

TITLE:

Implementation of a Patient Level Costing System and Ancillary Services in the Province of Quebec

Introduction

In 2012-2013, the Province of Quebec (Canada) started investigating ways in which it could make changes to the funding of its Public Health and Social Services network, including the introduction of patient-based funding. A prerequisite for this transformation was a developed understanding of the cost of providing healthcare services across different settings.

As a result, PowerHealth Solutions was awarded a 3-year contract to implement its Patient Level Costing solution. PowerPerformance Manager (PPM), in 31 Health and Social Services health networks across Quebec in May 2017.

The implementation was far more than just the introduction of Patient Level Costing encompassing data integration and the development of over 1,800 interfaces, the development of a standardised Costing methodology, the provision of Lean Six Sigma Green and Black Belt Training, clinical engagement, data analysis, the development of a centralised reporting database for the Ministry of Health and Social Services and a Comparative Portal so that each establishment can easily compare its performance to others.

Methods

The steps and major elements of this wide-ranging project are listed below. The tasks mainly took place in parallel following the completion of project initiation tasks. Each portion can influence the other in an agile method:

- Quebec Project context and objectives
- Project Governance
 - Governance structure
 - Finance, data normalization and Methodology committees
- Integration and Normalization of Clinical and Financial Data
 - State-wide clinical system inventory
 - Standard views,
- Implementation of the solution throughout the Public Health and Social Services Network (PHSSN)
 - Approach
 - Formation of a team (in the PHSSN) providing customer support
- Cost results, activities, and case-mix analysis:
 - Development of support packages
 - Design of an analysis tool
- Submitting Data to the Ministry:
 - Costing results, raw finance data and methodologies
- Centralized auditing capacity:
 - Provincial Cost Database and Portal
 - Provincial Financial and Methodological Database

Results

This Project was completed in accordance with the planned time frames and within the budget due to an effective and flexible project management approach, which provided feedback and learning for use in other similar implementations.

The agile mode where certain elements are decided during the project represents a challenge to manage the sometimes-changing expectations of the customer and ensure that the deliverables remain within scope.

Financial and clinical data standardization are fundamental elements in Patient Level Costing, to ensure that the results are fully comparable across establishments in the PHSSN.

The local availability of data and the presence of the portal allows the establishments to assess the effectiveness and efficiency of care trajectories and to challenge their costs.

Conclusions

This project demonstrates that, even starting from a lack of costing history in a province of 8 million inhabitants served by a significant number of very diverse facilities, it is possible in only three years to establish an infrastructure that provides the Quebec Ministry of Health and Social Services and establishments with data that will allow them to make informed changes to the health system in the future. Such an approach provides a catalyst for changes in clinical practice.