


DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION




CDC's National Program of Cancer Registries
Economic Analysis

Florence Tangka, Ph.D.
EARB/CDC

Jeremy Green, B.A.
RTI

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NPCR Cost Study Team


- Florence Tangka, Ph.D., CDC
- Fran Michaud, C.T.R., B.S., CDC
- Hannah Weir, Ph.D., CDC
- Sujha Subramanian, Ph.D., RTI, International
- Jeremy Green, B.A., RTI, International

Acknowledge the participation of the registries and NPCR team




Overview of NPCR

- In 1992, CDC established NPCR to collect complete, timely, accurate population-based cancer incidence data.
- To date, there has been no comprehensive analysis of the true cost of the NPCR.
- A comprehensive economic assessment of the cost and cost-effectiveness of the registry operations will provide both CDC and the registries with better tools to improve efficiency and make resource allocation decisions that meet program priorities.




Overall Purpose of the Economic Analysis

- Estimate the cost of cancer registry operations
- Identify the costs of core and advanced activities
- Evaluate factors that impact cost of registry operations
- Assess cost effectiveness of the registries
- Develop resource allocation tool



Specific Questions for the Economic Analysis

- What are the economic costs of performing core and advanced activities in CCRs?
- What factors influence costs?
- How much funding do CCR require to enhance and/or improve their infrastructure and operations?
- Are there specific modifications that can be adopted to improve the efficiencies of registry operations?
- What model/tool/formula can aid CDC in equitably allocating resources to CCRs?



Project Framework


Phase I: Pilot site visits; preliminary cost data collection & identify effectiveness measures

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Phase II: Developed economic models & comprehensive cost data-collection tool; Obtain OMB clearance

Phase III: Administer questionnaire, collect and analyze data

<p>Task 1: Perform cost analysis</p>	<p>Task 2: Perform cost-effectiveness analysis</p>	<p>Task 3: Create resource NPCR allocation tool</p>
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Data Collection Approach



Data Collection Tool

- Cost Assessment Tool (CAT)
 - Includes questionnaire, definitions and automated data checks
 - Pilot tested in 7 registries
- Collect information from all NPCR CCRs
 - Web-based data collection system
- The CAT collects information on resources spent and costs associated with various core and advanced NPCR activities



Core Activities

- Management
- Training
- Database management
- Case ascertainment
- Death certificated clearance
- Quality assurance and improvement
- Developing analytic files
- Analyzing data and generating reports
- Sharing cases
- Reporting requirements to CDC, NAACCR

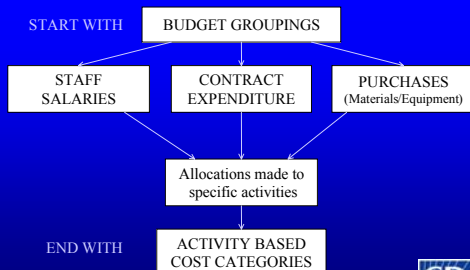


Advanced Activities

- Automatic casefinding
- Electronic case reporting and data encryption
- Geocoding cancer cases
- Survival analysis
- Linking records to other state-wide or national databases
- Special studies and advanced analysis
- Publications



Cost Data Collection Approach



Staff Cost and Activities

Core Activities

- Management (managing people)
- Administration (including clerical, logging, mailing, filing)
- Training of registry staff
- Training of others by registry staff
- Database management (including system development and modification)
- IT support
- Case ascertainment (including tumor linkage and data item consolidation)



75%	
10%	95%



Progress to Date

- Identified core and advanced activities
- Analyzed the Annual Program Evaluation Instrument (APEI)
- Performed site visits to 5 registries to understand data collection infrastructure and ability to provide activity based cost data
- Developed Cost Assessment Tool (CAT)
- Collected cost data from 7 registries to pilot test CAT
- Performed preliminary analysis of data from 7 registries (*presented today*)



Preliminary Results from Pilot Test



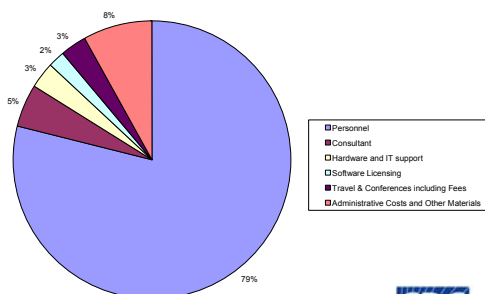
Proportion of Registry Costs by Budget Categories

Proportion of Registry Cost by Budget Categories	
Budget Categories	(%)
Personnel	79.4%
Consultant	5.1%
Hardware and IT support	2.9%
Software Licensing	2.2%
Travel & Conferences including Fees	3.1%
Administrative Costs and Other Materials	8.0%

Source: Analysis of registry cost data from selected registries.
Note: Percentages do not add to 100 due to rounding.



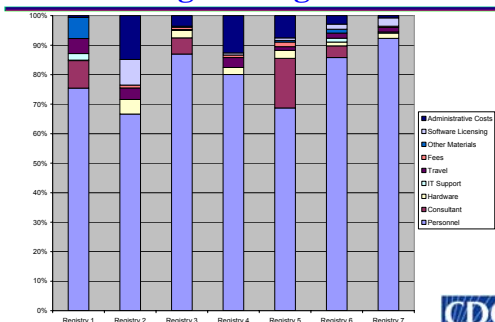
Distribution of Registry Costs by Activity: Averaged Across 7 Registries



Source: Analysis of registry cost data from selected registries.



