

Design of a Toolkit to Add Electronic Clinical Data to Statewide Hospital Administrative Claims Data

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Target Population: Not Applicable

Summary: As health care reform efforts increase, so does the importance of reliable and structured data streams for hospitals that are targeting quality improvements and consumers who are making health care decisions. Adding clinical data, especially “present-on-admission” (POA) codes and laboratory results, to existing administrative datasets is a practical, effective, and cost-efficient method to improve the accuracy and content of hospital-quality assessments and provide quality improvement evidence.

Based on pilot projects sponsored by the Agency for Healthcare Research and Quality (AHRQ) in four Healthcare Cost and Utilization Project (HCUP) Partner States (Florida, Minnesota, Virginia, and Washington), this project designed a toolkit to allow statewide data organizations to enhance their administrative data’s clinical content.

Based on this input and review of materials developed by the AHRQ-funded pilots, recommendations were developed on the content and dissemination strategy for the toolkit. Recommendations included designing a toolkit of the materials developed by the pilot States and other HCUP partners, and developing new benchmarking tools to evaluate the quality of POA results. Toolkit information is disseminated through the HCUP User Support (HCUP-US) Web site, educational Webinars with HCUP partners and others, presentations at professional conferences, and a journal article to document the purpose, process, and results of working with data organizations to expand clinical data collection.

Additional information about this project is available through the [Enhancing Clinical Data Web site](#), and the [toolkit design report](#).

Project Objectives:

- Catalog tools that help data organizations increase effectiveness and efficiency when adding laboratory values or POA codes to administrative discharge records. **(Achieved)**
- Solicit input from partner organizations and statewide data organizations on ways an electronic toolkit can enhance the clinical content of statewide electronic hospital discharge abstracts. **(Achieved)**
- Develop content recommendations for an Adding Clinical Data toolkit. **(Achieved)**
- Develop a toolkit dissemination strategy. **(Achieved)**

2010 Activities: In February, an online survey collected information about POA data and lab values to assess partner interest and current activities in enhancing the clinical content of administrative data. This survey was also designed to help AHRQ determine what tools would be most useful for collecting

clinical information. Twenty-seven individuals from 25 of 42 HCUP Partner States responded to the survey, for a 60 percent response rate.

Statewide data organizations participating in the HCUP provided input on useful materials and examples to include in a toolkit. For additional suggestions, two Webinars about adding clinical data were conducted in early 2010. During these events, partners discussed the types of tools for adding POA and/or lab values to administrative records for inclusion in the Adding Clinical Data Toolkit, and the biggest challenges to adding this data. Statewide data organizations also expressed uncertainty about the quality of POA codes collected.

Feedback included requests for technical information on increasing POA coding accuracy and programming code for POA screening to identify potential coding errors. Suggestions for lab data included information on establishing a business case for collection, identifying the most useful lab tests and timing relative to admission for collection, using lab coding standards, and assessing data quality.

Impact and Findings: The project's final report made specific recommendations for the Adding Clinical Data Toolkit based on information collected by the planning and pilot contracts, the partner survey, and the Webinar discussion. Recommendations included addressing all facets of data collection, redesigning the [HCUP-US Enhancing the Clinical Content of Administrative Data Webpage](#) to incorporate the toolkit, and in turn populating the toolkit with specific items from that Web page, and suggestions for toolkit dissemination.

The toolkit comprises two sections: POA and lab values. Although similar in structure, the POA section focuses more on training and results because most partners are familiar with collecting POA. The lab values section assumes that partners have little knowledge about this area and will need extensive information on the importance (business case) for collecting lab values, standardized coding and data transmission and storage issues, lab value collection options, and hospital readiness and training issues.

The final report also describes the challenges faced by the partner data organizations as they expanded the clinical data available on their administrative databases, and presents findings on potential useful tools. The resulting recommendations for building an electronic toolkit will help other partners enhance the clinical content of their statewide electronic hospital discharge abstracts. The tools will also support the entire life cycle of the project to add laboratory results, and will further efforts to improve the quality of POA coding and analysis of results.

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

Business Goal: Synthesis and Dissemination