The Direct Cost of Hospitalizations in Manitoba, 2005/06

March 2009

Manitoba Centre for Health Policy
Department of Community Health Sciences
Faculty of Medicine, University of Manitoba

Gregory S. Finlayson, BA
Julene Reimer, BA
Matthew Dahl, BSc
Matthew Stargardter, MA
Kari-Lynne McGowan, MSc

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Manitoba Centre for Health Policy
Dept. of Community Health Sciences
Faculty of Medicine, University of Manitoba
4th Floor, Room 408
727 McDermot Avenue
Winnipeg, Manitoba, Canada R3E 3P5

Email: reports@cpe.umanitoba.ca
Phone: (204) 789 3819
Fax: (204) 789 3910

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The Manitoba Centre For Health Policy

The Manitoba Centre for Health Policy (MCHP) is located within the Department of Community Health Sciences, Faculty of Medicine, University of Manitoba. The mission of MCHP is to provide accurate and timely information to health care decision-makers, analysts and providers, so they can offer services which are effective and efficient in maintaining and improving the health of Manitobans. Our researchers rely upon the unique Population Health Research Data Repository (Repository) to describe and explain patterns of care and profiles of illness, and to explore other factors that influence health, including income, education, employment and social status. This Repository is unique in terms of its comprehensiveness, degree of integration, and orientation around an anonymized population registry.

Members of MCHP consult extensively with government officials, health care administrators, and clinicians to develop a research agenda that is topical and relevant. This strength, along with its rigorous academic standards, enables MCHP to contribute to the health policy process. MCHP undertakes several major research projects, such as this one, every year under contract to Manitoba Health and Healthy Living. In addition, our researchers secure external funding by competing for research grants. We are widely published and internationally recognized. Further, our researchers collaborate with a number of highly respected scientists from Canada, the United States, Europe and Australia.

We thank the University of Manitoba, Faculty of Medicine, and Health Research Ethics Board for their review of this project. MCHP complies with all legislative acts and regulations governing the protection and use of sensitive information. We implement strict policies and procedures to protect the privacy and security of anonymized data used to produce this report and we keep the provincial Health Information Privacy Committee informed of all work undertaken for Manitoba Health and Healthy Living.

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EXECUTIVE SUMMARY

This report provides a valuable update to work first published by the Manitoba Centre for Health Policy in 1999. It includes a cost list showing the direct cost of hospitalization for all discharges in Manitoba in 2005/06 and updates the method of calculating these costs to be consistent with methods that are used elsewhere. While very detailed information is provided for different categories of hospitalizations (i.e., different age groups and case complexities), a summary value is provided for each type of discharge. For example, after taking into account the mix of ages and complexity of people having hip replacements, we calculated the average direct hospitalization cost for a hip replacement as $6,760—depending upon the age and health status of the patient this could range from $5,576 to $16,139. We also know, for example, that the hospitalization cost for the vaginal delivery and care of a healthy newborn was $2,187.

In addition to the cost list, we have provided updated values that may be used for economic evaluations. The *average cost per weighted case* allows researchers to conduct population-based hospitalization costing studies. These studies can provide information relevant to policy development. For example, when combined with other resources, it allows us to look at the cost of treating chronic disease in the province or to consider the importance of pre-natal care in avoiding at-risk births.

Developing a cost list involves two steps: determining the average cost per weighted case and then applying this value to standardized weights for different types of hospitalizations. The average cost per weighted case is calculated first by identifying all costs that are directly associated with inpatient care (e.g., nursing services, medical supplies, diagnostic services), and then dividing this value by the *weight* for all inpatient cases. The weight for an inpatient case is a relative value that is assigned to each type of case, which reflects the cost of different types of hospitalizations. For example, the hospitalization for a hip replacement in an otherwise healthy adult is expected to cost approximately 2.8 times more than a similar person who is treated for chronic bronchitis. Once the average cost per weighted case is calculated, it is multiplied by the standardized weight for each type of case—there are 472 different types of cases ranging from heart failure to frostbite to eating disorders to asthma—the resulting value is the average cost for a particular type of hospitalization.

When using the information presented here, it is important to keep in mind three things:

1. These are *standard costs*, that is, they will not necessarily represent the cost for an individual hospitalization. Each hospitalization is unique—what we present here is an average cost that would be associated with a typical case. For example, some individuals may require more pain relief following surgery than others, resulting in greater costs. As described above, standard costs are determined through the use of standard weights. These weights have been developed by using actual costs of care that occurred in hospitals elsewhere in Canada.

An alternative to standard costs are *actual costs* where, for each patient, the goods and services that are received by the individual are summed to provide a total cost for the case. When actual costs are determined, the costs for similar types of cases may be different. The actual costs reflect the particular care needs of each individual. Actual cost accounting requires sophisticated reporting systems that are not in place in Manitoba hospitals; while there may be value in developing these systems, they have been considered a lower priority than providing direct patient care.

2. We describe *direct costs of inpatient care*. There are many different ways of calculating costs. The approach we adopted is similar to that used by the Canadian Institute for Health Information (CIHI) and Hay Group for benchmarking in Canadian hospitals. Direct costs are those costs that can be directly attributed to inpatients—so they exclude all administrative and support services (e.g., human resources, information technology, physical plant) as well as the capital costs associated with hospitals (e.g., mortgages and leases), and the cost of regional health authority administrative offices.

3. The costs we report here are just the hospitalization costs—the costs of physician services associated with a hospital stay are not included. For example, if a person has a surgical procedure, the fee paid to the surgeon is not included and would need to be added to the costs reported here to determine the total direct cost. Information on fees paid to physicians is available from Manitoba Health and Healthy Living.

The cost list allows us to make a variety of cost comparisons. We used Case Mix Groups with complexity overlay (CMG ™ Plx ™), a grouping methodology developed by CIHI, as the way of classifying different types of cases. CMGs categorize every hospitalization into one of 472 different homogeneous groups that are expected to require similar resources. Table E.1 provides a *top 10* list of types of hospitalizations with the highest total cost for Manitoba hospitals. It is worth noting that the cost for an individual hospitalization may not be high, but because many people are hospitalized (accounting for 30% of hospitalizations), the total cost is great—these 10 types of hospitalizations account for 23% of the cost for all hospitalizations. An alternative way of looking at costs is to look at the average cost for hospitalizations. The *top 10* average costs per hospitalization are presented in Table E.2—it is noteworthy that most of these very high cost hospitalizations are relatively uncommon. In fact, for all of the *top 10* most costly individual hospitalizations, there were only 153 discharges (0.1% of all hospitalizations) in 2005/06, accounting for 2% of the total costs. Table E.3 shows the 10 most frequent reasons for hospitalization, representing 33% of all cases in 2005/06. These hospitalizations account for 20% of the costs. *Top 10* lists for all of the hospitals in each Regional Health Authority and for the residents of each region are found in Appendix 6.

Table E.1: Case Mix Groups with the Highest Total Costs, Typical Cases, Manitoba, 2005/06

CMG	Hospitalization Type	# of Cases	Average Weighted Direct Cost ($)	Total Direct Cost ($)
611	Vaginal Delivery	6,819	1,662	11,332,257
354	Knee Replacement	1,593	5,939	9,484,218
143	Simple Pneumonia and Pleurisy	2,496	2,827	7,056,063
352	Hip Replacement	1,017	6,760	6,888,157
609	Vaginal Delivery with Complicating Diagnosis	3,278	2,003	6,565,295
840	Other Admissions with Surgery	359	17,663	6,341,070
294	Esophagitis, Gastroenteritis and Miscellaneous Digestive Disease	3,697	1,636	6,056,341
253	Major Intestinal and Rectal Procedures	807	6,987	5,638,667
222	Heart Failure	1,687	3,225	5,446,784
648	Neonates Weight > 2,500 grams (Normal Newborn)	9,743	525	5,119,161
% of Provincial Total		**30%**		**23%**

Source: Manitoba Centre for Health Policy, 2009

Table E.2: Case Mix Groups with the Highest Cost per Case, Typical Cases, Manitoba, 2005/06

CMG	Hospitalization Type	# of Cases	Average Weighted Direct Cost ($)	Total Direct Cost ($)
625	Neonates Weight <750 grams	-	99,612	-
125	Tracheostomy	10	72,533	725,335
626	Neonates Weight 750-999 grams	14	69,582	974,151
175	Heart or Lung Transplant	-	63,188	-
830	Extensive Burns with Skin Graft Wound Debridement or Other Burn Procedures	11	52,339	575,730
650	Tracheostomy and Gastrostomy Procedures for Trauma	6	49,973	299,839
659	Thoraco-abdominal Procedure with Wound Debridement or Lower Extremity Procedure for Trauma	-	34,542	-
628	Neonates Weight 1,000-1,499 grams without Catastrophic Diagnosis	68	28,587	1,943,921
040	Tracheostomy and Gastrostomy Procedures	34	28,003	952,113
653	Intracranial or Femur Procedures with Thoraco-abdominal Procedures for Trauma	-	26,299	-
%of Provincial Total		**0.1%**		**2%**

"-" denotes value suppressed due to small numbers

Source: Manitoba Centre for Health Policy, 2009

Table E.3: Case Mix Groups with the Most Cases, Typical Cases, Manitoba, 2005/06

CMG	Hospitalization Type	# of Cases	Average Weighted Direct Cost($)	Total Direct Cost ($)
648	Neonates Weight > 2,500 grams (Normal Newborn)	9,743	525	5,119,161
611	Vaginal Delivery	6,819	1,662	11,332,257
294	Esophagitis, Gastroenteritis and Miscellaneous Digestive Disease	3,697	1,636	6,056,341
609	Vaginal Delivery with Complicating Diagnosis	3,278	2,003	6,565,295
143	Simple Pneumonia and Pleurisy	2,496	2,827	7,056,063
646	Neonates Weight > 2,500 grams with Caesarean Delivery	2,394	914	2,188,341
222	Heart Failure	1,687	3,225	5,446,784
579	Major Uterine and Adnexal Procedures without Malignancy	1,629	2,685	4,373,175
354	Knee Replacement	1,593	5,939	9,484,218
846	Aftercare Following Surgery or Treatment	1,372	903	1,239,011
% of Provincial Total		**33%**		**20%**

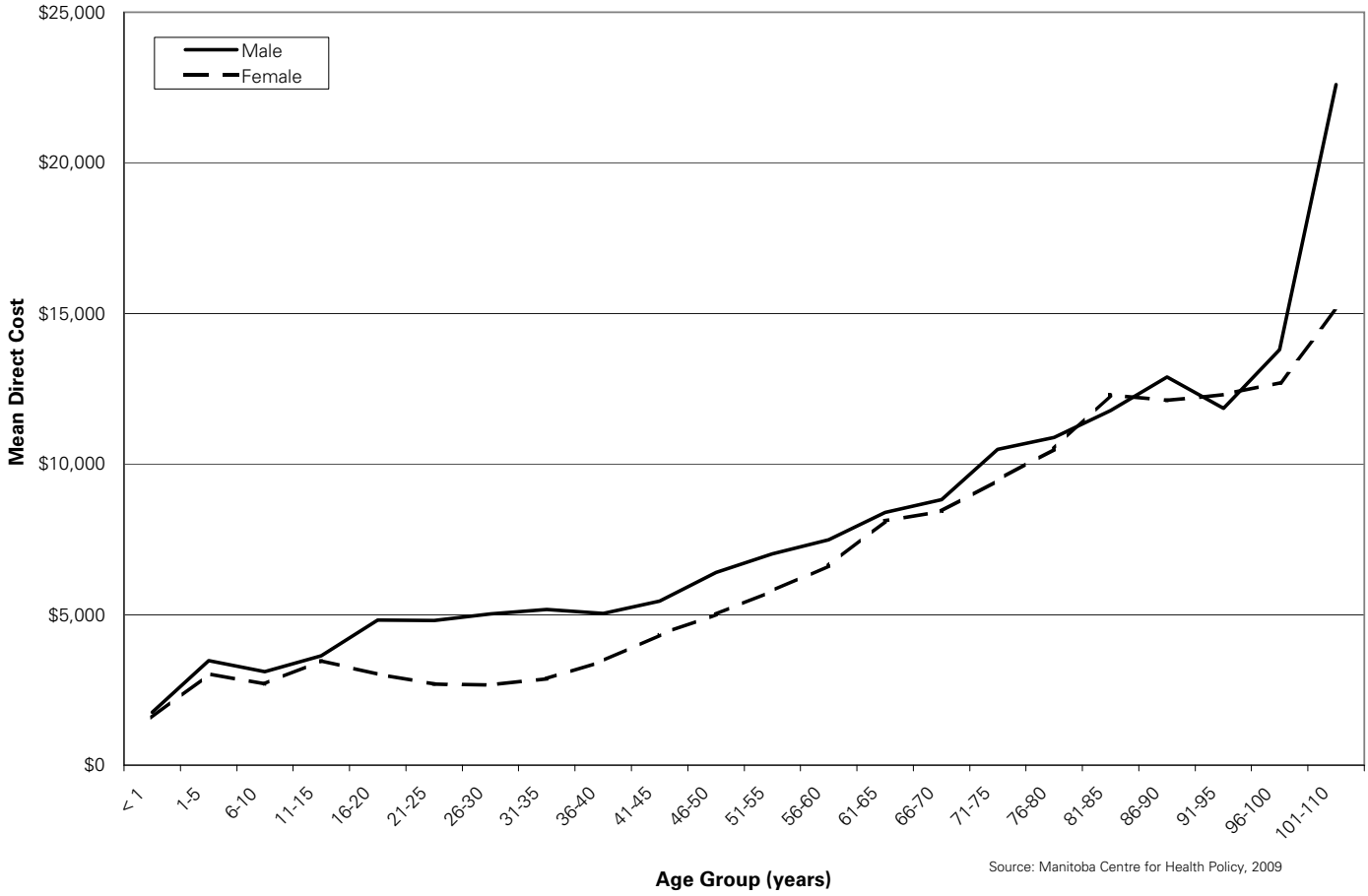
Source: Manitoba Centre for Health Policy, 2009

One important consideration in interpreting these tables is that they report the cost for an entire case, not merely for the intervention that was provided. For example, a tracheostomy is not an expensive procedure, but it is performed on a person who is very sick and is likely to require care in an intensive care unit. These costs relate to groups of individuals and the particular care they receive for their entire hospitalization. Also note that when a baby is born in a hospital, there is a cost associated with the mother (the birth) and one associated with the baby. Another important consideration for obstetric services is that there are multiple categories of both the birth (i.e., the cost of caring for the mother), ranging from *vaginal delivery* to *caesarean delivery with complicating diagnosis*, and the care of the neonate, ranging from *normal newborn* to *neonates less than 750 grams*.

In Appendix 4, we report the hospitalization costs by age group and sex. There are a variety of ways in which these data can be used—graphically they can show us how the direct cost of health care changes across the lifespan. Figure E.1 shows us the average direct cost per hospitalization for males and females, by age group, while Figure E.2 shows the total direct cost. In Figure E.1, we see that across much of the life course, hospitalized males have a higher average cost than hospitalized females. When looking at total costs (Figure E.2), we see that total costs are higher for females during the childbearing years (15–44) and again in later life. These greater later life costs are associated with the longer life expectancy of females. These two different ways of looking at the data provide interesting insights into the influence of age and sex on hospitalization costs.

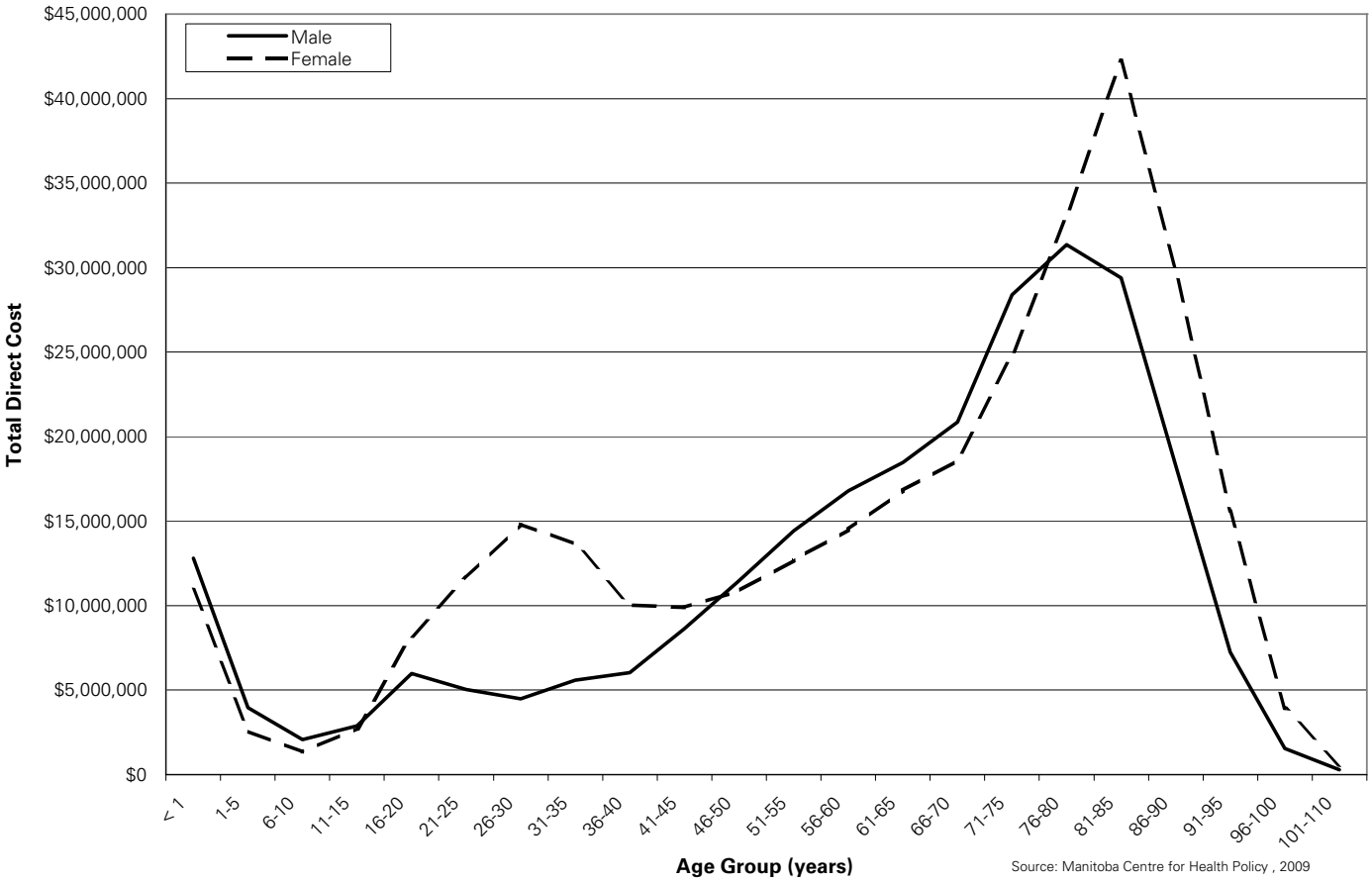
This report may be used by policy-makers to understand the cost associated with different types of hospitalizations and by researchers who conduct economic evaluations where the use of standard costs is appropriate.