Distribution of Registry Costs by Budget Categories



Source: Analysis of registry cost data from selected registries.

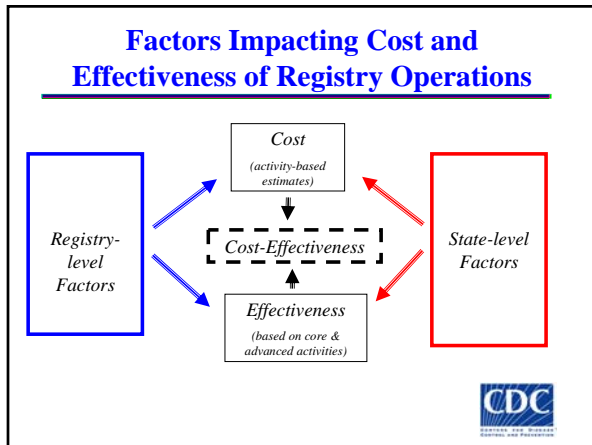
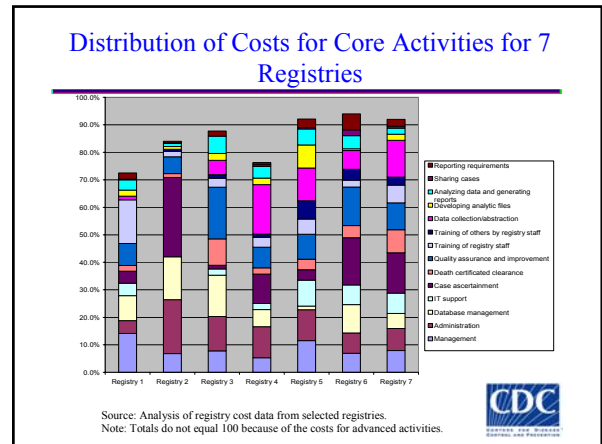
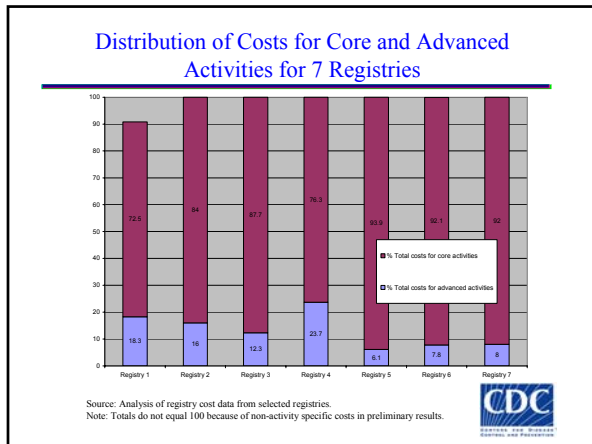


Proportion of Registry Costs by Specific Activities

Proportion of Registry Cost by Specific Activities	
Specific Activities	(%)
% Total costs for all core activities	87.1%
% Total costs for all advanced activities	11.8%
% Core costs for specific activities:	
Management and administration	31.8%
Case ascertainment and death clearance	14.2%
Database management and IT	10.8%
Quality assurance and improvement	16.4%
Training	8.1%
Data collection and abstraction	8.1%
Data file development and analysis	7.2%
Reporting requirements and case sharing	3.2%

Source: Analysis of registry cost data from selected registries.
Note: Percentages do not add to 100 due to rounding.





Central Cancer Registry Level Factors

	Impact program cost	Impacts registry effectiveness
Organizational structure	X	X
Reporting non-resident cases and data exchanged caseload	X	X
Reporting formats (paper, web-based, other electronic linkages, or diskettes)	X	X
Data collection process (percent of data abstracted directly from hospitals)	X	X
Database management software	X	
Work mix (core versus advanced activities)	X	X
Reporting requirements to other organizations	X	X
Level of funding	X	X

State Level Factors

	Impact program cost	Impacts registry effectiveness
Volume of cases	X	
Abstracts versus incidence cases	X	
Proportion of death certificate only cases	X	X
Size of area served	X	X
Presence of rural areas	X	X
Number of CTRs in hospital-based registries	X	X
Quality of facility reporting and presence of hospital-based registries	X	X
Geographic location (price differences)	X	

- ### Next Steps
- Finalize pilot data collection and analysis.
 - Submit package for OMB clearance.
 - Once OMB clearance is received, collect the cost data from all registries for three years.
 - Perform cost and cost-effectiveness analysis.
 - Develop resource allocation tool.
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Cost Study Plan

Project Time Schedule

Activity	Time schedule
Orientation/Training Meeting	Jan 2008
Initiate Data Collection	Feb 1, 2008
Year 1 of Data Collection	Spring 2008
Year 2 of Data Collection	Spring 2009
Year 3 of Data Collection	Spring 2010
Close Data Submission	April 30, 2010
Validation	May – June 2010
Analysis	July – September 2010
Final Report & Publications	October – November, 2010

Notes:

CAT will be shared with Registries in Fall of 2007 allowing for familiarity with data elements before collection of data. Preliminary data analysis and validation checks will be performed during the 3 years of data collection.



Thanks!

Comments/suggestions/Questions

Contact Information

Florence Tangka

FTangka@cdc.gov

770 488 1183

Jeremy Green

jegreen@rti.org

781 434 1701

