019, 2.25% included economic analyses.
Economic Analysis Grants by Cancer Continuum Area, n=86 R grants (non-exclusive categories)
Economic Analysis Grants by Economic Analysis/Outcome, n=86 R grants (non-exclusive categories)
Economic Analysis Grants by Study Type, n=86 R grants (non-exclusive categories)
Relation of Economic Analysis with Study Type (N=86)

- Cost-Effectiveness
- Unspecified Costs
- Policy Impact
- Medical Care Costs
- Financial Hardship

% of Grants with Study Type

Interventional RCT
Simulation/Model
Retrospective
Observational
Funding Study Section

- Many of the identified funded grants were reviewed by the Health Services Organization and Deliver (HSOD) Study Section.

- HSOD has ended; two new Study Sections have been initiated that include a focus on health economics:
  - Health Services: Quality and Effectiveness: focus on the provision of health services, healthcare quality, effectiveness, and individual/patient health outcomes. Studies focus on the access/receipt/utilization of services, cost-effectiveness, and comparative effectiveness.
  - Organization and Delivery of Health Services: including health care financing, insurance, access, utilization and the provision of health services at the population level.
  
- [https://public.csr.nih.gov/StudySections/DABP/HDM](https://public.csr.nih.gov/StudySections/DABP/HDM)
Conclusions

• Only a small proportion of NCI-funded grants discussed economic outcomes/analyses in their specific aims or abstract

• Perspective of economic analyses was rarely mentioned

• Most grants including economic analyses focused on prevention and screening; fewer addressed cancer treatment or survivorship

• While representing a relatively small proportion of all funded NCI grants, the NCI portfolio of funded grants including economic analyses is diverse, covering a range of cancer types, study designs, and economic analyses