Figure E.1: Mean Direct Costs for Inpatient Hospitalization by Sex and Age Group, Manitoba, 2005/06



Source: Manitoba Centre for Health Policy, 2009

Figure E.2: Total Direct Costs for Inpatient Hospitalization by Sex and Age Group, Manitoba, 2005/06



Source: Manitoba Centre for Health Policy , 2009

CHAPTER 1: INTRODUCTION

This report has two purposes: to provide a list of the cost of hospital **inpatient**[1] and **day surgery** services in Manitoba, and to present a value of hospital services that may be used for economic evaluations such as cost-effectiveness or cost-benefit analysis. A cost list was first published by the Manitoba Centre for Health Policy (MCHP) in 1999, using 1993/94 and 1994/95 data (Jacobs et al., 1999). At that time, cases were classified using **Refined Diagnostic Related Groups** (**RDRG®**). Since then, the **Canadian Institute for Health Information** (CIHI) has refined the **Case Mix Group** (CMG™) system such that it has become the standard for classifying inpatient and day surgery cases in Canada. MCHP published its first CMG-based cost report in 1999, using data from 1995/96 (Finlayson et al., 1999) and then in 2001, MCHP updated the information to 1997/98 (Finlayson, Roos et al., 2001). However, these reports focused on the quality of the financial data and produced operational indicators (e.g., employee costs, proportion of **ambulatory care** cost, worked hours per emergency department visit, etc.) for use by **regional health authorities** (RHAs). While the information included in these reports has been used in a variety of hospital costing projects, it has not been explicitly reported as a cost list for hospital services.

There are a number of differences between this report and the earlier ones. First, we adopted an alternative methodology for calculating the cost of inpatient care. CIHI and Hay Group use an approach that is based on workload within various areas of hospitals to allocate costs to inpatients (for example, see *Canadian MIS Database Hospital Financial Performance Indicators 1999–2000 to 2003–2004*). This particular approach is used for benchmarking hospitals in Canada. We used a similar (although not identical) method in this project. This has the advantage of making our results comparable with those reported to hospitals by CIHI. This approach is different from our earlier work that assumed all costs reported as inpatient costs were only for inpatients and all those reported in other areas of the hospital (except some diagnostic and therapeutic services) were not inpatient costs. In reality, there are inpatient costs reported in various areas of the hospital, and this approach recognizes this. A second difference is that our earlier reports included a share of indirect costs (e.g., general administration, human resources, information technology, physical plant) as part of the *full cost* of inpatient care. After discussion with the working group, it was determined that it is more appropriate to report the direct costs (i.e., those that can be directly attributed to inpatients) as being the most relevant indicator of the cost of hospital care. In addition, we report a percentage value that may be used to *gross up* the direct costs to a full cost that may be more appropriate for economic evaluations. Finally, the perspective from which this report presents information is different. Our earlier work was primarily intended as a tool for evaluating and/or benchmarking. In these reports, we presented data for each hospital, RHA and type of hospital and we reported both financial and operating indicators. Given that the purpose of this report is to present a *cost list,* we have not reported results comparing performance indicators for individual hospitals or RHAs, but have included a cost measure for three different types of hospitals (teaching, urban community, and other)—this will be useful information for conducting economic analyses. In Appendix 6, we provide information on types of hospitalizations for each RHA and for the population of each RHA.

[1] Throughout this report, terms in **bold** typeface and acronyms are defined in the glossary located at the end of the report.

There are other alternative cost allocation approaches that could have been used. As noted above, we did not include any *indirect costs* in the values that are presented in this report. There are two types of indirect costs that may be included in estimates of the cost of inpatient care—indirect costs associated with hospitals and indirect costs associated with regional administration. In earlier work, we reported *full costs* which included both the *direct* and *indirect* hospital costs (but not regional costs). We chose to focus on the *direct costs* in this report as these are the costs that are of most interest to administrators for influencing health care processes and systems. The indirect costs are important to understanding the total costs of health care, but they are influenced by factors that are not necessarily associated with patient care. In its performance indicator reports, CIHI uses a full cost approach (including both hospital and regional indirect costs)—given the purpose of this report is to present a cost list rather than measure performance, using direct costs as the base, with the opportunity to add indirect costs, seems most appropriate.

The report walks the reader through the various steps that are involved in producing the cost list, how the cost list can be used, and then the actual list of all types of hospital care and their associated cost. The appendices include very detailed information on the methods, as well as reference tables, that will be useful to individuals wishing to use the information that has been developed for further work.

1.1 Key Terms

There are several terms that will come up regularly in this report. A brief description of what they mean is presented here with more detail in the relevant section below:

Average Cost per Weighted Case (CPWC)—A financial indicator that provides a measure of the cost to provide care to a *standard* hospital patient. A relative, average cost is calculated by summing the weights assigned to all cases treated by a hospital and dividing this number into the hospital's total inpatient expenditure.

Case Mix Groups (CMG™)—A Canadian patient classification system developed by the Canadian Institute for Health Information (CIHI), based on most responsible diagnosis, used to group and describe types of inpatients discharged from **acute care hospitals**. Each patient case is initially assigned to one of 25 mutually exclusive major clinical categories (MCCs), which are based on body systems (e.g., circulatory, respiratory), then further classified as medical or surgical, and finally the CMG is assigned to create homogeneous groups. Cases within the same CMG are subsequently assigned to typical or atypical categories and typical cases are classified according to age group and complexity level (CMG Plx).

Day Procedure Group (DPG)—A classification system for ambulatory care provided in hospitals, most commonly surgical procedures that can be performed without the need for an overnight stay. A resource intensity weight is assigned to each DPG which reflects the average relative resource requirements for the type of procedure.

Direct Costs of Inpatient Care—Those costs that can be identified as being directly attributable to inpatient services. Examples would include nursing services, drugs and other medical supplies. Direct costs exclude those costs that are shared by all hospital users—for example information technology and human resources. The **Management Information System** (**MIS**) is used to classify these costs.

Management Information System (**MIS**)—A set of financial and statistical reporting guidelines developed for use in reporting health care activities. The MIS standards are national standards that provide an integrated approach to managing financial and statistical data related to the operations of Canadian health services organizations.

Resource Intensity Weights (**RIW™**)—The **case weights** for CMGs™ are used to measure the intensity of resource use (relative cost) associated with different diagnostic, surgical procedure and demographic characteristics of an individual. RIWs are assigned according to the case mix group to which an individual is assigned as well as their age, health status and discharge status, and are based upon micro-costing. In this report RIWs have been assigned using the CIHI Plx methodology.

Total Weighted Cases (**TWC**)—For a hospital, type of hospital, RHA, or province, this equals the sum of the case weights (i.e., RIWs) for all cases discharged during a specified period of time.

CHAPTER 2: DATA

The data used in this report come from the **Population Health Research Data Repository** (Repository), housed at MCHP. Data are provided to MCHP from Manitoba Health and Healthy Living (MHHL) after identifying information (e.g., names, street addresses and personal health information number) is removed or encrypted. Therefore, the Repository contains only anonymized information, which is linkable across files. Specifically, this report uses two sources of data: MIS and the **hospital discharge abstract database**. The MIS data are for the 2005/06 fiscal year. These data report financial and statistical information for all Manitoba hospitals. The data are created through the accounting systems in hospitals and/or RHAs and are reported to MHHL. We use the year-end, post-adjustment MIS data. The data from the hospital discharge abstract database that were used includes all individuals who were discharged from a Manitoba hospital during the 2005/06 and 2006/07 fiscal year. The RIWs are assigned to each discharged hospital case by CIHI, using the algorithm appropriate for the year. We made adjustments to individual or aggregate weights to ensure weights were matched with costs (see Appendix 2 for further information).

The **Manitoba Health Insurance Registry** held at MCHP was used to determine the population reported in Appendices 4 and 6. The use of data from MHHL is reviewed by the Health Information Privacy Committee, and the project was approved by the University of Manitoba Health Research Ethics Board. All analyses for this research were performed using SAS® statistical analysis software, version 9.1.

CHAPTER 3: AVERAGE COST PER WEIGHTED CASE (CPWC)

In this section, the two components of the cost per average case are described. A more detailed description is included in Appendices 1 and 2. We then report the results that may be used for economic evaluations and describe the types of cost that are not included in the results.

3.1 Methods

3.1.1 Calculating the Average Cost per Weighted Case (CPWC)

Producing a cost list for hospital services requires the development of an Average Cost per Weighted Case (CPWC). The CPWC is calculated by simply dividing the costs of inpatient care (or the inputs) by the Total Weighted Cases (which could be considered the output of hospitals (TWC)). The formula for the Average Cost per Weighted Case is:

$$\textit{Average Cost per Weighted Case} = \frac{\textit{Direct Inpatient Costs}}{\textit{Total Weighted Cases}}$$

In the following sections, the methods used for calculating inpatient costs and total weighted cases will be presented.

3.1.2 Calculating Direct Inpatient Costs

We adopted the approach taken by CIHI/Hay Group for calculating the direct costs of inpatient care. This methodology utilizes various workload measures to determine the proportion of all costs in a hospital that are attributable to inpatients. Previous work done at MCHP used workload measures to allocate the cost of diagnostic and therapeutic services between inpatient and other services. The refinement used in this project recognizes that services are provided to inpatients in settings other than the acute care setting, for example, in an **outpatient** clinic. Consistent with the CIHI/Hay Group methodology, we broke down both the costs and the statistics into several *work functions*, that is, within each hospital we identified the net costs[2] for Inpatient Acute Care, Operating Room, Outpatient Services, Community Services, Emergency Department, Inpatient **Long Term Care**, Inpatient Rehabilitation, Day Care, Patient Food Services, Patient Transport, Diagnostic and Therapeutic Services, Diagnostic and Therapeutic Services Administration, Laboratory Administration, and Other. We then examine various types of statistics that are reported and determine the one that is likely the most accurate indicator of the proportion of expenditures that are associated with inpatient care. If insufficient statistics are available, we use a default value. We then multiply the proportion of services that are attributable to inpatient services by the net expenses for each of the fourteen work function categories, and then sum these values to give the total direct inpatient cost for the hospital.

A limitation of this approach is that it is dependent upon having complete and accurate statistical data that describe how, within a functional centre, workload is divided among the various types of

[2] Net costs are direct costs net of recoveries.

patients (e.g., acute inpatient, outpatient, long term care, day care). The CIHI/Hay Group methodology applies the workload distribution approach at a very precise level (e.g., an individual department)—we found that the data that were reported by the majority of hospitals were insufficient to support this approach throughout the province. As a result we aggregated workload and costs.[3]

Detailed information on the calculation of direct inpatient costs is provided in Appendix 1.

3.1.2.1 Costs Not Included

There are a number of costs reported by hospitals that are not included in the direct cost of inpatient care. These include:

- Physician services—When we calculate the cost of inpatient care, we exclude all physician remuneration costs that are reported in MIS. The reason for this is that there are many different ways in which physicians are paid; some physicians are compensated under an **alternative payment plan**, while others are compensated on a **fee-for-service** basis (these are not reported in MIS as they are paid directly by MHHL). Although these costs would be considered a legitimate direct cost of inpatient care, because of these differing reporting mechanisms, they are not included here. In any situation where one wishes to have all direct costs, it is necessary to add the physicians' fees associated with the hospital stay.
- Research—Many hospitals conduct research. The cost of this research is not included in the direct cost of inpatient care.
- Education—Some hospitals offer educational programs or are involved in training health care providers. For example, in the teaching hospitals, there are costs associated with residency programs. Costs reported within the education area are not included in the direct cost of inpatient care, nor are the salaries of physician residents.
- Community services—Many hospitals report community services that are operated through the facility. These costs are not considered inpatient costs and are not included unless the facility explicitly reports inpatient-related workload being provided through community services.
- Ambulatory care—While our cost list does report costs for day surgery it does not report other ambulatory care such as diagnostic or rehabilitation clinics that are provided to non-inpatients. However, there are situations where inpatients receive services in the ambulatory care setting—these are considered legitimate direct inpatient costs and are included.
- Capital—Capital-related costs (e.g., mortgages, long-term leases, etc.) are not included in the direct cost of inpatient care. Because of the variety of financing mechanisms that are used, the reporting of these costs is inconsistent between facilities. In addition, designating the allocation of these costs between inpatients and others is problematic. We therefore excluded these costs from our calculation.

[3] Even though we aggregated the data, a high-level review of results for Winnipeg hospitals, where the CIHI/HayGroup methodology has already been applied, suggests our results are within ±5% of the more precise analysis.

- Administration and support services—The direct cost of inpatient care does not include what are considered indirect costs. Administrative services such as information technology and human resources provide services to all areas of the hospital, as well as to each other. We did not include these costs in our calculation, but provide a provincial average rate (see section 3.2.3) that may be used when it is desirable to include these costs in an economic analysis.

3.1.3 Data Validation

Two stages of data validation were used to increase our confidence that the data were reporting the actual financial and statistical activity that occurs in Manitoba hospitals. First, in the early stages of the project, reports were developed that allowed RHA financial officers to compare the facilities in their region with other similar types of hospitals on key financial and operating indicators. These reports included data from the 2003/04 fiscal year. While we ultimately used 2005/06 fiscal year data, these reports likely sensitized recipients to the ways in which we were considering using the data. For the final creation of the cost list, we developed detailed reports from the MIS data that showed how we calculated the direct cost for inpatient care. These reports were also distributed to every RHA in the province, along with an invitation to revise the data and/or provide estimates where data were missing. Several RHAs provided additional information that was incorporated into the results that are presented here.

3.1.4 Measuring the Level of Care–the Resource Intensity Weight

When a person is discharged from a hospitalization, either as an inpatient or from day surgery, their chart is transcribed into a computerized record. This record includes demographic information (e.g., date of birth, sex) as well as information about the hospitalization, such as diagnoses, major procedures, and admission and discharge dates. An algorithm developed by the CIHI uses these data to assign a RIW to every person who is discharged from hospital. The RIW reflects the relative amount of resources (i.e., the cost of care) for each individual—people who receive more complex (and costly) care would receive a RIW that is higher than those who receive less complex care. For example, the resource requirements for a hip replacement in an otherwise healthy adult is expected to be approximately 2.8 times more than a similar person who is treated for chronic bronchitis. Detailed information on how a RIW is assigned to cases is available from CIHI.

These weights (i.e., RIWs) are used as a measure of what is *produced* by a hospital—an alternative to using RIWs would be a count of days. Unfortunately, using days as a measure assumes that all types of cases use the same amount of resources, and that the cost for a particular type of case is simply a function of the **length of stay** (**LOS**). Using the example provided above, the expected LOS for chronic bronchitis and hip replacement is similar (the stay for a hip replacement is normally a little over one day more). If days were used as the measure, the cost associated with chronic bronchitis would be overstated, while that of a hip replacement would be understated.

In order to determine what is produced by all hospitals in the province, the RIW that is assigned to each case that is discharged is summed—this produces the denominator for calculating the CPWC—the *total weighted cases*.

3.1.5 In-Year Adjustment

One of the issues that arises when calculating the denominator (TWC) is determining if the weights are matched with the costs. Because weights are assigned only when a person is discharged from hospital, if a person is admitted to hospital one year and discharged the next, we know nothing about their hospitalization until the next year. Similarly, if a person is discharged early in the year of interest but had much of their stay in a previous year, all of the weight would be assigned to a year in which there were relatively few costs. This is not a significant issue on a provincial basis because between years it balances out, but for smaller facilities, the discharge of a single long-term patient can have a substantial effect on the TWCs for that facility, as we previously described (Finlayson, Jacobs et al., 2001).

To account for this, we make an *in-year adjustment*. Simply put, this adjustment attempts to match the weights that are assigned to cases with the year in which the costs were incurred. This means that we use two years of discharge data (2005/06 and 2006/07 in this project) in order to identify individuals who were admitted in 2005/06 and were discharged in 2006/07. Only the weights assigned to days in 2005/06 are included in 2005/06. Similarly, if a person was admitted in 2004/05 and was discharged in 2005/06, only the 2005/06 days are included. In some cases, by looking at the MIS data, we know that there are long stay patients who have not been discharged—in that case, we add weights to 2005/06.

We provide the in-year adjusted values for each hospital in Manitoba in Appendix 5. This information may be used by RHAs if they wish to calculate the CPWC for an individual facility.

Details of the in-year adjustment process can be found in Appendix 2.

3.2 Results

3.2.1 Provincial Average Cost per Weighted Case (CPWC)

The provincial CPWC represents the average cost for a standardized patient across all hospitals in the province. The total direct cost of inpatient care in 2005/06 was $587,678,491, and the total of the in-year adjusted weighted cases was 198,980.09. This results in a provincial CPWC for direct costs of $2,953.45.

Table 3.1: Inpatient Costs by Type of Hospital, Manitoba, 2005/06

Type of Hospital	Direct Cost ($)	Adjusted Total Weighted Cases	Average Cost per Weighted Case ($)
Teaching Hospitals	277,409,431	79,137	3,505
Urban Community Hospitals	179,209,609	67,629	2,650
Other Hospitals	131,059,451	52,214	2,510

Source: Manitoba Centre for Health Policy, 2009

3.2.2 Average Cost per Weighted Case (CPWC) by Hospital Type

There are circumstances under which researchers may want to have different costs for different types of hospitals. Previous research has shown that there are important differences in the cost structures of different types of hospitals (Finlayson, Roos et al., 2001). We therefore present in Table 3.1 the average cost per weighted case for the two teaching hospitals (Health Sciences Centre and St. Boniface General Hospital), the urban community hospitals (Brandon, Concordia, Grace, Seven Oaks, and Victoria), and all other hospitals combined.

