

## Predicting health care utilization using CIHI's Population Grouping Methodology

Rosehart, Y<sup>1</sup>

<sup>1</sup>Canadian Institute for Health Information

### Introduction

CIHI's Population Grouping Methodology uses data from multiple sectors to create clinical profiles and to predict the entire population's current and future morbidity burden and health-care utilization. Outputs from the grouper can be applied to healthcare decision making and planning processes.

cations for health policy makers, planners and funders. The presentation will focus on how stakeholders can apply the outputs to aid in their decision-making and planning processes.

### Objectives and Approach

The population grouping methodology starts with everyone who is eligible for healthcare, including those who haven't interacted with the healthcare system, providing a true picture of the entire population. The grouper uses diagnosis information over a 2-year period to create health profiles and predict individuals' future morbidity and expected use of primary care, emergency department and long-term care services.

Predictive models were developed using age, sex, health conditions and the most influential health condition interactions as the predictors. These models produce predictive indicators for the concurrent period as well as one year into the future.

### Results

The power of the model lies in the user's ability to aggregate the data by population segments and compare healthcare resource utilization by different geographic regions, health sectors and health status.

The presentation will focus on how CIHI's population grouping methodology helps client's monitor population health and conduct disease surveillance. It assists clients with population segmentation, health profiling, predicting health care utilization patterns and explaining variation in health care resource use. It can be used for risk adjustment of populations for inter-jurisdictional analysis, for capacity planning and it can also be used as a component in funding models.

### Conclusion/Implications

CIHI's population grouping methodology is a useful tool for profiling and predicting healthcare utilization, with key appli-

