ASSESSING RESEARCH DATA COSTS

A Checklist for Administrators at Research Institutions

This checklist is generalized from advice in *Life-Cycle Decisions for Biomedical Data: The Challenge of Forecasting Costs*. Download the full report at **nap.edu/25639.**

Foster implementation of the cost forecasting framework

- ✓ Encourage researchers to think about data costs beyond the current state or funding period
- ✓ Outline resources and personnel for researchers to consult regarding data characteristics
- ✓ Incorporate data management activities throughout the data life cycle
- ✓ Consider disruptors and communicate how they may affect researchers and their data costs

Improve training and awareness for researchers

- ✓ Identify where costs will be accrued, who will pay for them, and who has managerial responsibility
- ✓ Identify motives for data sharing among researchers
- ✓ Promote incentives for data preservation and curation
- ✓ Develop targeted instruction on data management practices for researchers at different career stages

Update data policies and procedures

- ✓ Assess the value of data using factors that extend beyond monetary investment
- ✓ Thoroughly investigate data storage and computation options before selecting among them
- ✓ Communicate institution-based storage options, if applicable

Drive future improvements in the ability to forecast costs

- ✓ Recognize that scientific data constitute an asset and that data stewardship requires support
- ✓ Systematically collect data on costs associated with the biomedical research data enterprise
- ✓ Develop mechanisms to help with creating and maintaining data management plans

Expand the capacity to make sound data management decisions

- ✓ Recognize the value of enhancing curation, discoverability, and use of data
- ✓ Structure cost forecasts for active repository resources around communities and research programs rather than individual research efforts
- ✓ Support standardization efforts for cost estimation
- ✓ Explicitly support metadata preparation
- ✓ Identify incentives, tools, and training for adopting good data management practices
- ✓ Develop mechanisms to inform researchers of the actual costs paid for services rendered
- ✓ Encourage researchers to limit the costs of services rendered

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