3.2.3 Provincial Average Administrative and Support Services Cost

There are times, particularly for economic analysis, when it is desirable to have what would be considered a full cost rather than the direct cost that is reported above. The full cost is simply the direct cost plus an amount for indirect costs. Indirect costs include activities such as administration, health records, and plant maintenance. These are real costs associated with operating a hospital, but they cannot be directly attributed to inpatient care.

A provincial average rate for administrative and support services has been calculated by taking the total expenses that are attributable to administrative and support services as a proportion of the total direct costs used in the CPWC calculation. This calculation provides a rate of 19.9%, meaning that for every $1.00 of direct expenses in hospitals, $0.199 is incurred in indirect costs. This is the amount that could be added to the direct cost to determine the full costs of hospital care.

It should be noted that there are limitations in using this approach to estimating full costs, especially when specific conditions are being considered or a small sample size is being used. While some administrative and support costs are variable in relation to the direct costs of a case, others are fixed—that is, the cost is the same for all patients regardless of the direct cost. Investigators should use caution in the use of the value reported here as we did not analyze the cost structure of administrative and support services and its relation to direct costs as part of this project.

CHAPTER 4: COST LIST

4.1 Using the Cost List

This cost list provides a *standard cost* for each type of case that receives care in a hospital in Manitoba. A standard cost refers to an average cost—similar cases will not cost necessarily cost exactly the same. We report the average of all cases treated in a year.

For a number of years CIHI has used a complexity overlay to assign weights to cases. This approach recognizes that even within a single CMG there may be varying costs. For example, it may be more costly to provide care to an older person than a younger one, and multiple co-morbidities may also increase the associated cost. Within each CMG (with a few exceptions), CIHI calculates a weight for three age groups (0 to 17 years, 18 to 69 years, and 70 years and over) and one[4] or four complexity levels (CMG Plx). The complexity levels[5] are:

1. No complexity
2. Complexity related to chronic condition(s)
3. Complexity related to serious/important condition(s)
4. Complexity related to potentially life-threatening condition(s)
9. Complexity not assigned

The cost associated with a particular CMG/age group/complexity level is calculated by multiplying the provincial average direct cost per weighted case ($2,953.45) by the RIW that is assigned to that cell. There are many instances where there were no cases for a particular cell in 2005/06—the value shows what the cost would be if there had been cases.

While the CPWC is calculated for inpatients, it can also be applied to day procedures (outpatient surgery). For day procedures, each case is classified into a DPG. The cost is calculated by multiplying the weight that is assigned to the DPG by the same value.

The presentation of the cost list is designed to be useful for a variety of audiences. For those who want a single number for a particular type of case, a weighted average has been calculated. This average is a function of the number of cases in each cell, the cost associated with that cell, and the total number of cases. The weighted average cost is calculated by multiplying the number of cases in each cell by the cost per case for the cell. The total cost for all cells is summed, and this total is divided by the total number of cases for the CMG. For example, for a given CMG if there were 10 cases at $1,000 and 50 cases at $1,500 and 5 cases at $3,000, the weighted average cost per case would be [(10 x 1,000) + (50 x 1,500) + (5 x 3,000)] / (10 + 50 + 5) = $1,538. If there were 0 cases

[4] If Plx level 9 is assigned, no other Plx levels are involved.
[5] Additional information on how individual cases are assigned to a complexity level is available in the CIHI publication, *DAD Resource Intensity Weight and Expected Length of Stay,* 2005.

in a cell, the cost associated with that CMG was not included in the weighted average cost. For those that want more detailed information, that is provided as well. In addition, we provide the total cost for each type of case for those that are interested in population-level costs rather than those at the individual level.

In situations where there are five or fewer cases in a single cell, the number has not been reported, and is indicated by a "-". In some cases we combined groups (indicated by a "c" in both cells) or the suppression of one other cell in the CMG so that the cost per case and the total cost for CMG could be presented. These suppressed cases are, however, aggregated with all of the other cases when reporting the weighted average cost.

4.2 The Cost List

The following pages include the CMG-based cost list for hospital services provided in Manitoba in 2005/06. It is important to remember that the costs reported here are direct costs and do not include the cost of physician services provided during the hospital stay, nor do they include any of the indirect costs related to operating a health care facility. Earlier in the report we describe how the numbers presented here could be adjusted to reflect full costs.

Table 4.1: Cost List for Inpatient Hospital Services - Direct Cost for Typical, Atypical and All Cases by Major Clinical Classification and Case Mix Group (CMG), Manitoba, 2005/06

CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
DISEASES & DISORDERS OF THE NERVOUS SYSTEM																			
1	Craniotomy Procedures	1	18	3.8	6,698	208	3.3	6,727	38	3.3	6,103	4.0	7,280	2,067,535	116	1,690,857	400	9,396	3,758,391
		2	-	8.0	8,768	9	4.9	10,450	-	24.0	9,643								
		3	0	n/a	12,188	-	21.0	12,243	0	n/a	9,905								
		4	-	18.3	28,123	-	31.5	28,805	0	n/a	21,951								
3	Spinal Procedures	1	-	5.0	4,673	13	3.3	4,673	-	4.5	4,673	4.9	5,302	116,648	8	81,410	30	6,602	198,059
		2	-	16.0	9,287	-	13.0	9,287	-	6.0	9,287								
		3	0	n/a	14,623	0	n/a	14,623	0	n/a	14,623								
		4	0	n/a	22,869	0	n/a	22,869	0	n/a	22,869								
4	Extracranial Vascular Procedures	1	0	n/a	3,602	70	1.6	3,602	92	1.7	3,602	2.1	3,907	683,717	10	140,253	185	4,454	823,970
		2	0	n/a	5,464	-	3.8	5,464	-	9.0	5,464								
		3	0	n/a	7,006	-	1.5	7,006	-	8.0	7,006								
		4	0	n/a	13,658	0	n/a	13,658	-	15.0	13,658								
5	Ventricular Shunt Revision	1	7	2.0	3,096	-	4.3	3,000	0	n/a	3,388	2.7	3,212	38,544	-	35,095	-	-	73,639
		2	-	1.0	4,873	0	n/a	5,083	0	n/a	5,115								
		3	0	n/a	6,244	0	n/a	6,294	0	n/a	6,302								
		4	0	n/a	14,237	0	n/a	14,237	0	n/a	14,237								
6	Carpal Tunnel Release and Specified Nervous System Procedures	1	7	1.3	2,623	13	1.2	2,623	-	1.0	2,623	2.7	3,337	83,419	7	105,407	32	5,901	188,826
		2	0	n/a	5,517	0	n/a	5,517	0	n/a	5,517								
		3	-	9.0	6,796	0	n/a	6,796	0	n/a	6,796								
		4	0	n/a	16,287	-	30.0	16,287	0	n/a	16,287								
7	Peripheral, Cranial Nerve and Other Neurological Procedures	1	-	2.3	6,425	8	3.6	6,425	-	10.0	6,425	8.3	7,280	116,477	7	579,223	23	30,248	695,700
		2	0	n/a	10,147	-	29.5	10,147	0	n/a	10,147								
		3	0	n/a	12,656	0	n/a	12,656	-	18.0	12,656								
		4	0	n/a	29,781	0	n/a	29,781	0	n/a	29,781								
10	Neoplasm of Nervous System	1	-	4.0	1,870	37	5.3	2,731	23	9.7	3,516	8.3	3,551	276,951	82	906,075	160	7,394	1,183,026
		2	-	2.0	4,738	6	15.3	4,832	-	10.0	6,247								
		3	0	n/a	6,567	-	15.0	6,567	-	17.7	6,479								
		4	0	n/a	12,392	0	n/a	12,392	0	n/a	11,789								
11	Degenerative Nervous Disorders	1	-	2.8	1,756	48	5.4	2,778	73	11.3	4,307	10.9	4,306	624,302	96	2,600,592	241	13,381	3,224,894
		2	0	n/a	4,827	-	15.8	5,074	8	24.0	6,053								
		3	0	n/a	7,297	-	19.0	7,505	0	n/a	8,149								
		4	0	n/a	16,645	0	n/a	16,645	-	36.4	16,805								
12	Multiple Sclerosis and Cerebellar Disorders	1	-	4.0	3,061	41	7.2	3,061	-	7.0	3,061	7.4	3,229	151,781	29	353,320	76	6,646	505,101
		2	0	n/a	5,704	-	12.3	5,704	0	n/a	5,704								
		3	0	n/a	8,762	0	n/a	8,762	0	n/a	8,762								
		4	0	n/a	12,884	0	n/a	12,884	0	n/a	12,884								
13	Specific Cerebrovascular Disorders except Transient Ischemic Attacks	1	6	6.7	3,049	141	6.0	3,524	265	7.9	3,781	9.5	4,560	2,380,230	691	8,706,320	1,213	9,140	11,086,550
		2	-	16.0	5,478	18	12.6	5,657	40	13.6	6,159								
		3	-	11.5	7,794	6	15.7	7,794	26	20.5	8,591								
		4	0	n/a	14,215	-	9.5	14,215	15	34.2	13,020								
14	Transient Ischemic Attacks and Precerebral Occlusions	1	0	n/a	2,113	82	2.6	1,914	243	4.3	2,099	4.1	2,168	750,143	62	443,866	408	2,926	1,194,009
		2	0	n/a	3,032	-	4.0	3,032	13	6.2	3,459								
		3	0	n/a	4,753	0	n/a	4,753	-	14.0	5,141								
		4	0	n/a	7,351	0	n/a	7,351	-	10.0	8,449								
15	Nonspecific Cerebrovascular Disorders	1	-	5.0	2,005	9	4.9	2,529	11	6.6	4,257	5.9	3,614	86,728	24	148,533	48	4,901	235,261
		2	0	n/a	5,302	-	1.0	5,302	0	n/a	5,370								
		3	0	n/a	7,827	-	13.0	7,827	0	n/a	7,815								
		4	0	n/a	8,261	0	n/a	8,261	0	n/a	10,528								

"-" denotes values suppressed due to small numbers

Source: Manitoba Centre for Health Policy, 2009

CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
17	Cranial and Peripheral Nerve Diseases	1	6	4.0	1,797	72	4.1	2,161	36	7.1	3,157	5.8	2,970	415,867	34	620,783	174	5,958	1,036,650
		2	0	n/a	3,834	16	5.6	3,836	-	7.0	5,887								
		3	0	n/a	6,108	-	10.0	6,108	-	32.0	7,158								
		4	0	n/a	12,230	-	39.0	12,230	-	10.0	12,760								
18	Viral Meningitis	1	29	2.6	1,794	25	3.5	1,367	-	7.5	1,551	3.3	1,657	96,078	9	25,153	67	1,809	121,231
		2	0	n/a	2,667	-	1.0	2,667	0	n/a	2,667								
		3	0	n/a	3,756	0	n/a	3,803	0	n/a	3,803								
		4	-	11.0	4,098	0	n/a	4,098	0	n/a	4,098								
19	Infection except Viral Meningitis	1	18	6.6	3,573	36	6.1	3,573	7	9.0	3,573	8.4	4,500	306,014	45	381,086	113	6,081	687,100
		2	-	3.0	6,978	-	14.3	6,978	0	n/a	6,978								
		3	0	n/a	8,538	0	n/a	8,538	0	n/a	8,538								
		4	-	43.0	20,054	-	36.0	20,054	0	n/a	20,054								
20	Hypertensive Encephalopathy	1	-	7.0	5,347	-	6.0	5,347	-	6.2	5,347	6.1	5,347	42,775	-	68,372	-	-	111,147
		2	0	n/a	5,347	-	5.0	5,347	0	n/a	5,347								
		3	0	n/a	5,347	0	n/a	5,347	0	n/a	5,347								
		4	0	n/a	5,347	0	n/a	5,347	0	n/a	5,347								
21	Non-traumatic Stupor and Coma	1	-	2.0	1,496	17	3.8	1,726	6	3.8	2,438	6.0	2,485	89,465	14	170,914	50	5,208	260,379
		2	0	n/a	2,835	-	12.0	2,835	-	15.3	3,485								
		3	0	n/a	4,134	0	n/a	4,134	-	5.0	4,661								
		4	0	n/a	8,613	-	21.5	8,613	0	n/a	9,062								
22	Seizure and Headache	1	251	2.0	1,213	427	3.3	1,692	79	3.6	2,038	3.2	1,755	1,448,123	226	1,439,737	1,051	2,748	2,887,860
		2	14	3.6	1,937	23	5.6	3,479	13	8.8	4,294								
		3	-	4.5	3,425	9	3.4	3,751	-	8.5	5,106								
		4	-	26.0	10,040	-	12.7	9,245	-	13.0	8,433								
28	Other Nervous System Diagnoses	1	19	2.4	1,665	49	3.9	2,077	64	6.9	2,721	6.4	2,791	427,076	125	1,342,307	278	6,365	1,769,383
		2	0	n/a	4,039	-	3.6	4,025	7	10.3	4,137								
		3	0	n/a	6,776	-	19.3	7,317	-	27.0	8,240								
		4	0	n/a	12,534	0	n/a	12,758	0	n/a	10,980								
40	Tracheostomy and Gastrostomy Procedures	1	0	n/a	12,653	6	10.8	12,653	7	23.6	12,653	45.7	28,003	952,113	52	3,586,158	86	52,771	4,538,272
		2	0	n/a	16,507	-	30.0	16,507	-	53.5	16,507								
		3	-	20.5	19,932	-	46.7	19,932	-	75.0	19,932								
		4	0	n/a	51,543	6	64.0	51,543	6	91.2	51,543								
DISEASES & DISORDERS OF THE EYE*																			
50	Orbital Procedures	1			2,325			1,605			1,620								
		2			3,750			3,747			3,935								
		3			4,443			4,452			4,462								
		4			6,181			6,181			6,181								
51	Other Intraocular Procedures	1			1,470			1,470			1,470								
		2			1,981			1,981			1,981								
		3			2,097			2,097			2,097								
		4			2,097			2,097			2,097								
52	Retinal Procedures	1			1,403			1,403			1,403								
		2			1,862			1,862			1,862								
		3			1,912			1,912			1,912								
		4			1,937			1,937			1,937								
53	Iris and Lens Procedures	1			1,734			1,734			1,734								
		2			1,734			1,734			1,734								
		3			1,734			1,734			1,734								
		4			1,734			1,734			1,734								
54	Extraocular Procedures	1			1,551			1,551			1,551								
		2			1,603			1,603			1,603								
		3			1,603			1,603			1,603								
		4			19,053			19,053			19,053								

"-" denotes values suppressed due to small numbers

Source: Manitoba Centre for Health Policy, 2009

* These results have been suppressed because not all of the procedures are performed in acute care hospitals so our results would be incomplete.

CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
55	Lens Insertion (MNRH)	1			1,785			1,785			1,785								
		2			2,196			2,196			2,196								
		3			2,196			2,196			2,196								
		4			2,196			2,196			2,196								
57	Other Ophthalmic Procedures (MNRH)	1			1,069			1,069			1,069								
		2			1,159			1,159			1,159								
		3			1,471			1,471			1,471								
		4			1,471			1,471			1,471								
60	Major Eye Infections	1			1,616			2,667			3,070								
		2			2,939			3,012			3,070								
		3			5,737			5,841			5,841								
		4			5,841			5,841			5,841								
62	Hyphema	1			942			942			942								
		2			942			942			942								
		3			942			942			942								
		4			942			942			942								
63	Other Ophthalmic Diagnoses (MNRH)	1			1,307			1,490			2,437								
		2			2,230			2,230			3,032								
		3			4,489			4,489			4,642								
		4			4,489			4,489			4,642								
DISEASES & DISORDERS OF EAR, NOSE, MOUTH & THROAT																			
75	Radical Laryngectomy and Glossectomy	1	0	n/a	16,705	7	13.4	16,705	0	n/a	16,705	16.2	19,340	232,079	-	136,237	-	-	368,316
		2	0	n/a	20,596	-	22.0	20,596	-	19.0	20,596								
		3	0	n/a	22,133	-	19.0	22,133	-	13.0	22,133								
		4	0	n/a	29,688	-	28.0	29,688	0	n/a	29,688								
76	Major Head and Neck Procedures	1	-	2.0	5,273	30	5.8	5,273	15	4.9	5,273	7.2	6,830	375,667	17	560,886	72	13,008	936,552
		2	0	n/a	14,422	0	n/a	14,422	-	19.0	14,422								
		3	0	n/a	18,469	-	38.0	18,469	0	n/a	18,469								
		4	-	38.0	26,383	-	21.0	26,383	0	n/a	26,383								
77	Less Extensive Head and Neck Procedures	1	-	1.6	2,473	44	1.5	1,743	13	2.5	2,655	1.7	2,074	130,653	10	46,208	73	2,423	176,862
		2	-	1.0	7,089	0	n/a	7,089	0	n/a	7,130								
		3	0	n/a	7,335	0	n/a	7,673	0	n/a	7,673								
		4	0	n/a	13,643	0	n/a	13,643	0	n/a	13,643								
78	Cleft Lip and Palate Repair	1	82	1.2	2,480	7	1.4	2,480	0	n/a	2,480	1.2	2,480	220,695	-	5,587	-	-	226,282
		2	0	n/a	3,517	0	n/a	3,517	0	n/a	3,517								
		3	0	n/a	4,184	0	n/a	4,184	0	n/a	4,184								
		4	0	n/a	4,995	0	n/a	4,995	0	n/a	4,995								
81	Salivary Gland Procedures	1	0	n/a	2,529	39	1.1	2,133	-	1.0	2,060	1.1	2,325	102,312	-	10,242	-	-	112,554
		2	0	n/a	6,416	-	1.0	6,478	0	n/a	6,470								
		3	0	n/a	6,478	0	n/a	6,478	0	n/a	6,478								
		4	0	n/a	10,133	0	n/a	10,133	0	n/a	10,103								
82	Minor Ear, Nose and Throat Procedures	1	-	1.0	1,311	8	1.0	1,311	-	1.0	1,311	1.0	1,311	14,418	-	14,233	-	-	28,651
		2	0	n/a	2,507	0	n/a	2,507	0	n/a	2,507								
		3	0	n/a	4,196	0	n/a	4,196	0	n/a	4,196								
		4	0	n/a	5,402	0	n/a	5,402	0	n/a	5,402								
83	Reconstructive Ear Nose and Throat Procedures	1	103	1.4	3,443	109	1.5	3,443	-	2.0	3,443	1.5	3,443	-	-	17,189	-	-	-
		2	0	n/a	4,466	0	n/a	4,466	0	n/a	4,466								
		3	0	n/a	6,161	0	n/a	6,161	0	n/a	6,161								
		4	0	n/a	10,435	0	n/a	10,435	0	n/a	10,435								
84	Miscellaneous Ear, Nose and Throat Procedures	1	-	1.0	1,531	32	2.8	2,209	12	2.1	2,198	2.6	2,191	-	8	31,131	-	-	-
		2	0	n/a	5,251	0	n/a	5,355	0	n/a	5,432								
		3	0	n/a	5,355	0	n/a	5,355	0	n/a	5,432								
		4	0	n/a	22,396	0	n/a	22,396	0	n/a	22,396								

