

Evaluation of the UPI/CR Newfoundland and Labrador

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- **WHAT IS A UPI/CR?**

A UPI/CR is a Unique Personal Identifier and Client Registry. The Client Registry is a provincial database which contains the most current demographic information on clients of the provincial health and community services system, and facilitates the appropriate linkage of client records across source systems. The Unique Personal Identifier is the unique reference number that is assigned to each individual represented in the Client Registry database. The UPI/CR is the foundation for a provincial Electronic Health Record.

- **WHY DID WE DO THIS STUDY?**

The Newfoundland and Labrador Centre for Health Information (NLCHI) implemented a provincial UPI/CR in 2001. In partnership with Canada Health Infoway Inc. "Canada Health Infoway", enhancements to the original UPI/CR system were completed in February, 2005, using Best of Breed (BoB) components. These enhancements were designed to create a reusable client registry solution which can be shared with other jurisdictions across Canada (CR1). An evaluation of this initiative was required to (1) ensure accountability for the funding received to develop the system; and (2) ensure that important knowledge gained from the Client Registry Project in NL is documented and shared with other jurisdictions in order to enhance their EHR related initiatives.

- **HOW DID WE DO THIS STUDY?**

The evaluation was designed as a pre/post implementation study and involved a number of strategies. *Infoway* and NCLHI collaborated on the identification of the major research questions to be addressed, which focused on accountability and knowledge transfer issues. These questions were:

- What benefits were anticipated and realized arising from the implementation of the Client Registry in NL?
- What was the total cost of ownership of the Client Registry in NL?
- What were the key facilitators and barriers to successful implementation of the UPI/CR/CR1?

Data available from earlier scoping exercises contributed to the pre-implementation information. Post-implementation data was collected via key informant interviews and a secondary data analysis of project documents related to costs and other resource requirements.

- **WHAT WERE THE KEY FINDINGS FROM THE STUDY?**

- The projects resulted in the successful implementation of a reusable client registry system.
- The major benefits achieved were improved data access and data quality; revenue and cost recovery/avoidance opportunities; and capacity building, including the development of a Toolkit which can be shared with other jurisdictions.
- The total cost of ownership for the UPI/CR/CR1 in NL was approximately \$8.9M, with ongoing annual costs of approximately \$600,000.
- Key facilitators included leadership, stakeholder engagement processes, team work and preparatory work among system users.
- Key barriers involved unanticipated changes in project scope, timing of the implementation, and limitations in the supply of human resources available.

- **HOW WILL THE RESULTS OF THIS EVALUATION STUDY BE USED?**

The findings from this study will be shared with other jurisdictions across Canada to assist them in: (1) providing evidence regarding the costs and benefits of a UPI/CR to their funding partners; (2) planning the implementation of a similar system; and (3) leveraging and consolidating resources and expertise across Canada to undertake evaluations of health information system projects.

- **HOW CAN I LEARN MORE ABOUT THIS PROJECT?**

If you are interested in learning more about the evaluation study, you can contact Dr. Doreen Neville (709-777-6215; dneville@mun.ca). If you would like a copy of the report, it can be downloaded from the following site: www.nlchi.nl.ca/research_evaluations.asp