# A New Tool for Costing Health Care in Manitoba



## THE MANITOBA CENTRE FOR HEALTH POLICY AND EVALUATION

Manitoba spends almost \$2 billion per year providing health care to Manitobans. We know how much is spent in total on hospital care, physician services, Pharmacare and other services, and we even know how much is spent to run specific institutions and programs. But until now, we have not had the tools to estimate the costs of providing care at a finer level of detail.

For instance, we have not been able to estimate the average cost of treating an episode of care, such as a heart attack or stroke. Nor have we been able to determine how much money is spent on prevention versus cure—for example, how much is spent on drugs to prevent strokes, compared to spending to treat strokes once they occur. In addition, we have been unable to determine how much we spend to provide care to groups or individuals with specific illnesses. This is especially difficult when services are provided in a variety of settings—as is the case for stroke—where patients may receive care in hospital, home, nursing home and other locations.

A new report from the Manitoba Centre for Health Policy and Evaluation (MCHPE) addresses these issues. The Cost List report builds on earlier MCHPE work to provide researchers and others with a tool for estimating the costs associated with all publicly-funded health care in Manitoba. It represents one of the most comprehensive attempts to put together system wide cost data to date.

The report lists standard costs for:

- Inpatient hospital care by type of case and type of hospital
- □ Hospital outpatient procedures
- Emergency room nursing care
- Prescription drugs
- □ Diagnostic procedures, including both radiological and laboratory procedures
- Care in Personal Care Homes (nursing homes)

- □ Home care
- Chronic and long term care hospitals
- Physician services

The Cost List uses "standard" costs as a method of describing the cost of health care. With this approach, the same unit costs are used for a given group of services, no matter where they are provided. A standard cost list therefore provides a set of recommended unit

Table	1: Hospit	al Costs	s for Sel	ected C	ases

	ated Cost
Related Group (RDRG) \$	Per Case
Chronic Obstructive Pulmonary Disea	se 2,226
*Chronic Obstructive Pulmonary Disea	se 4,438
Major Small & Large Bowel Procedur	es 4,616
*Malignant Breast Disorders	4,338
Prostatectomy	1,983
Depressive Neuroses	1,973
Laparoscopic Cholecystectomy	1,992
Day Procedure Group (DPG)	
Endoscopy - Ear, nose, throat	560
Cardiac Catheterization	1,018
Cholecystectomy	1,149
Myelogram	414

\* With moderate complications and co-morbidity; all others have none.

costs enabling the user to make comparisons across many different settings.

One of the most exciting features of MCHPE's Cost List is that it makes it possible to estimate the cost of hospital care (Table 1). Until now, cost estimates for different types of cases treated in hospital have not been

available. The report uses the RDRG (Refined Diagnostic Related Group) method of identifying and grouping hospital cases. This approach provides standard costs for the many hundreds of different types of cases treated in Manitoba hospitals. It provides information for inpatient cases as well as for procedures provided on an outpatient basis. It also provides different estimates of costs according to how "complex" cases are. Less-complex cases—those in which patients have no major complications or co-morbidity are generally less expensive than those in which patients have major complications and co-morbidity. Table 1 provides an example of estimated costs for some of the types of hospital cases available in the Cost List.

The use of standard costs detailed in this project will allow researchers to conduct important research such as:

- Describing expenditures for specific types of care:
- ☐ Making comparisons of the cost of health care received by two or more groups; and
- □ Doing "what-if" modeling to understand the cost impact of alternative interventions.

When used in combination with the administrative data collected by Manitoba Health and contained in the Manitoba Health Research Data Base, the Cost List will be an even more powerful tool for researchers and policy makers. A wide range of cost-related questions can be answered. Following are three possible examples:

1. Objective: To compare the annual cost of health care for people in different age groups

**Method:** For each designated age group, use the Manitoba Health Research Data Base to sum the costs of hospital care, physician services, prescription drugs, outpatient diagnostic services, nursing home care and home care.

2. Objective: To compare the cost of health care for people living in different regions of Manitoba

**Method:** Using the Cost List and the Manitoba Health Research Data Base, it will be possible to estimate the average cost per person for each of the regions in Manitoba.

3. Objective: To compare the cost of providing care in hospital with the cost of providing home care plus drug therapy.

If the case was treated with a hospital stay? Average case cost .....\$2,652

If a prescription drug was provided and the person was visited at home by a nurse for 30 days?

### **Prescription Drug Cost**

120 tablets @ \$1.26 each +

\$6.21 dispensing fee \*\$157.41

### **Home Care Cost**

2 hours per day for 30 days

.....\$1,724.40 @ \$28.74 per hour

#### Total cost \$1,882

Assuming the outcome of each alternative is the same, the health care costs will be less if the prescription drug is provided in conjunction with home care.

\* This is the full fee for the prescription. Under the Manitoba Pharmacare program, an individual may be eligible for reimbursement for all or some of this.

Some cost estimates are listed directly in the MCHPE report. For others, users are referred to the authoritative sources. For example, the Manitoba Interchangeability Formulary includes price data for prescription drugs. And the Manitoba Health Services Insurance Plan Physician's Manual provides information on the fees paid to physicians for different types of services.

The Cost List is an important tool for researchers and others who are interested in the costs of health care. The Winnipeg and Regional Health Authorities, and groups that want to compare the costs of health care will find it a valuable resource. Manitoba now has a single place to go for information about costs for different types of health care.

Summary by Greg Finlayson, based on the report: Cost List for Manitoba Health Services, by Philip Jacobs, Marian Shanaban, Noralou P Roos and Michael Farnworth.