"-" denotes values suppressed due to small numbers
MNRH - May Not Require Hospitalization

Source: Manitoba Centre for Health Policy, 2009

CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
85	Mastoid Procedures	1	9	1.0	5,132	6	1.2	5,132	-	3.0	5,132	1.7	5,216	88,667	-	37,412	-	-	126,079
		2	-	9.0	6,552	0	n/a	6,552	0	n/a	6,552								
		3	0	n/a	13,653	0	n/a	13,653	0	n/a	13,653								
		4	0	n/a	13,653	0	n/a	13,653	0	n/a	13,653								
86	Other Tonsillar Procedures	1	8	2.9	1,331	13	3.1	1,198	0	n/a	1,234	3.3	1,616	-	-	1,839	-	-	-
		2	0	n/a	2,043	0	n/a	2,083	0	n/a	2,083								
		3	0	n/a	2,414	0	n/a	2,475	0	n/a	2,475								
		4	0	n/a	9,335	0	n/a	9,335	-	10.0	9,335								
87	Sinus Procedures	1	0	n/a	1,627	11	1.2	1,627	-	1.0	1,627	1.2	1,627	-	-	11,968	-	-	-
		2	0	n/a	3,007	0	n/a	3,007	0	n/a	3,007								
		3	0	n/a	4,361	0	n/a	4,361	0	n/a	4,361								
		4	0	n/a	7,614	0	n/a	7,614	0	n/a	7,614								
88	Ethmoidectomy (MNRH)	1	-	2.0	1,529	15	1.0	1,529	-	1.0	1,529	1.2	1,529	30,580	-	2,064	-	-	32,644
		2	0	n/a	2,038	0	n/a	2,038	0	n/a	2,038								
		3	0	n/a	2,038	0	n/a	2,038	0	n/a	2,038								
		4	0	n/a	2,038	0	n/a	2,038	0	n/a	2,038								
89	Dental Extraction or Restoration (MNRH)	1	58	1.1	1,565	-	1.4	1,565	-	1.0	1,565	1.1	1,565	117,355	-	15,869	-	-	133,224
		2	0	n/a	1,565	0	n/a	1,565	0	n/a	1,565								
		3	0	n/a	1,565	0	n/a	1,565	0	n/a	1,565								
		4	0	n/a	1,565	0	n/a	1,565	0	n/a	1,565								
90	External and Middle Ear Procedures (MNRH)	1	-	1.0	1,325	-	1.4	1,325	0	n/a	1,325	1.2	1,325	13,246	-	2,266	-	-	15,512
		2	0	n/a	1,325	0	n/a	1,325	0	n/a	1,325								
		3	0	n/a	1,325	0	n/a	1,325	0	n/a	1,325								
		4	0	n/a	1,325	0	n/a	1,325	0	n/a	1,325								
91	Nasal Procedures (MNRH)	1	6	1.2	1,251	63	1.1	1,251	-	1.0	1,251	1.1	1,251	-	0	0	-	1,251	-
		2	0	n/a	2,187	0	n/a	2,187	0	n/a	2,187								
		3	0	n/a	2,451	0	n/a	2,451	0	n/a	2,451								
		4	0	n/a	2,451	0	n/a	2,451	0	n/a	2,451								
92	Myringotomy (MNRH)	1	0	n/a	1,788	0	n/a	1,788	0	n/a	1,788	n/a	n/a	0	0	0	0	n/a	0
		2	0	n/a	1,788	0	n/a	1,788	0	n/a	1,788								
		3	0	n/a	1,788	0	n/a	1,788	0	n/a	1,788								
		4	0	n/a	1,788	0	n/a	1,788	0	n/a	1,788								
93	Tonsillectomy and Adenoidectomy Procedures (MNRH)	1	411[c]	1.1	1,150	72	1.2	1,115	0	n/a	1,123	1.1	1,147	553,842	-	8,245	-	-	562,088
		2	c	2.0	2,057	0	n/a	1,785	0	n/a	1,785								
		3	0	n/a	2,057	0	n/a	1,785	0	n/a	1,785								
		4	0	n/a	11,307	0	n/a	11,270	0	n/a	11,270								
100	Ear, Nose and Throat Malignancy	1	0	n/a	2,715	10	4.1	2,715	-	1.7	2,715	5.3	3,319	49,792	18	155,199	33	6,212	204,991
		2	0	n/a	4,840	0	n/a	4,840	-	21.0	4,840								
		3	0	n/a	7,807	0	n/a	7,807	0	n/a	7,807								
		4	0	n/a	9,663	-	13.0	9,663	0	n/a	9,663								
101	Acute Suppurative Infections	1	18	3.6	1,699	10	4.4	1,699	-	3.8	1,699	4.0	1,764	58,219	-	11,268	-	-	69,487
		2	0	n/a	2,681	0	n/a	2,681	0	n/a	2,681								
		3	0	n/a	3,857	-	7.0	3,857	0	n/a	3,857								
		4	0	n/a	8,179	0	n/a	8,179	0	n/a	8,179								
102	Dysequilibrium	1	-	1.3	1,126	98	1.9	1,144	210	4.0	1,504	3.5	1,459	472,668	49	358,879	373	2,229	831,547
		2	0	n/a	1,826	0	n/a	1,826	9	6.9	2,910								
		3	0	n/a	2,488	-	1.0	2,488	-	13.5	2,910								
		4	0	n/a	6,780	-	14.0	6,780	0	n/a	6,780								
104	Influenza	1	54	2.1	1,308	39	3.1	1,409	60	4.7	2,148	3.7	1,882	316,165	12	52,732	180	2,049	368,897
		2	-	2.0	1,760	-	5.0	2,562	8	5.5	2,831								
		3	0	n/a	3,910	0	n/a	3,516	0	n/a	3,969								
		4	0	n/a	25,230	0	n/a	25,371	-	30.0	25,287								

"-" denotes values suppressed due to small numbers
c - due to small numbers, the # of cases for some CMGs has been combined

Source: Manitoba Centre for Health Policy, 2009

CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
107	Epiglottitis	1	-	2.0	2,215	10	1.6	2,215	0	n/a	2,215	1.6	2,215	-	-	20,998	-	-	-
		2	0	n/a	2,861	0	n/a	2,861	0	n/a	2,861								
		3	0	n/a	3,004	0	n/a	3,004	0	n/a	3,004								
		4	0	n/a	12,983	0	n/a	12,983	0	n/a	12,983								
108	Epistaxis	1	-	1.7	1,321	30	3.7	1,321	51	2.5	1,321	3.0	1,404	133,363	26	85,976	121	1,813	219,339
		2	0	n/a	1,963	-	2.3	1,963	6	3.5	1,963								
		3	0	n/a	2,374	0	n/a	2,374	-	5.5	2,374								
		4	0	n/a	3,653	0	n/a	3,653	0	n/a	3,653								
109	Other Ear Nose and Throat Infections	1	51	2.7	1,302	35	3.0	1,367	12	5.0	1,802	3.2	1,439	145,292	13	46,592	114	1,683	191,884
		2	0	n/a	2,392	-	13.0	2,425	-	6.0	2,486								
		3	0	n/a	3,744	0	n/a	3,825	0	n/a	3,850								
		4	0	n/a	4,516	0	n/a	4,516	-	3.0	4,516								
113	Sinusitis (MNRH)	1	-	1.0	1,657	20	2.9	1,366	6	3.8	1,366	3.9	1,578	55,225	-	2,655	-	-	57,879
		2	0	n/a	1,999	-	8.0	2,035	-	9.0	2,045								
		3	0	n/a	3,281	-	5.0	3,286	0	n/a	3,277								
		4	0	n/a	3,286	0	n/a	3,286	-	12.0	3,277								
114	Sore Throat (MNRH)	1	82	2.1	1,074	146	2.4	1,074	7	2.7	1,074	2.3	1,117	275,887	21	41,565	268	1,185	317,451
		2	-	2.0	1,818	6	2.3	1,818	0	n/a	1,818								
		3	0	n/a	1,846	-	3.0	1,846	0	n/a	1,846								
		4	0	n/a	3,443	-	3.0	3,443	0	n/a	3,443								
115	Miscellaneous Ear Nose and Throat Diagnoses (MNRH)	1	34	1.6	1,033	27	1.5	1,057	7	1.6	1,468	1.9	1,230	89,778	32	185,296	105	2,620	275,075
		2	-	2.5	3,036	0	n/a	3,336	-	5.0	3,042								
		3	0	n/a	3,517	-	15.0	3,709	0	n/a	3,709								
		4	0	n/a	7,524	0	n/a	7,162	0	n/a	7,271								
116	Croup (MNRH)	1	46	1.4	818	0	n/a	1,316	0	n/a	1,300	1.4	818	37,619	-	10,497	-	-	48,116
		2	0	n/a	1,769	0	n/a	1,769	0	n/a	1,769								
		3	0	n/a	4,993	0	n/a	4,993	0	n/a	4,993								
		4	0	n/a	9,853	0	n/a	9,853	0	n/a	9,853								
DISEASES & DISORDERS OF THE RESPIRATORY SYSTEM																			
125	Tracheostomy	1	0	n/a	6,470	-	9.0	6,470	0	n/a	6,470	55.3	72,533	725,335	48	4,039,648	58	82,155	4,764,982
		2	0	n/a	23,854	0	n/a	23,854	0	n/a	23,854								
		3	0	n/a	44,991	0	n/a	44,991	-	19.0	44,991								
		4	-	46.0	84,234	7	68.4	84,234	0	n/a	84,234								
126	Resection of Lung	1	-	5.2	5,929	171	4.9	6,286	67	5.3	6,860	5.9	6,907	1,947,710	40	527,911	322	7,688	2,475,621
		2	0	n/a	8,266	12	8.5	8,500	19	11.2	9,543								
		3	0	n/a	10,222	-	14.8	10,311	-	12.0	11,703								
		4	0	n/a	17,476	-	21.0	18,122	-	13.0	17,460								
127	Major Respiratory Procedures	1	-	2.3	5,452	29	7.1	4,771	19	7.6	5,345	10.1	7,070	494,909	37	467,264	107	8,992	962,173
		2	0	n/a	7,982	7	13.7	8,158	-	16.0	7,523								
		3	0	n/a	9,854	-	12.3	9,961	-	9.0	12,078								
		4	-	18.0	25,075	-	36.0	25,844	-	44.5	29,281								
128	Minor Respiratory Procedures	1	11	4.3	3,346	26	2.9	3,346	-	2.0	3,346	3.6	3,439	137,564	7	66,572	47	4,343	204,136
		2	-	11.0	5,203	-	8.0	5,203	0	n/a	5,203								
		3	0	n/a	9,220	0	n/a	9,220	0	n/a	9,220								
		4	0	n/a	18,312	0	n/a	18,312	0	n/a	18,312								
129	Other Respiratory Procedures	1	-	3.0	1,956	-	3.4	1,956	-	4.0	1,956	4.5	2,731	38,234	20	273,747	34	9,176	311,981
		2	0	n/a	5,571	-	8.7	5,571	0	n/a	5,571								
		3	0	n/a	7,989	0	n/a	7,989	0	n/a	7,989								
		4	0	n/a	14,422	0	n/a	14,422	0	n/a	14,422								
135	Tuberculosis	1	8	13.1	4,553	43	19.3	4,553	-	25.7	4,553	18.8	4,681	262,151	38	356,346	94	6,580	618,497
		2	0	n/a	6,325	-	20.0	6,325	0	n/a	6,325								
		3	0	n/a	9,978	0	n/a	9,978	-	20.0	9,978								
		4	0	n/a	29,730	0	n/a	29,730	0	n/a	29,730								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
136	Respiratory Failure	1	-	3.8	5,100	7	5.4	5,100	8	10.5	5,100	10.6	9,335	354,716	99	1,098,334	137	10,606	1,453,051
		2	-	25.0	6,914	-	8.5	6,914	-	2.7	6,914								
		3	-	27.0	9,288	-	9.5	9,288	-	9.5	9,288								
		4	6	18.8	21,236	-	19.5	21,236	0	n/a	21,236								
137	Respiratory Infections and Inflammations	1	25	6.0	3,748	51	6.9	4,174	45	8.9	3,920	9.0	4,937	784,992	114	1,126,829	273	7,003	1,911,821
		2	-	9.4	6,081	7	13.4	6,397	11	14.7	5,837								
		3	-	13.0	7,875	-	7.2	7,905	-	13.3	6,656								
		4	-	16.0	21,762	-	20.0	22,441	-	24.8	12,774								
138	Respiratory Neoplasms	1	-	5.0	3,454	101	6.5	3,454	103	9.2	3,588	10.2	4,289	1,393,837	392	3,581,815	717	6,940	4,975,652
		2	0	n/a	4,740	47	11.4	4,740	45	13.3	5,127								
		3	0	n/a	6,798	10	15.5	6,798	8	18.9	6,593								
		4	0	n/a	10,560	-	31.7	10,558	6	29.0	10,436								
139	Interstitial Disease	1	-	3.7	3,002	38	6.4	3,087	43	7.8	3,304	8.6	3,582	372,498	67	677,602	171	6,141	1,050,100
		2	-	5.0	4,686	-	13.2	4,686	8	15.9	3,745								
		3	0	n/a	6,759	-	13.0	6,759	-	16.7	7,364								
		4	-	6.0	7,975	0	n/a	7,975	-	35.0	9,201								
140	Chronic Obstructive Pulmonary Disease (COPD)	1	-	4.6	2,549	264	4.9	2,549	561	7.2	3,041	8.0	3,549	4,088,772	370	4,817,222	1,522	5,852	8,905,994
		2	0	n/a	3,828	43	8.5	3,828	150	10.1	4,089								
		3	-	7.8	5,133	31	9.6	5,133	51	13.5	5,840								
		4	0	n/a	12,394	14	16.1	12,394	25	27.7	10,321								
141	Pulmonary Edema	1	-	3.5	2,645	21	5.1	2,805	31	6.1	3,221	6.6	3,908	300,888	58	374,111	135	5,000	674,999
		2	0	n/a	3,568	6	10.0	3,568	10	6.6	4,029								
		3	0	n/a	3,568	-	4.0	3,568	-	16.0	4,064								
		4	0	n/a	20,000	-	19.5	20,000	-	3.0	19,885								
142	Chronic Bronchitis	1	-	4.0	2,157	322	5.2	2,260	636	6.0	2,599	6.7	2,914	3,409,619	293	3,030,192	1,463	4,402	6,439,811
		2	0	n/a	3,788	32	7.9	3,788	106	9.9	4,058								
		3	0	n/a	5,070	16	11.2	5,070	31	12.0	5,211								
		4	0	n/a	9,404	-	14.5	9,404	13	22.8	9,603								
143	Simple Pneumonia and Pleurisy	1	583	2.9	1,841	662	4.3	2,192	772	6.1	2,703	5.6	2,827	7,056,063	791	5,492,737	3,287	3,818	12,548,799
		2	18	6.9	3,560	81	6.5	3,750	198	8.7	4,039								
		3	11	6.1	4,066	48	10.1	4,881	71	12.8	5,714								
		4	7	19.0	12,739	20	16.3	13,368	25	19.2	9,439								
144	Pneumothorax	1	6	5.5	1,394	51	3.2	1,548	21	5.0	2,288	4.4	1,802	144,121	33	137,995	113	2,497	282,116
		2	0	n/a	3,422	0	n/a	3,422	-	23.0	3,734								
		3	0	n/a	4,648	0	n/a	4,648	-	25.0	5,039								
		4	0	n/a	8,852	0	n/a	8,852	0	n/a	8,852								
145	Tracheobronchitis	1	299	2.6	1,582	106	2.9	1,693	109	5.0	2,076	3.5	2,012	1,108,711	120	381,073	671	2,220	1,489,784
		2	7	4.1	3,208	-	7.2	3,101	13	7.5	3,550								
		3	-	7.5	4,308	-	3.5	3,849	-	4.0	3,875								
		4	-	14.3	17,079	-	12.0	18,871	-	23.5	19,199								
146	Asthma	1	472	1.9	1,315	202	2.9	1,495	41	4.0	2,010	2.5	1,487	1,091,594	68	202,043	802	1,613	1,293,636
		2	-	5.5	2,587	-	9.8	3,082	6	10.5	3,211								
		3	0	n/a	3,908	-	3.3	4,017	0	n/a	3,876								
		4	-	9.0	14,759	0	n/a	14,900	-	39.0	15,803								
147	Other Respiratory Diagnoses	1	127	2.2	1,358	115	3.4	1,827	134	4.4	2,091	3.7	1,971	865,251	103	720,514	542	2,926	1,585,765
		2	8	4.8	2,631	16	4.2	2,997	31	6.2	2,989								
		3	0	n/a	4,338	-	4.5	4,428	-	10.0	4,203								
		4	0	n/a	7,118	-	10.0	7,328	-	7.0	7,866								
175	Heart or Lung Transplant	1	0	n/a	27,233	0	n/a	27,233	0	n/a	27,233	16.7	63,188	189,563	-	7,016	-	-	196,579
		2	0	n/a	27,233	-	19.0	27,233	0	n/a	27,233								
		3	0	n/a	29,066	0	n/a	29,066	0	n/a	29,066								
		4	0	n/a	81,165	-	15.5	81,165	0	n/a	81,165								

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CMG	Description	Complexity Level	TYPICAL CASES									Weighted Mean		Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+						All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
CARDIAC & VASCULAR DISEASES & DISORDERS OF CIRCULATORY SYSTEM																			
176	Cardiac Valve Replacement with Heart Pump with Cardiac Catheter	1	0	n/a	17,347	-	21.5	17,347	-	27.7	17,347	29.1	24,286	412,862	17	489,092	34	26,528	901,955
		2	0	n/a	18,400	-	14.0	18,400	-	20.5	18,400								
		3	0	n/a	20,754	-	25.7	20,754	0	n/a	20,754								
		4	0	n/a	38,053	-	34.5	38,053	-	84.0	38,053								
177	Cardiac Valve Replacement with Heart Pump without Cardiac Catheter	1	0	n/a	10,514	45	6.4	11,272	29	7.6	11,992	9.0	13,348	1,615,148	47	1,115,865	168	16,256	2,731,012
		2	0	n/a	12,552	13	9.1	12,830	18	12.0	14,862								
		3	0	n/a	17,774	-	9.6	17,031	-	15.2	17,718								
		4	0	n/a	26,191	-	19.4	24,758	-	20.0	28,274								
178	Coronary Bypass with Heart Pump with Cardiac Catheter	1	0	n/a	13,396	-	15.5	13,396	-	18.7	13,763	18.1	16,699	1,118,821	21	357,903	88	16,781	1,476,723
		2	0	n/a	14,192	31	17.3	14,192	7	10.4	16,729								
		3	0	n/a	17,087	7	18.1	17,087	9	20.2	19,496								
		4	0	n/a	27,938	-	31.4	27,938	-	18.0	32,143								
179	Coronary Bypass with Heart Pump without Cardiac Catheter	1	0	n/a	8,877	196	5.5	8,875	77	7.0	9,402	7.8	10,171	4,933,109	212	2,994,437	697	11,374	7,927,547
		2	0	n/a	9,865	107	8.3	9,865	25	11.0	11,114								
		3	0	n/a	11,987	32	9.9	11,987	28	12.7	13,918								
		4	0	n/a	17,218	8	12.3	17,218	12	17.4	18,772								
181	Other Cardio-thoracic Procedures with Heart Pump with Cardiac Catheter	1	0	n/a	13,214	-	8.0	13,214	0	n/a	13,214	8.0	14,303	-	-	66,721	-	-	-
		2	0	n/a	15,392	-	8.0	15,392	0	n/a	15,392								
		3	0	n/a	15,392	0	n/a	15,392	0	n/a	15,392								
		4	0	n/a	61,521	0	n/a	61,521	0	n/a	61,521								
182	Other Cardio-thoracic Procedures with Heart Pump without Cardiac Catheter	1	0	n/a	10,407	13	5.8	8,920	-	10.3	10,883	7.5	10,304	216,389	-	59,814	-	-	276,203
		2	0	n/a	12,058	-	7.0	10,598	0	n/a	11,212								
		3	0	n/a	13,033	-	9.0	12,058	-	5.0	12,205								
		4	0	n/a	26,438	-	24.0	22,320	0	n/a	25,388								
183	Major Cardio-thoracic Procedures without Heart Pump with Cardiac Catheter	1	-	1.0	3,455	-	10.0	9,280	0	n/a	10,694	11.7	12,779	127,788	9	210,650	19	17,813	338,438
		2	0	n/a	13,013	-	9.7	13,452	-	1.0	14,538								
		3	0	n/a	13,891	-	5.0	14,190	-	17.0	16,832								
		4	0	n/a	20,369	0	n/a	20,369	-	44.0	19,856								
184	Major Cardio-thoracic Procedures without Heart Pump without Cardiac Catheter	1	0	n/a	8,275	14	4.6	8,721	-	10.0	9,014	7.0	10,180	305,392	11	147,255	41	11,040	452,646
		2	0	n/a	9,516	-	4.4	9,518	6	10.2	11,491								
		3	0	n/a	11,117	-	14.0	11,114	-	12.0	13,450								
		4	0	n/a	24,227	-	15.0	24,168	0	n/a	18,326								
185	Permanent Pacemaker Implant for Complicating Cardiac Conditions	1	0	n/a	17,033	-	8.7	17,033	7	8.7	17,033	12.0	19,566	450,025	13	504,704	36	26,520	954,728
		2	0	n/a	20,237	-	12.3	20,237	7	16.1	20,237								
		3	0	n/a	22,683	-	13.0	22,683	-	7.0	22,683								
		4	0	n/a	31,957	-	19.0	31,957	0	n/a	31,957								
186	Permanent Pacemaker Implant without Complicating Cardiac Conditions	1	-	1.0	6,504	55	4.1	8,776	209	5.2	7,059	6.1	8,419	2,786,671	117	1,159,821	448	8,809	3,946,492
		2	0	n/a	13,671	18	7.6	13,671	19	6.8	10,538								
		3	0	n/a	13,673	-	10.3	13,671	15	12.9	11,122								
		4	0	n/a	15,071	-	18.3	15,071	7	23.7	15,577								
188	Percutaneous Transluminal Coronary Angioplasty with Complicating Cardiac Conditions	1	0	n/a	5,831	181	4.9	5,831	53	6.3	6,075	5.9	6,366	1,871,630	36	481,238	330	7,130	2,352,868
		2	0	n/a	6,586	24	7.1	6,586	15	9.7	7,943								
		3	0	n/a	8,264	9	5.6	8,264	-	10.8	9,028								
		4	0	n/a	14,141	-	7.0	14,141	-	15.8	12,484								
189	Percutaneous Transluminal Coronary Angioplasty without Complicating Cardiac Conditions	1	0	n/a	3,822	43	1.1	3,529	27	1.3	3,615	4.6	4,853	1,688,827	118	1,203,223	466	6,206	2,892,049
		2	0	n/a	4,867	175	4.5	4,867	74	6.1	5,062								
		3	0	n/a	6,326	14	6.8	6,328	10	10.1	6,817								
		4	0	n/a	10,464	-	11.0	10,464	-	16.5	11,465								
191	Temporary Cardiac Pacemaker	1	0	n/a	3,246	-	5.0	3,246	-	4.0	3,246	8.7	6,050	60,503	18	60,240	28	4,312	120,742
		2	0	n/a	6,260	0	n/a	6,260	-	8.0	6,260								
		3	0	n/a	6,700	-	14.0	6,700	-	17.0	6,700								
		4	0	n/a	10,801	-	15.0	10,801	-	6.0	10,801								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
193	Cardiac Pacemaker Device Replacement or Revision	1	-	1.0	4,502	-	1.8	4,502	23	1.5	4,502	1.5	4,502	135,050	-	29,564	-	-	164,614
		2	0	n/a	8,202	0	n/a	8,202	0	n/a	8,202								
		3	0	n/a	9,321	0	n/a	9,321	0	n/a	9,321								
		4	0	n/a	23,451	0	n/a	23,451	0	n/a	23,451								
194	Minor Cardio-thoracic Procedures without Heart Pump	1	-	1.0	3,300	-	2.0	2,399	-	4.0	2,946	6.6	3,790	26,531	-	63,996	-	-	90,527
		2	0	n/a	4,199	-	8.0	4,080	-	12.0	4,554								
		3	-	17.0	6,853	0	n/a	6,853	0	n/a	7,090								
		4	0	n/a	14,958	0	n/a	14,958	0	n/a	14,958								
200	Acute Myocardial Infarction, Unstable Angina or Cardiac Catheter with Shock or Pulmonary Embolism	1	0	n/a	6,388	-	12.7	6,388	-	8.0	6,388	11.0	9,340	112,082	72	570,380	84	8,125	682,462
		2	0	n/a	8,612	-	9.0	8,612	-	9.0	8,612								
		3	0	n/a	11,519	-	8.5	11,519	0	n/a	11,519								
		4	0	n/a	27,106	-	27.0	27,106	0	n/a	27,106								
201	Acute Myocardial Infarction with Cardiac Catheter with Congestive Heart Failure	1	0	n/a	7,346	12	11.0	7,346	13	9.3	7,346	11.2	7,933	277,650	21	154,320	56	7,714	431,970
		2	0	n/a	8,684	-	11.5	8,684	-	16.0	8,684								
		3	0	n/a	9,377	0	n/a	9,377	-	17.0	9,377								
		4	0	n/a	15,140	-	13.0	15,140	0	n/a	15,140								
202	Acute Myocardial Infarction with Cardiac Catheter with Ventricular Tachycardia	1	0	n/a	4,134	-	6.3	4,134	-	8.0	4,134	7.0	4,134	20,671	-	8,095	-	-	28,766
		2	0	n/a	4,463	0	n/a	4,463	0	n/a	4,463								
		3	0	n/a	5,291	0	n/a	5,291	0	n/a	5,291								
		4	0	n/a	7,315	0	n/a	7,315	0	n/a	7,315								
203	Acute Myocardial Infarction with Cardiac Catheter with Angina	1	0	n/a	5,058	-	10.5	5,058	-	9.7	5,757	10.0	5,477	27,387	-	59,088	-	-	86,476
		2	0	n/a	6,765	0	n/a	6,765	0	n/a	7,163								
		3	0	n/a	7,257	0	n/a	7,257	0	n/a	7,257								
		4	0	n/a	12,133	0	n/a	12,133	0	n/a	12,133								
204	Acute Myocardial Infarction with Cardiac Catheter without Specified Cardiac Conditions	1	0	n/a	4,452	100	7.0	4,452	61	7.4	5,289	7.5	4,883	835,045	52	263,731	223	4,927	1,098,775
		2	0	n/a	6,334	-	9.0	6,334	-	19.0	6,698								
		3	0	n/a	6,643	-	10.0	6,643	0	n/a	8,198								
		4	0	n/a	8,113	0	n/a	8,113	-	14.0	8,774								
205	Acute Myocardial Infarction without Cardiac Catheter with Congestive Heart Failure	1	0	n/a	4,074	20	7.1	4,074	97	8.1	4,362	8.9	4,999	774,788	108	753,642	263	5,812	1,528,430
		2	0	n/a	6,614	-	8.6	6,614	18	10.3	5,959								
		3	0	n/a	8,235	-	8.0	8,235	10	13.0	7,619								
		4	0	n/a	8,350	-	33.0	8,350	-	19.0	12,369								
206	Acute Myocardial Infarction without Cardiac Catheter with Ventricular Tachycardia	1	0	n/a	3,572	-	4.5	3,572	12	6.2	3,572	6.2	3,693	66,475	8	50,412	26	4,496	116,887
		2	0	n/a	4,657	0	n/a	4,657	-	9.5	4,657								
		3	0	n/a	7,691	0	n/a	7,691	0	n/a	7,691								
		4	0	n/a	11,205	0	n/a	11,205	0	n/a	11,205								
207	Acute Myocardial Infarction without Cardiac Catheter with Angina	1	0	n/a	2,885	-	4.2	2,885	-	9.4	3,108	7.0	3,241	38,897	7	23,042	19	3,260	61,939
		2	0	n/a	4,313	-	10.0	4,313	-	6.0	4,617								
		3	0	n/a	7,016	0	n/a	7,016	0	n/a	7,074								
		4	0	n/a	7,952	0	n/a	7,952	0	n/a	7,952								
208	Acute Myocardial Infarction without Cardiac Catheter without Specified Cardiac Conditions	1	-	5.0	3,357	245	4.3	3,357	283	6.1	3,443	5.9	3,667	2,218,359	442	1,942,473	1,047	3,974	4,160,833
		2	0	n/a	4,462	18	7.6	4,462	29	9.2	4,679								
		3	0	n/a	5,316	-	10.3	5,316	19	12.7	6,333								
		4	0	n/a	10,610	-	15.7	10,610	-	17.8	8,492								
210	Unstable Angina with Cardiac Catheter with Specified Cardiac Conditions	1	0	n/a	5,568	-	7.7	5,568	-	9.0	5,568	8.0	5,841	40,890	-	10,921	-	-	51,810
		2	0	n/a	7,481	0	n/a	7,481	-	6.0	7,481								
		3	0	n/a	8,150	0	n/a	8,150	0	n/a	8,150								
		4	0	n/a	8,354	0	n/a	8,354	0	n/a	8,354								
211	Unstable Angina with Cardiac Catheter without Specified Cardiac Conditions	1	0	n/a	3,758	54	7.5	3,758	33	7.3	4,828	7.5	4,219	379,741	14	69,975	104	4,324	449,716
		2	0	n/a	5,089	0	n/a	5,089	-	11.0	6,124								
		3	0	n/a	5,263	-	10.0	5,263	-	9.0	6,124								
		4	0	n/a	7,840	0	n/a	7,840	0	n/a	7,860								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
212	Unstable Angina without Cardiac Catheter with Specified Cardiac Conditions	1	0	n/a	2,420	9	3.7	2,420	37	6.6	2,736	6.5	3,083	172,675	16	145,670	72	4,421	318,345
		2	0	n/a	3,949	-	2.0	3,949	8	9.4	4,431								
		3	0	n/a	4,609	0	n/a	4,609	0	n/a	4,729								
		4	0	n/a	7,478	0	n/a	7,478	-	9.0	10,257								
213	Unstable Angina without Cardiac Catheter without Specified Cardiac Conditions	1	0	n/a	1,660	219	3.0	1,660	280	4.3	1,997	3.9	1,952	1,042,394	165	570,889	699	2,308	1,613,283
		2	0	n/a	3,250	9	4.0	3,250	20	7.0	3,313								
		3	0	n/a	4,612	-	6.7	4,612	-	2.3	3,436								
		4	0	n/a	4,830	0	n/a	4,830	0	n/a	5,461								
215	Cardiac Catheter with Congestive Heart Failure	1	0	n/a	5,406	27	9.8	4,558	27	11.1	5,434	12.5	5,940	457,360	47	448,778	124	7,308	906,138
		2	0	n/a	6,781	10	17.7	6,455	-	19.6	7,658								
		3	0	n/a	7,648	-	12.3	7,648	-	11.7	11,269								
		4	0	n/a	13,465	-	15.0	13,465	-	33.0	14,523								
216	Cardiac Catheter with Ventricular Tachycardia	1	0	n/a	4,293	28	6.1	4,293	17	8.2	4,293	7.3	4,524	235,248	21	111,838	73	4,755	347,086
		2	0	n/a	5,955	-	7.7	5,955	-	8.5	5,955								
		3	0	n/a	6,146	-	14.0	6,146	-	14.0	6,146								
		4	0	n/a	11,589	0	n/a	11,589	0	n/a	11,589								
217	Cardiac Catheter with Unstable Angina	1	0	n/a	2,912	35	5.9	2,912	25	6.5	3,743	6.1	3,415	221,947	22	90,134	87	3,587	312,080
		2	0	n/a	5,072	-	4.5	5,072	-	6.0	5,316								
		3	0	n/a	5,409	0	n/a	5,409	-	8.0	5,682								
		4	0	n/a	6,347	0	n/a	6,347	0	n/a	6,347								
218	Cardiac Catheter without Specified Cardiac Conditions	1	-	1.0	2,703	160	4.2	2,303	61	6.0	2,496	4.8	2,492	593,071	37	184,925	275	2,829	777,995
		2	0	n/a	4,161	8	5.4	4,265	-	4.0	4,216								
		3	0	n/a	4,409	-	8.0	4,409	-	5.5	4,663								
		4	0	n/a	5,349	-	6.0	5,349	-	25.0	5,390								
219	Endocarditis	1	0	n/a	5,366	-	12.8	5,366	-	16.0	5,366	23.3	7,761	77,615	28	275,172	38	9,284	352,787
		2	0	n/a	9,897	0	n/a	9,897	-	47.0	9,897								
		3	0	n/a	15,077	0	n/a	15,077	-	45.0	15,077								
		4	0	n/a	22,375	0	n/a	22,375	0	n/a	22,375								
220	Pulmonary Embolism	1	0	n/a	2,473	55	5.7	2,605	33	6.9	2,980	7.7	3,226	429,104	62	528,673	195	4,912	957,776
		2	0	n/a	3,242	21	9.1	3,242	12	11.8	4,218								
		3	0	n/a	4,715	7	11.6	4,715	-	12.7	6,635								
		4	0	n/a	7,940	-	16.5	7,940	0	n/a	8,298								
222	Heart Failure	1	-	1.0	2,115	276	5.3	2,484	967	6.4	2,631	7.6	3,225	5,446,784	762	8,634,443	2,451	5,745	14,081,227
		2	0	n/a	2,895	59	7.4	3,742	204	10.2	3,991								
		3	0	n/a	5,034	34	11.0	4,939	95	14.9	5,576								
		4	0	n/a	9,256	-	17.3	9,256	38	18.3	9,225								
225	Hypertensive Heart Disease	1	0	n/a	2,494	-	3.3	2,494	6	4.2	2,494	7.8	3,317	135,998	15	163,074	56	5,341	299,072
		2	0	n/a	3,154	9	7.6	3,154	15	8.5	3,154								
		3	0	n/a	4,684	0	n/a	4,684	7	10.0	4,684								
		4	0	n/a	5,061	-	17.0	5,061	0	n/a	5,061								
226	Other Circulatory Diagnoses	1	8	3.0	1,776	107	3.1	2,019	100	5.2	2,356	5.3	2,841	-	129	867,143	-	-	-
		2	0	n/a	3,752	22	6.8	3,935	21	8.9	4,054								
		3	0	n/a	4,840	17	11.4	4,991	12	8.8	6,451								
		4	0	n/a	10,555	-	8.5	10,555	0	n/a	9,192								
229	Atherosclerosis (MNRH)	1	0	n/a	1,657	67	3.3	1,657	73	4.3	2,223	5.4	2,561	499,337	144	1,090,843	339	4,691	1,590,181
		2	0	n/a	2,942	16	5.9	2,942	26	9.0	3,876								
		3	0	n/a	5,979	-	7.3	5,979	9	17.3	5,528								
		4	0	n/a	9,692	0	n/a	9,692	-	7.0	10,474								
232	Acquired Valvular Disorders (MNRH)	1	-	4.0	2,502	7	3.9	2,502	-	8.4	2,502	6.2	3,284	78,817	28	183,464	52	5,044	262,280
		2	-	5.0	3,540	-	3.4	3,540	-	11.3	3,540								
		3	0	n/a	4,878	0	n/a	4,878	-	11.0	4,878								
		4	0	n/a	9,554	0	n/a	9,554	-	9.0	9,554								

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Source: Manitoba Centre for Health Policy, 2009

CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
233	Hypertension (MNRH)	1	-	3.5	1,780	100	2.9	1,759	143	3.3	1,906	3.5	1,983	543,428	20	128,094	294	2,284	671,521
		2	0	n/a	2,339	-	2.8	2,400	20	7.0	2,828								
		3	0	n/a	4,067	-	2.5	4,067	-	7.0	4,078								
		4	0	n/a	6,444	-	6.0	6,444	-	8.0	6,522								
234	Congenital Cardiac Disorders (MNRH)	1	0	n/a	2,499	0	n/a	2,499	0	n/a	2,499	n/a	n/a	0	7	22,019	7	3,146	22,019
		2	0	n/a	2,901	0	n/a	2,901	0	n/a	2,901								
		3	0	n/a	3,313	0	n/a	3,313	0	n/a	3,313								
		4	0	n/a	3,313	0	n/a	3,313	0	n/a	3,313								
235	Angina Pectoris	1	0	n/a	1,350	138	2.4	1,350	134	3.1	1,525	2.9	1,539	464,784	42	177,089	344	1,866	641,873
		2	0	n/a	1,774	11	4.1	1,774	15	3.2	2,391								
		3	0	n/a	3,099	0	n/a	3,099	-	9.0	3,186								
		4	0	n/a	9,129	0	n/a	9,129	-	10.0	9,129								
237	Arrhythmia	1	19	1.9	1,906	329	2.4	1,502	506	3.7	1,862	3.8	2,030	2,088,810	262	1,287,610	1,291	2,615	3,376,420
		2	-	4.0	2,918	38	5.2	2,918	104	6.9	3,310								
		3	0	n/a	4,345	10	6.6	4,345	18	7.9	4,690								
		4	0	n/a	7,512	-	23.0	7,512	-	10.3	7,631								
240	Syncope and Collapse	1	7	1.7	1,004	79	2.0	1,286	184	3.6	1,667	3.6	1,765	548,867	26	206,568	337	2,242	755,434
		2	-	3.0	2,023	-	5.0	2,023	24	5.6	3,096								
		3	0	n/a	2,095	-	4.0	2,095	6	14.2	3,899								
		4	0	n/a	5,665	-	6.0	5,665	-	8.0	5,318								
242	Chest Pain	1	-	1.5	980	513	1.8	1,171	258	2.5	1,352	2.1	1,278	1,037,415	109	376,901	921	1,536	1,414,316
		2	0	n/a	2,022	22	3.6	2,022	7	3.6	2,481								
		3	0	n/a	2,039	6	2.3	2,039	-	8.0	2,732								
		4	0	n/a	3,671	-	10.0	3,671	0	n/a	3,738								
880	Amputation of Lower Limb except Toe with Major Vascular Surgery	1	0	n/a	11,826	-	7.0	11,826	-	12.0	11,826	18.4	16,725	83,623	7	127,177	12	17,567	210,800
		2	0	n/a	13,684	-	9.0	13,684	0	n/a	13,684								
		3	0	n/a	17,093	0	n/a	17,093	0	n/a	17,093								
		4	0	n/a	32,603	-	55.0	32,603	0	n/a	32,603								
881	Amputation of Lower Limb except Toe	1	0	n/a	6,104	30	11.6	6,104	25	11.2	6,104	15.2	9,176	779,968	117	1,702,417	202	12,289	2,482,385
		2	0	n/a	10,139	6	15.8	10,139	-	17.5	10,139								
		3	0	n/a	12,679	9	16.2	12,679	-	13.0	12,679								
		4	0	n/a	22,033	-	41.5	22,033	-	33.8	22,033								
882	Wound Debridement or Other Amputation with Major Vascular Surgery	1	0	n/a	10,123	6	7.8	10,123	-	15.8	10,123	12.9	11,293	169,393	16	174,830	31	11,104	344,222
		2	0	n/a	11,599	-	3.0	11,599	-	20.5	11,599								
		3	0	n/a	15,161	-	18.0	15,161	0	n/a	15,161								
		4	0	n/a	18,206	0	n/a	18,206	-	22.0	18,206								
883	Wound Debridement and Grafting Other than Hand	1	0	n/a	5,918	-	13.3	5,918	0	n/a	5,918	13.3	5,918	-	-	21,155	-	-	-
		2	0	n/a	9,562	0	n/a	9,562	0	n/a	9,562								
		3	0	n/a	15,911	0	n/a	15,911	0	n/a	15,911								
		4	0	n/a	21,402	0	n/a	21,402	0	n/a	21,402								
884	Other Amputations including Toe	1	0	n/a	3,962	15	8.5	3,962	9	8.6	3,962	10.2	5,315	196,655	18	173,516	55	6,730	370,171
		2	0	n/a	6,441	-	10.6	6,441	-	11.5	6,441								
		3	0	n/a	6,571	-	17.7	6,571	0	n/a	6,571								
		4	0	n/a	12,254	-	14.0	12,254	0	n/a	12,254								
885	Aortic Replacement	1	0	n/a	9,410	38	5.8	9,493	65	6.3	10,530	7.9	10,972	1,514,167	38	758,156	176	12,911	2,272,323
		2	0	n/a	9,675	-	4.6	9,624	12	9.0	11,345								
		3	0	n/a	9,959	-	10.0	9,959	9	13.0	12,403								
		4	0	n/a	20,500	0	n/a	20,500	8	25.1	20,393								
887	Vascular Bypass Surgery	1	0	n/a	5,665	77	5.2	5,665	59	5.7	6,695	6.8	7,226	1,293,435	56	739,331	235	8,650	2,032,766
		2	0	n/a	8,456	11	11.0	8,456	8	9.4	8,607								
		3	0	n/a	9,569	12	9.8	9,569	6	18.0	11,051								
		4	0	n/a	16,510	-	6.0	16,510	-	12.2	20,537								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
890	Other Thoraco-abdominal Procedures	1	0	n/a	6,317	10	5.4	6,317	8	4.4	6,317	5.6	6,994	146,882	12	93,408	33	7,282	240,290
		2	0	n/a	7,880	0	n/a	7,880	0	n/a	7,880								
		3	0	n/a	11,060	-	10.5	11,060	-	7.0	11,060								
		4	0	n/a	25,408	0	n/a	25,408	0	n/a	25,408								
891	Vascular Repair	1	-	1.0	4,170	15	4.5	4,538	21	3.8	4,975	6.8	6,414	301,480	28	212,965	75	6,859	514,445
		2	0	n/a	8,681	0	n/a	8,576	-	18.3	8,306								
		3	0	n/a	11,181	-	6.0	11,181	-	2.0	10,147								
		4	0	n/a	21,394	-	24.5	21,394	-	53.0	20,367								
892	Other Vascular Procedures	1	0	n/a	2,930	23	2.1	2,930	23	2.4	2,930	3.0	3,481	177,540	17	108,504	68	4,207	286,044
		2	0	n/a	8,215	0	n/a	8,215	-	1.7	8,215								
		3	0	n/a	8,265	-	1.0	8,265	0	n/a	8,265								
		4	0	n/a	9,830	0	n/a	9,830	-	42.0	9,830								
893	Vein Ligation and Stripping (MNRH)	1	0	n/a	1,614	58	1.1	1,614	7	1.3	1,614	1.1	1,614	104,933	0	0	65	1,614	104,933
		2	0	n/a	1,946	0	n/a	1,946	0	n/a	1,946								
		3	0	n/a	2,017	0	n/a	2,017	0	n/a	2,017								
		4	0	n/a	2,017	0	n/a	2,017	0	n/a	2,017								
895	Deep Vein Thrombophlebitis	1	-	11.5	2,353	79	6.0	2,577	59	8.4	2,744	8.0	2,981	527,665	46	447,541	223	4,373	975,207
		2	0	n/a	2,954	8	5.3	2,935	14	9.6	3,922								
		3	0	n/a	3,912	-	11.6	3,912	7	15.3	5,358								
		4	0	n/a	6,311	-	22.0	6,311	-	33.0	7,861								
898	Peripheral Vascular Disease	1	0	n/a	1,932	46	3.0	2,204	61	3.9	2,511	5.2	2,959	396,461	96	834,656	230	5,353	1,231,117
		2	0	n/a	4,516	-	3.6	4,516	10	11.2	4,847								
		3	0	n/a	6,307	-	8.0	6,293	8	16.9	5,067								
		4	0	n/a	7,959	0	n/a	7,959	-	27.0	11,481								
DISEASES & DISORDERS OF THE DIGESTIVE SYSTEM																			
250	Extensive Gastrointestinal Procedures	1	-	14.0	10,373	8	8.3	10,373	6	7.7	10,373	14.1	16,744	418,608	12	558,756	37	26,415	977,364
		2	0	n/a	14,151	-	12.5	14,151	-	17.0	14,151								
		3	0	n/a	18,349	-	25.0	18,349	0	n/a	18,349								
		4	-	50.0	36,774	-	18.5	36,774	-	23.0	36,774								
251	Gastrostomy and Colostomy Procedures	1	16	5.8	4,716	102	9.8	6,342	63	11.7	7,606	15.1	10,017	2,874,832	143	3,887,484	430	15,726	6,762,316
		2	-	12.3	7,828	14	15.7	9,475	10	18.9	11,342								
		3	7	4.4	7,828	18	20.8	10,466	18	21.3	13,856								
		4	-	36.7	35,028	21	30.9	24,406	12	43.3	24,466								
252	Major Esophageal, Stomach and Duodenum Procedures	1	0	n/a	6,863	7	8.1	6,863	10	6.7	6,863	9.6	7,562	158,809	10	241,369	31	12,909	400,177
		2	0	n/a	8,749	-	20.0	8,749	-	15.0	8,749								
		3	0	n/a	12,321	-	8.0	12,321	-	35.0	12,321								
		4	0	n/a	28,296	0	n/a	28,296	0	n/a	28,296								
253	Major Intestinal and Rectal Procedures	1	13	6.7	4,737	380	7.7	5,349	221	9.5	6,050	10.4	6,987	5,638,667	236	4,783,922	1,043	9,993	10,422,589
		2	0	n/a	7,530	36	11.4	7,572	25	14.2	8,781								
		3	-	6.0	8,024	40	13.3	8,019	32	16.8	10,295								
		4	-	25.5	15,561	27	23.3	16,519	30	26.1	19,331								
255	Less Extensive Esophageal, Stomach and Duodenum Procedures	1	19	6.1	4,318	157	4.5	3,722	45	7.1	5,133	6.1	4,779	1,242,632	33	532,473	293	6,058	1,775,105
		2	-	5.0	5,880	10	8.8	6,374	7	11.7	8,223								
		3	-	7.5	6,106	10	11.4	7,164	-	11.0	9,749								
		4	-	29.0	13,072	-	16.0	14,507	-	17.3	19,391								
258	Laparotomy	1	20	4.5	3,483	114	5.0	3,525	37	9.3	4,749	7.5	4,830	1,067,396	67	675,679	288	6,052	1,743,076
		2	-	7.0	7,672	17	8.5	6,096	9	14.4	7,454								
		3	0	n/a	7,785	8	12.4	7,532	-	17.0	8,604								
		4	-	11.5	13,314	-	20.8	14,094	-	21.3	13,884								
260	Less Extensive Intestinal and Rectal Procedures	1	-	3.5	2,316	85	3.0	1,825	16	4.5	3,048	4.2	2,333	268,248	14	162,132	129	3,336	430,380
		2	0	n/a	4,554	-	6.8	4,539	-	6.0	4,994								
		3	0	n/a	4,998	-	15.0	4,998	-	22.5	5,450								
		4	0	n/a	10,991	0	n/a	10,991	-	44.0	11,029								

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CMG	Description	Complexity Level	TYPICAL CASES											ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean		Total Cost for CMG	All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
261	Complicated Appendectomy	1	100	4.6	3,033	154	3.6	2,579	16	7.3	3,385	4.6	2,981	894,423	45	194,272	345	3,156	1,088,695
		2	6	8.5	4,513	8	8.1	4,380	-	7.3	4,379								
		3	-	9.5	4,529	-	7.6	4,459	-	9.0	4,721								
		4	0	n/a	6,214	-	6.0	6,473	-	16.0	6,509								
262	Simple Appendectomy	1	203	2.2	1,850	501	2.3	1,762	18	3.5	2,457	2.4	1,859	1,384,659	62	214,764	807	1,982	1,599,422
		2	0	n/a	3,391	9	5.3	3,427	-	6.3	3,969								
		3	0	n/a	3,431	10	7.5	3,476	0	n/a	3,969								
		4	0	n/a	4,403	0	n/a	4,437	-	18.0	4,437								
264	Minor Gastrointestinal Procedures	1	13	2.9	2,735	10	4.8	3,447	-	6.5	3,832	5.2	3,535	109,579	7	25,474	38	3,554	135,053
		2	-	8.0	4,184	-	13.0	4,593	0	n/a	4,686								
		3	-	5.0	4,661	0	n/a	4,748	0	n/a	4,797								
		4	0	n/a	10,910	0	n/a	10,910	-	25.0	10,779								
265	Abdominal Laparoscopy	1	-	9.0	2,046	9	3.4	2,046	-	1.0	2,046	4.0	2,208	26,493	-	6,651	-	-	33,145
		2	0	n/a	2,243	0	n/a	2,243	0	n/a	2,243								
		3	0	n/a	3,982	0	n/a	3,982	-	7.0	3,982								
		4	0	n/a	7,698	0	n/a	7,698	0	n/a	7,698								
266	Anus and Stomal Procedures (MNRH)	1	-	2.3	1,386	286	1.9	1,708	78	3.3	2,704	2.6	1,982	759,251	17	82,290	400	2,104	841,540
		2	-	14.0	2,692	10	6.6	2,692	-	12.0	4,405								
		3	0	n/a	4,254	0	n/a	4,254	-	7.0	4,869								
		4	0	n/a	9,795	0	n/a	9,795	-	66.0	11,029								
269	Bilateral or Complex Unilateral Hernia Procedures	1	16	1.2	1,677	420	2.2	2,051	220	2.5	1,923	2.4	2,062	1,389,857	44	231,474	718	2,258	1,621,331
		2	0	n/a	3,519	-	5.6	3,519	6	4.5	4,026								
		3	0	n/a	4,428	-	6.5	4,428	-	8.0	4,275								
		4	0	n/a	6,190	0	n/a	6,190	-	8.0	7,335								
271	Simple Unilateral Hernia Procedures (MNRH)	1	24	1.3	1,571	147	2.1	2,338	59	2.8	2,309	2.4	2,309	547,149	13	114,963	250	2,648	662,111
		2	0	n/a	3,335	-	4.0	3,335	-	3.0	3,860								
		3	0	n/a	3,741	-	5.0	3,756	-	9.7	4,342								
		4	0	n/a	5,602	-	15.0	5,602	0	n/a	5,602								
279	Digestive System Malignancy	1	0	n/a	2,626	74	6.4	2,682	94	5.9	3,133	7.0	3,373	684,796	175	1,650,694	378	6,179	2,335,490
		2	0	n/a	4,560	14	8.4	4,560	12	11.3	5,002								
		3	0	n/a	6,305	-	18.3	6,305	-	10.7	5,209								
		4	0	n/a	11,526	-	16.5	11,526	-	19.0	10,364								
281	Gastrointestinal Hemorrhage	1	10	4.0	1,381	230	3.3	1,676	406	4.5	2,213	4.7	2,337	1,785,736	289	1,461,720	1,053	3,084	3,247,456
		2	-	11.0	2,443	27	6.5	3,139	48	7.5	3,966								
		3	-	11.0	3,109	12	9.0	3,558	22	9.7	4,871								
		4	0	n/a	7,846	-	10.6	7,846	-	19.5	9,033								
285	Complicated Ulcer	1	-	1.0	2,137	19	4.5	2,137	16	5.6	2,137	6.1	2,586	111,206	21	178,347	64	4,524	289,553
		2	0	n/a	4,042	-	13.0	4,042	-	15.5	4,042								
		3	0	n/a	4,902	-	5.0	4,902	0	n/a	4,902								
		4	0	n/a	8,285	-	18.0	8,285	0	n/a	8,285								
286	Uncomplicated Ulcer	1	-	2.0	1,434	44	3.0	1,449	20	6.7	2,173	4.3	1,925	142,460	24	65,117	98	2,118	207,578
		2	0	n/a	3,692	-	6.7	3,692	-	4.8	3,783								
		3	0	n/a	3,692	-	2.0	3,692	-	7.0	3,932								
		4	0	n/a	5,713	0	n/a	5,713	0	n/a	5,719								
289	Inflammatory Bowel Disease	1	27	6.4	2,726	210	4.4	2,292	17	6.5	3,041	5.5	2,704	757,147	41	341,971	321	3,424	1,099,118
		2	-	22.0	4,978	13	10.6	5,114	-	19.5	5,132								
		3	0	n/a	5,777	7	7.9	5,343	0	n/a	6,034								
		4	0	n/a	10,053	-	15.0	10,244	-	26.0	10,530								
290	Gastrointestinal Obstruction	1	10	3.4	1,493	304	3.8	1,521	275	4.6	1,957	4.7	1,944	1,244,091	208	698,106	848	2,290	1,942,197
		2	0	n/a	3,301	13	6.8	3,301	14	10.5	4,071								
		3	0	n/a	3,922	8	11.4	3,945	9	15.7	4,638								
		4	0	n/a	8,897	-	4.0	9,155	-	12.4	7,435								

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			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
294	Esophagitis, Gastroenteritis and Miscellaneous Digestive Disease	1	423	1.8	981	1914	2.9	1,331	1064	4.3	1,937	3.5	1,636	6,056,341	637	3,398,105	4,338	2,179	9,454,446
		2	14	3.6	1,779	76	5.8	2,593	100	8.1	3,440								
		3	-	5.5	2,876	45	6.7	3,067	40	8.2	4,280								
		4	0	n/a	6,207	11	10.5	5,779	-	11.8	8,287								
297	Other Gastrointestinal Diagnoses	1	61	1.9	1,158	283	3.7	1,771	144	4.1	1,973	4.1	2,049	1,106,588	190	955,244	730	2,824	2,061,831
		2	-	14.0	3,663	20	8.5	3,792	12	9.6	3,896								
		3	0	n/a	4,091	6	8.7	4,365	7	10.0	6,130								
		4	0	n/a	9,723	-	9.0	9,723	-	10.5	11,177								
575	Pelvic Exenteration	1	0	n/a	11,461	-	18.0	11,461	0	n/a	11,461	18.0	11,461	-	0	0	-	11,461	-
		2	0	n/a	11,461	0	n/a	11,461	0	n/a	11,461								
		3	0	n/a	11,461	0	n/a	11,461	0	n/a	11,461								
		4	0	n/a	18,042	0	n/a	18,042	0	n/a	18,042								
DISEASES & DISORDERS OF HEPATOBILIARY SYSTEM OR PANCREAS																			
310	Liver Transplant	1	0	n/a	17,752	0	n/a	17,752	0	n/a	17,752	n/a	n/a	0	0	0	0	n/a	0
		2	0	n/a	22,544	0	n/a	22,544	0	n/a	22,544								
		3	0	n/a	23,862	0	n/a	23,862	0	n/a	23,862								
		4	0	n/a	40,411	0	n/a	40,411	0	n/a	40,411								
311	Major Pancreatic Procedures	1	0	n/a	9,358	13	10.2	9,358	-	16.0	9,358	19.6	14,362	545,756	24	726,036	62	20,513	1,271,792
		2	0	n/a	11,711	-	14.4	11,711	-	12.0	11,711								
		3	0	n/a	14,335	8	22.1	14,335	-	26.0	14,335								
		4	0	n/a	31,232	-	50.5	31,232	-	29.0	31,232								
312	Major Hepatobiliary Procedures	1	-	5.0	7,446	13	6.3	7,446	11	7.3	7,446	8.2	8,610	284,132	7	168,381	40	11,313	452,513
		2	-	13.0	9,862	-	10.0	9,862	0	n/a	9,862								
		3	0	n/a	10,988	-	7.0	10,988	-	19.0	10,988								
		4	0	n/a	18,284	0	n/a	18,284	-	18.0	18,284								
313	Common Duct Exploration	1	0	n/a	4,904	-	8.3	4,904	-	7.0	4,904	8.0	4,904	19,614	-	76,537	-	-	96,152
		2	0	n/a	6,609	0	n/a	6,609	0	n/a	6,609								
		3	0	n/a	6,641	0	n/a	6,641	0	n/a	6,641								
		4	0	n/a	11,147	0	n/a	11,147	0	n/a	11,147								
314	Other Hepatobiliary and Pancreatic Procedures	1	-	1.0	3,219	28	3.5	3,290	13	8.3	4,319	8.1	5,090	295,240	18	190,214	76	6,388	485,454
		2	-	1.0	5,234	-	12.3	5,234	-	20.5	8,638								
		3	0	n/a	7,500	-	10.0	7,500	-	17.0	8,638								
		4	0	n/a	14,255	-	19.3	14,255	-	37.0	15,485								
315	Cholecystectomy	1	6	6.2	3,762	95	4.6	3,873	39	7.8	4,960	7.0	4,879	858,729	28	349,489	204	5,923	1,208,218
		2	0	n/a	5,457	10	10.2	5,727	7	8.3	6,636								
		3	-	16.0	6,729	7	12.4	6,729	-	14.0	7,134								
		4	0	n/a	10,813	-	13.3	10,813	-	22.6	11,939								
317	Laparoscopic Cholecystectomy	1	35	1.5	1,958	697	2.1	1,872	114	2.9	2,290	2.6	2,121	1,959,818	70	504,098	994	2,479	2,463,916
		2	-	10.3	3,543	36	5.9	3,503	17	7.5	4,347								
		3	0	n/a	4,601	15	7.2	4,601	-	8.3	5,129								
		4	0	n/a	5,173	-	7.0	5,173	-	21.0	10,076								
320	Miscellaneous Hepatobiliary and Pancreatic Procedures	1	-	5.0	3,748	13	4.8	3,748	9	5.6	3,748	8.6	4,468	129,576	6	28,030	35	4,503	157,606
		2	0	n/a	6,869	-	19.5	6,869	0	n/a	6,869								
		3	0	n/a	7,949	-	26.5	7,949	0	n/a	7,949								
		4	0	n/a	18,047	0	n/a	18,047	0	n/a	18,047								
323	Cirrhosis and Alcoholic Hepatitis	1	-	1.0	2,599	46	6.2	2,599	12	10.6	3,809	8.3	3,990	486,751	96	1,062,405	218	7,106	1,549,156
		2	0	n/a	3,645	28	8.1	3,645	-	9.0	4,045								
		3	0	n/a	4,877	16	9.2	4,877	6	9.5	5,580								
		4	0	n/a	10,079	7	10.9	10,079	-	26.5	9,293								
324	Pancreatic Cancer or Other Malignancy of Hepatobiliary System	1	0	n/a	2,588	29	5.8	2,670	43	7.9	3,281	8.7	3,924	455,152	142	1,269,292	258	6,684	1,724,444
		2	-	6.0	3,992	16	10.7	3,992	10	10.7	4,957								
		3	0	n/a	5,933	6	9.5	5,933	6	15.0	5,761								
		4	0	n/a	9,362	-	15.7	9,363	-	14.0	10,484								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
325	Pancreas Diseases except Malignancy	1	16	3.8	2,204	475	4.2	1,839	135	5.4	2,357	4.9	2,269	1,624,532	153	922,774	869	2,931	2,547,306
		2	-	5.0	3,361	42	6.1	3,464	23	7.1	3,960								
		3	0	n/a	4,662	16	11.3	4,640	-	9.7	6,071								
		4	0	n/a	13,348	-	24.5	13,348	-	25.3	12,841								
326	Liver Diseases except Cirrhosis or Cancer	1	11	3.0	1,698	66	5.3	2,305	20	6.3	2,776	6.4	3,225	416,059	112	889,751	241	5,418	1,305,810
		2	-	4.0	2,407	7	8.1	3,505	-	9.8	5,665								
		3	-	5.0	6,320	12	10.7	6,473	-	5.5	6,748								
		4	-	17.0	10,091	-	19.5	10,259	0	n/a	12,311								
329	Biliary Tract Diseases	1	16	2.1	1,641	373	3.1	1,461	182	5.8	2,426	4.3	2,056	-	185	763,233	-	-	-
		2	0	n/a	2,313	28	4.9	2,556	15	8.9	4,347								
		3	0	n/a	2,313	25	5.4	2,563	12	5.7	4,407								
		4	0	n/a	5,611	-	8.5	5,611	6	14.8	11,654								
DISEASES & DISORDERS OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE																			
350	Multiple or Bilateral Joint Replacement	1	0	n/a	8,124	56	7.4	8,124	8	9.1	8,124	10.0	9,349	841,396	27	901,373	117	14,895	1,742,769
		2	0	n/a	11,008	12	17.3	11,008	-	14.7	11,008								
		3	0	n/a	11,535	6	11.0	11,535	-	8.0	11,535								
		4	0	n/a	21,344	-	20.0	21,344	-	28.0	21,344								
352	Hip Replacement	1	-	5.5	5,576	495	5.7	6,310	393	7.2	6,440	7.4	6,760	6,888,157	224	3,352,060	1,243	8,238	10,240,218
		2	0	n/a	7,285	15	8.7	7,285	44	11.8	7,682								
		3	0	n/a	7,383	12	8.9	7,383	27	13.9	8,719								
		4	0	n/a	11,658	-	15.3	11,658	20	31.3	16,139								
354	Knee Replacement	1	0	n/a	5,635	795	5.8	5,635	674	6.6	5,886	6.6	5,939	9,484,218	223	2,682,679	1,820	6,685	12,166,897
		2	0	n/a	6,715	18	8.7	6,715	53	10.1	7,415								
		3	0	n/a	7,428	-	10.3	7,428	29	13.5	8,333								
		4	0	n/a	9,977	-	14.0	9,977	13	19.5	12,303								
355	Reattachment Procedures or Lower Extremity or Shoulder Amputations	1	-	12.0	4,149	8	8.5	4,149	-	14.0	4,149	15.1	6,556	98,335	18	233,649	33	10,060	331,984
		2	0	n/a	7,910	-	11.0	7,910	0	n/a	7,910								
		3	0	n/a	9,743	-	33.0	9,743	0	n/a	9,743								
		4	0	n/a	25,300	-	44.0	25,300	0	n/a	25,300								
356	Repair Hip and Femur Procedures	1	16	1.8	2,861	14	4.6	4,892	-	3.0	6,445	4.0	4,560	168,737	13	178,579	50	6,946	347,316
		2	-	4.0	9,017	-	19.5	9,839	0	n/a	9,903								
		3	0	n/a	10,292	0	n/a	10,292	0	n/a	10,735								
		4	0	n/a	13,838	0	n/a	13,838	0	n/a	14,642								
358	Lower Extremity Procedures with Infection	1	-	2.0	4,457	13	5.0	4,457	0	n/a	4,457	13.7	5,903	112,152	10	55,554	29	5,783	167,706
		2	0	n/a	6,662	-	17.0	6,662	-	32.0	6,662								
		3	0	n/a	10,627	-	52.0	10,627	0	n/a	10,627								
		4	0	n/a	19,143	-	76.0	19,143	0	n/a	19,143								
359	Upper Extremity Procedures with Infection	1	-	15.0	3,482	11	5.2	3,482	0	n/a	3,482	8.1	5,635	78,895	-	1,892	-	-	80,787
		2	0	n/a	6,851	0	n/a	6,851	0	n/a	6,851								
		3	0	n/a	12,663	-	30.0	12,663	0	n/a	12,663								
		4	0	n/a	24,450	-	11.0	24,450	0	n/a	24,450								
360	Upper Extremity Amputations and Upper and Lower Extremity Revisions	1	-	6.0	4,617	7	8.4	4,617	0	n/a	4,617	7.5	4,878	53,657	-	10,578	-	-	64,235
		2	0	n/a	7,489	0	n/a	7,489	-	6.0	7,489								
		3	0	n/a	11,735	0	n/a	11,735	0	n/a	11,735								
		4	0	n/a	21,537	0	n/a	21,537	0	n/a	21,537								
361	Musculoskeletal Biopsy for Malignancy	1	0	n/a	4,881	-	2.7	4,881	-	11.3	4,881	7.6	4,881	34,170	-	46,769	-	-	80,940
		2	0	n/a	11,775	0	n/a	11,775	0	n/a	11,775								
		3	0	n/a	13,071	0	n/a	13,071	0	n/a	13,071								
		4	0	n/a	19,644	0	n/a	19,644	0	n/a	19,644								
362	Musculoskeletal Biopsy without Malignancy	1	0	n/a	4,314	-	8.3	4,314	-	3.0	4,314	24.7	9,220	101,415	7	235,645	18	18,726	337,060
		2	-	1.0	8,937	-	15.0	8,937	-	28.0	8,937								
		3	0	n/a	11,525	-	27.0	11,525	0	n/a	11,525								
		4	0	n/a	20,754	-	101.0	20,754	-	63.0	20,754								

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CMG	Description	Complexity Level	TYPICAL CASES												ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean		Total Cost for CMG	All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
363	Back and Neck Procedures with Fusion	1	17	7.5	10,265	145	4.2	4,684	20	5.9	5,422	5.0	5,877	1,151,805	30	268,498	226	6,285	1,420,303
		2	-	7.5	10,265	-	7.6	8,756	-	8.0	10,731								
		3	0	n/a	10,958	-	6.0	10,516	0	n/a	11,670								
		4	-	11.0	23,362	0	n/a	22,187	0	n/a	25,305								
365	Back and Neck Procedures without Fusion	1	-	6.5	2,638	183	2.9	2,376	54	3.8	3,309	3.4	2,704	670,648	48	252,888	296	3,120	923,536
		2	0	n/a	4,594	6	6.2	4,594	-	24.0	6,076								
		3	0	n/a	5,308	-	9.0	5,308	0	n/a	6,076								
		4	0	n/a	14,217	0	n/a	14,217	-	15.0	12,972								
367	Shoulder Arthroplasty	1	0	n/a	4,847	26	2.1	4,847	28	3.1	4,821	2.8	4,881	273,317	-	33,428	-	-	306,745
		2	0	n/a	5,687	0	n/a	5,687	-	11.0	5,640								
		3	0	n/a	6,680	0	n/a	6,680	0	n/a	6,516								
		4	0	n/a	6,680	-	7.0	6,680	0	n/a	6,680								
368	Major Hip and Knee Procedures	1	0	n/a	3,412	0	n/a	3,412	0	n/a	3,412	n/a	n/a	0	-	9,114	-	-	9,114
		2	0	n/a	3,597	0	n/a	3,597	0	n/a	3,597								
		3	0	n/a	5,339	0	n/a	5,339	0	n/a	5,339								
		4	0	n/a	9,427	0	n/a	9,427	0	n/a	9,427								
369	Major Lower Extremity Procedures	1	23	2.1	3,605	52	2.8	3,311	6	3.8	4,105	2.8	3,501	290,596	6	22,192	89	3,514	312,788
		2	0	n/a	4,992	-	10.0	5,019	0	n/a	5,412								
		3	0	n/a	5,845	-	5.0	5,887	0	n/a	5,941								
		4	0	n/a	10,777	0	n/a	10,777	0	n/a	10,777								
372	Major Upper Extremity Procedures	1	-	1.8	1,992	43	2.0	2,847	6	2.5	3,963	2.2	2,966	160,160	7	40,198	61	3,285	200,358
		2	0	n/a	5,851	0	n/a	5,851	-	12.0	6,013								
		3	0	n/a	6,939	0	n/a	6,939	0	n/a	6,966								
		4	0	n/a	6,939	0	n/a	6,939	0	n/a	6,966								
374	Minor Lower Extremity Procedures	1	24	1.4	2,121	71	1.7	2,247	16	2.4	2,731	1.8	2,301	-	16	92,690	-	-	-
		2	0	n/a	3,570	-	9.0	3,601	0	n/a	3,796								
		3	0	n/a	5,383	0	n/a	5,383	0	n/a	5,497								
		4	0	n/a	5,383	0	n/a	5,383	0	n/a	5,497								
375	Minor Upper Extremity Procedures	1	-	1.0	1,793	74	1.4	1,926	6	2.2	1,935	1.4	1,932	164,208	6	25,547	91	2,085	189,756
		2	0	n/a	2,883	-	1.0	2,883	0	n/a	3,059								
		3	0	n/a	5,759	0	n/a	5,759	0	n/a	5,759								
		4	0	n/a	5,759	0	n/a	5,759	0	n/a	5,759								
376	Miscellaneous Musculoskeletal Procedures	1	13	2.9	5,495	25	2.1	2,899	0	n/a	4,113	2.4	3,787	143,893	-	30,180	-	-	174,073
		2	0	n/a	8,594	0	n/a	8,648	0	n/a	8,648								
		3	0	n/a	10,928	0	n/a	11,064	0	n/a	11,064								
		4	0	n/a	20,581	0	n/a	22,309	0	n/a	22,309								
377	Wound Debridement and Skin Graft for Musculoskeletal Disorders	1	11	1.3	2,658	24	4.8	3,999	-	8.0	4,415	5.5	6,071	279,252	11	104,011	57	6,724	383,262
		2	0	n/a	12,417	-	12.5	12,876	-	6.0	12,458								
		3	0	n/a	13,160	-	8.5	13,160	0	n/a	13,365								
		4	0	n/a	36,116	-	29.0	36,116	-	13.0	35,719								
378	Soft Tissue Procedures (MNRH)	1	-	1.0	2,896	8	1.4	2,896	-	1.0	2,896	5.7	4,023	56,318	6	64,084	20	6,020	120,402
		2	0	n/a	5,885	-	23.0	5,885	0	n/a	5,885								
		3	0	n/a	8,110	-	27.0	8,110	0	n/a	8,110								
		4	-	15.0	10,465	0	n/a	10,465	0	n/a	10,465								
379	Other Musculoskeletal Procedures (MNRH)	1	32	1.3	2,752	85	2.4	2,246	9	4.1	2,663	2.4	2,611	339,482	20	220,464	150	3,733	559,946
		2	0	n/a	8,719	-	6.0	8,977	0	n/a	8,121								
		3	-	7.0	9,619	0	n/a	9,639	0	n/a	9,521								
		4	0	n/a	23,084	0	n/a	23,084	0	n/a	23,111								
380	Other Lower Extremity Procedures (MNRH)	1	13	1.6	1,922	95	1.3	1,468	8	1.3	1,359	1.3	1,512	175,363	-	3,343	-	-	178,706
		2	0	n/a	3,061	0	n/a	3,061	0	n/a	3,054								
		3	0	n/a	3,376	0	n/a	3,376	0	n/a	3,368								
		4	0	n/a	5,270	0	n/a	5,270	0	n/a	5,270								

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CMG	Description	Complexity Level	TYPICAL CASES											ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean		Total Cost for CMG	All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
381	Hand and Wrist Procedures (MNRH)	1	6	1.5	1,831	42	1.5	1,831	-	1.0	1,831	1.5	1,831	-	9	37,346	-	-	-
		2	0	n/a	2,250	0	n/a	2,250	0	n/a	2,250								
		3	0	n/a	3,250	0	n/a	3,250	0	n/a	3,250								
		4	0	n/a	4,280	0	n/a	4,280	0	n/a	4,280								
382	Arthroscopy (MNRH)	1	0	n/a	2,998	-	9.0	2,998	0	n/a	2,998	9.0	2,998	-	-	20,884	-	-	-
		2	0	n/a	3,710	0	n/a	3,710	0	n/a	3,710								
		3	0	n/a	6,231	0	n/a	6,231	0	n/a	6,231								
		4	0	n/a	11,905	0	n/a	11,905	0	n/a	11,905								
383	Joint Replacement for Malignancy	1	0	n/a	10,571	0	n/a	10,571	-	7.0	10,571	8.5	13,376	-	-	22,833	-	-	-
		2	0	n/a	14,611	0	n/a	14,611	0	n/a	14,611								
		3	0	n/a	16,180	0	n/a	16,180	-	10.0	16,180								
		4	0	n/a	27,890	0	n/a	27,890	0	n/a	27,890								
384	Back and Neck Procedures for Malignancy	1	0	n/a	8,746	-	17.0	8,746	0	n/a	8,746	16.8	10,759	-	-	36,695	-	-	-
		2	0	n/a	12,773	-	16.5	12,773	0	n/a	12,773								
		3	0	n/a	18,130	0	n/a	18,130	0	n/a	18,130								
		4	0	n/a	25,650	0	n/a	25,650	0	n/a	25,650								
385	Major Orthopaedic Oncology Procedures	1	0	n/a	5,658	0	n/a	5,658	0	n/a	5,658	n/a	n/a	0	-	58,355	-	-	58,355
		2	0	n/a	8,728	0	n/a	8,728	0	n/a	8,728								
		3	0	n/a	10,675	0	n/a	10,675	0	n/a	10,675								
		4	0	n/a	20,021	0	n/a	20,021	0	n/a	20,021								
386	Other Orthopaedic Oncology Procedures	1	-	5.0	4,244	8	2.9	4,244	-	4.8	4,244	3.6	4,244	55,173	-	66,316	-	-	121,490
		2	0	n/a	8,881	0	n/a	8,881	0	n/a	8,881								
		3	0	n/a	11,210	0	n/a	11,210	0	n/a	11,210								
		4	0	n/a	13,809	0	n/a	13,809	0	n/a	13,809								
391	Secondary Neoplasms and Pathological Fractures	1	-	4.0	3,152	26	10.2	3,752	75	11.5	4,219	13.0	4,812	683,313	82	1,008,777	224	7,554	1,692,090
		2	-	3.0	5,603	-	9.4	5,603	23	16.2	6,287								
		3	0	n/a	7,293	0	n/a	7,293	-	26.8	7,201								
		4	0	n/a	11,638	-	23.5	11,638	-	52.0	11,193								
392	Osteomyelitis	1	15	5.5	3,751	19	7.2	3,751	-	7.3	3,751	8.1	4,744	227,720	28	303,284	76	6,987	531,003
		2	-	2.0	6,272	-	6.0	6,272	0	n/a	6,272								
		3	0	n/a	6,842	-	11.7	6,842	-	29.0	6,842								
		4	0	n/a	13,005	-	9.0	13,005	-	46.0	13,005								
393	Rheumatoid Arthritis	1	-	2.0	2,194	31	6.8	2,963	21	7.3	3,220	8.4	3,722	241,903	12	197,258	77	5,703	439,161
		2	0	n/a	5,596	-	19.5	5,713	-	9.7	5,843								
		3	-	14.0	6,167	-	20.0	6,199	-	12.5	6,400								
		4	0	n/a	17,715	-	32.0	17,715	0	n/a	17,185								
394	Septic Arthritis	1	6	7.0	2,891	24	5.3	2,891	-	4.2	2,891	6.7	3,529	151,760	40	363,113	83	6,203	514,873
		2	0	n/a	6,138	-	15.0	6,138	-	20.0	6,138								
		3	-	7.0	6,508	-	11.0	6,508	-	8.0	6,508								
		4	0	n/a	12,692	0	n/a	12,692	0	n/a	12,692								
397	Non-inflammatory Arthritis	1	0	n/a	2,293	18	4.2	2,293	74	7.0	3,403	7.8	3,535	395,956	31	566,447	143	6,730	962,403
		2	0	n/a	4,011	-	1.0	4,011	11	10.4	4,050								
		3	0	n/a	4,245	-	19.5	4,245	-	29.0	5,000								
		4	0	n/a	12,895	-	3.0	12,895	-	3.0	12,895								
398	Other Inflammatory Arthritis	1	30	2.9	1,906	78	5.0	2,224	83	6.1	2,611	6.6	2,898	698,356	60	591,800	301	4,286	1,290,156
		2	-	11.0	3,705	10	6.3	3,913	14	13.5	4,192								
		3	-	11.5	4,844	12	12.0	5,220	8	14.9	5,303								
		4	0	n/a	12,462	-	31.0	12,399	-	3.0	9,936								
399	Orthopaedic Aftercare	1	-	1.0	1,119	64	3.9	1,728	41	7.0	2,598	6.9	2,765	376,028	63	441,007	199	4,106	817,035
		2	0	n/a	3,728	9	12.0	3,728	7	13.3	5,121								
		3	0	n/a	6,102	-	11.4	6,102	-	13.4	6,825								
		4	0	n/a	10,378	-	17.0	10,378	-	60.0	11,100								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
401	Other Musculoskeletal Malignancy	1	-	3.0	2,888	-	5.3	3,135	-	12.0	3,883	6.7	3,485	52,279	14	145,675	29	6,826	197,954
		2	-	4.0	4,814	-	12.0	4,951	0	n/a	5,266								
		3	0	n/a	7,553	0	n/a	7,553	0	n/a	7,553								
		4	0	n/a	7,851	0	n/a	7,851	0	n/a	7,851								
402	Disc Disease	1	-	3.5	2,129	119	5.4	2,138	107	8.7	3,437	8.0	3,088	796,661	45	643,028	303	4,751	1,439,689
		2	0	n/a	4,326	-	10.0	4,326	16	11.1	5,123								
		3	0	n/a	6,700	-	34.5	6,700	-	27.5	7,048								
		4	0	n/a	10,440	-	8.0	10,440	-	53.0	12,219								
404	Other Musculoskeletal Infections	1	-	9.0	4,010	-	25.0	4,010	0	n/a	4,010	17.0	4,010	-	0	0	-	4,010	-
		2	0	n/a	4,010	0	n/a	4,010	0	n/a	4,010								
		3	0	n/a	4,010	0	n/a	4,010	0	n/a	4,010								
		4	0	n/a	4,010	0	n/a	4,010	0	n/a	4,010								
407	Other Musculoskeletal Disorders	1	-	2.0	1,696	10	3.6	1,722	8	6.8	2,181	6.2	2,398	67,134	11	122,690	39	4,867	189,824
		2	0	n/a	4,583	-	19.5	4,614	-	11.3	4,921								
		3	0	n/a	5,399	0	n/a	5,415	0	n/a	5,695								
		4	0	n/a	6,190	0	n/a	6,190	0	n/a	6,190								
409	Back Pain (MNRH)	1	9	1.7	1,145	164	2.8	1,464	110	7.5	2,593	5.1	2,064	627,478	44	323,779	348	2,733	951,257
		2	-	2.0	3,100	-	2.5	3,100	13	11.2	4,253								
		3	0	n/a	4,995	-	24.0	4,995	-	4.5	5,171								
		4	0	n/a	5,656	0	n/a	5,656	-	30.0	5,983								
411	Signs, Symptoms and Deformities (MNRH)	1	6	1.8	1,357	55	2.7	1,367	71	5.2	2,245	4.4	2,070	318,782	23	256,954	177	3,253	575,735
		2	0	n/a	3,038	7	4.7	3,096	7	8.0	3,478								
		3	0	n/a	3,448	-	7.0	3,448	-	6.0	3,741								
		4	0	n/a	4,759	0	n/a	4,759	-	8.0	4,772								
413	Joint Derangements (MNRH)	1	-	3.8	1,502	16	2.2	1,341	23	4.4	2,048	3.6	1,803	81,150	19	162,903	64	3,813	244,053
		2	0	n/a	1,556	0	n/a	1,556	0	n/a	2,048								
		3	0	n/a	5,213	0	n/a	5,213	0	n/a	5,075								
		4	0	n/a	5,213	0	n/a	5,213	-	6.0	5,075								
414	Sprains, Strains and Minor Injuries (MNRH)	1	9	1.6	1,221	29	3.1	1,363	17	5.8	2,448	3.7	1,711	-	7	76,496	-	-	-
		2	0	n/a	2,592	0	n/a	2,592	-	3.5	2,692								
		3	0	n/a	6,998	0	n/a	6,998	0	n/a	6,924								
		4	0	n/a	6,998	0	n/a	6,998	0	n/a	6,961								
DISEASES & DISORDERS OF SKIN, SUBCUTANEOUS TISSUE & BREAST																			
425	Skin Graft and Wound Debridement for Dermatologic Disease except Ulcer or Cellulitis	1	11	1.1	1,823	459	1.5	2,240	28	3.4	2,734	1.7	2,511	1,320,550	39	241,219	565	2,764	1,561,769
		2	0	n/a	5,180	17	3.2	5,092	-	2.0	5,733								
		3	-	9.0	9,662	7	6.9	9,662	-	4.0	10,186								
		4	0	n/a	16,195	-	6.0	16,195	0	n/a	19,182								
427	Skin Graft and Wound Debridement for Skin Ulcer or Cellulitis	1	-	16.0	6,581	9	15.7	6,581	-	11.8	6,581	27.5	11,553	231,060	-	195,245	-	-	426,305
		2	0	n/a	9,270	0	n/a	9,270	0	n/a	9,270								
		3	0	n/a	18,421	-	56.0	18,421	0	n/a	18,421								
		4	0	n/a	25,520	-	58.5	25,520	0	n/a	25,520								
428	Breast Procedures except Biopsy and Local Excision without Malignancy	1	-	1.0	2,222	22	1.3	2,248	-	1.0	2,140	1.3	2,241	56,031	6	20,837	31	2,480	76,869
		2	0	n/a	4,239	0	n/a	4,253	0	n/a	4,253								
		3	0	n/a	4,253	0	n/a	4,253	0	n/a	4,253								
		4	0	n/a	4,253	0	n/a	4,253	0	n/a	4,253								
429	Total Mastectomy for Breast Malignancy	1	0	n/a	2,471	129	1.9	2,471	84	2.3	2,484	2.1	2,533	562,333	12	52,066	234	2,626	614,400
		2	0	n/a	3,664	6	2.3	3,664	-	3.5	4,041								
		3	0	n/a	4,883	-	5.0	4,883	0	n/a	4,848								
		4	0	n/a	8,301	0	n/a	8,301	0	n/a	8,331								
432	Subtotal Mastectomy and Other Breast Procedures for Malignancy	1	0	n/a	2,152	152	1.2	2,152	56	1.5	2,152	1.3	2,162	458,436	10	91,699	222	2,478	550,135
		2	0	n/a	2,680	-	1.0	2,680	-	8.0	2,680								
		3	0	n/a	2,842	0	n/a	2,842	0	n/a	2,842								
		4	0	n/a	3,244	0	n/a	3,244	0	n/a	3,244								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
434	Breast Biopsy and Local Excision without Malignancy	1	-	1.5	1,549	11	1.3	1,549	-	2.0	1,549	1.4	1,572	23,574	0	0	15	23,574	1,572
		2	0	n/a	1,883	-	1.0	1,883	0	n/a	1,883								
		3	0	n/a	1,883	0	n/a	1,883	0	n/a	1,883								
		4	0	n/a	1,883	0	n/a	1,883	0	n/a	1,883								
435	Perianal and Pilonidal Cyst Procedures	1	9	2.1	1,522	33	1.6	1,522	0	n/a	1,522	1.7	1,522	63,920	-	11,245	-	-	75,165
		2	0	n/a	3,048	0	n/a	3,048	0	n/a	3,048								
		3	0	n/a	3,464	0	n/a	3,464	0	n/a	3,464								
		4	0	n/a	5,488	0	n/a	5,488	0	n/a	5,488								
436	Plastic Surgery	1	-	1.0	2,428	8	1.5	2,428	-	1.0	2,428	1.6	2,590	33,674	-	12,497	-	-	46,171
		2	0	n/a	3,198	-	4.0	3,198	0	n/a	3,198								
		3	0	n/a	3,764	-	2.0	3,764	0	n/a	3,764								
		4	0	n/a	3,764	0	n/a	3,764	0	n/a	3,764								
437	Other Dermatological Procedures without Malignancy or Skin Ulcer or Cellulitis	1	16	2.7	2,195	46	2.6	2,195	-	4.0	2,195	3.7	2,736	194,242	16	106,212	87	3,453	300,454
		2	-	5.0	4,002	-	6.5	4,002	0	n/a	4,002								
		3	0	n/a	5,574	-	11.0	5,574	0	n/a	5,574								
		4	0	n/a	17,002	-	28.5	17,002	0	n/a	17,002								
438	Other Dermatological Procedures for Malignancy or Skin Ulcer or Cellulitis	1	-	5.0	3,034	45	3.1	3,034	15	4.1	3,034	3.8	3,153	198,623	18	570,325	81	9,493	768,948
		2	0	n/a	5,934	0	n/a	5,934	0	n/a	5,934								
		3	0	n/a	10,528	-	30.0	10,528	0	n/a	10,528								
		4	0	n/a	25,254	0	n/a	25,254	0	n/a	25,254								
439	Skin Ulcer	1	-	13.0	5,235	16	9.9	5,235	23	12.6	5,235	14.1	5,886	347,286	26	498,256	85	9,948	845,542
		2	0	n/a	6,047	-	4.0	6,047	-	6.0	6,047								
		3	0	n/a	7,153	6	18.0	7,153	8	20.5	7,153								
		4	0	n/a	9,797	0	n/a	9,797	-	41.5	9,797								
440	Major Skin Disorders	1	6	5.2	1,780	13	3.5	2,174	13	5.2	2,436	4.9	2,257	-	13	186,874	-	-	-
		2	0	n/a	3,018	-	11.5	3,056	0	n/a	3,308								
		3	0	n/a	4,003	0	n/a	4,041	0	n/a	4,122								
		4	0	n/a	5,222	0	n/a	5,222	0	n/a	5,244								
443	Malignant Breast Disorders	1	0	n/a	2,964	13	4.8	2,964	8	2.9	2,964	7.3	3,335	110,043	42	409,051	75	6,921	519,094
		2	0	n/a	3,579	8	15.0	3,579	-	10.0	3,579								
		3	0	n/a	5,195	-	4.0	5,195	-	10.0	5,195								
		4	0	n/a	10,833	0	n/a	10,833	0	n/a	10,833								
446	Non-malignant Breast Disorders	1	-	3.0	1,217	31	2.9	1,217	-	6.5	1,217	3.4	1,223	45,258	-	15,963	-	-	61,220
		2	0	n/a	1,274	-	2.0	1,274	0	n/a	1,274								
		3	0	n/a	1,406	0	n/a	1,406	-	15.0	1,406								
		4	0	n/a	1,406	0	n/a	1,406	0	n/a	1,406								
447	Cellulitis	1	131	3.3	1,534	387	4.4	1,974	196	6.8	2,665	5.5	2,373	1,974,402	156	1,084,115	988	3,096	3,058,517
		2	-	2.3	2,300	38	8.2	3,964	51	10.7	3,956								
		3	-	2.0	2,303	13	9.3	4,273	8	11.5	4,824								
		4	0	n/a	7,902	-	12.0	7,902	0	n/a	8,717								
452	Trauma of Skin, Subcutaneous Tissue and Breast	1	14	1.3	805	59	1.6	1,175	39	5.0	2,528	3.1	1,699	198,772	19	193,404	136	2,884	392,176
		2	0	n/a	1,766	0	n/a	1,766	-	11.0	2,909								
		3	-	3.0	2,939	-	2.0	2,939	0	n/a	3,641								
		4	0	n/a	7,882	0	n/a	7,882	-	28.0	7,882								
454	Minor Skin Disorders	1	45	2.9	1,461	41	3.1	1,544	21	5.5	1,970	4.2	1,806	220,271	22	172,333	144	2,726	392,604
		2	-	2.5	2,881	-	8.0	2,944	6	7.3	3,262								
		3	0	n/a	3,529	-	9.5	3,637	-	25.0	4,206								
		4	0	n/a	6,430	0	n/a	6,430	0	n/a	6,442								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
ENDOCRINE NUTRITIONAL & METABOLIC DISEASES & DISORDERS																			
476	Adrenal and Pituitary Procedures	1	-	3.0	5,021	21	2.8	4,884	-	2.0	5,249	2.8	5,050	136,343	0	0	27	5,050	136,343
		2	0	n/a	7,981	-	5.0	7,981	0	n/a	7,729								
		3	0	n/a	10,710	0	n/a	10,341	0	n/a	10,378								
		4	0	n/a	15,052	0	n/a	15,052	0	n/a	15,052								
477	Parathyroid Procedures	1	0	n/a	2,183	20	1.2	2,183	7	1.6	2,183	1.9	2,226	-	-	54,216	-	-	-
		2	0	n/a	3,392	-	17.0	3,392	0	n/a	3,392								
		3	0	n/a	4,101	0	n/a	4,101	0	n/a	4,101								
		4	0	n/a	15,774	0	n/a	15,774	0	n/a	15,774								
478	Obesity Procedures	1	0	n/a	2,792	15	2.3	2,792	-	6.0	2,792	2.5	2,792	-	0	0	-	2,792	-
		2	0	n/a	4,176	0	n/a	4,176	0	n/a	4,176								
		3	0	n/a	5,982	0	n/a	5,982	0	n/a	5,982								
		4	0	n/a	16,345	0	n/a	16,345	0	n/a	16,345								
479	Thyroid Procedures	1	-	1.5	1,810	166	1.3	2,261	20	2.5	2,627	1.4	2,281	449,435	-	6,911	-	-	456,346
		2	0	n/a	3,457	0	n/a	3,444	0	n/a	3,355								
		3	0	n/a	3,482	-	2.0	3,444	0	n/a	3,541								
		4	0	n/a	9,302	0	n/a	9,302	0	n/a	9,302								
480	Thyroglossal Procedures	1	-	1.0	1,608	-	1.5	1,608	-	1.0	1,608	1.3	1,608	9,651	0	0	6	1,608	9,651
		2	0	n/a	1,608	0	n/a	1,608	0	n/a	1,608								
		3	0	n/a	1,608	0	n/a	1,608	0	n/a	1,608								
		4	0	n/a	1,608	0	n/a	1,608	0	n/a	1,608								
482	Other Endocrine, Nutrition and Metabolic Procedures	1	-	10.5	14,778	12	7.3	14,778	11	6.8	14,778	9.8	16,978	628,202	7	352,267	44	22,283	980,469
		2	-	5.0	17,770	-	14.0	17,770	-	27.0	17,770								
		3	0	n/a	23,171	0	n/a	23,171	-	6.0	23,171								
		4	-	15.0	25,793	-	10.0	25,793	-	42.0	25,793								
483	Diabetes	1	41	2.4	1,739	527	4.0	1,879	239	6.4	2,653	5.3	2,486	2,493,696	238	1,579,495	1,241	3,282	4,073,191
		2	-	5.5	1,804	62	6.4	3,100	42	9.5	3,881								
		3	-	4.0	2,114	55	7.5	3,713	15	11.0	4,124								
		4	0	n/a	9,190	12	11.1	9,190	7	11.7	8,704								
485	Nutritional and Miscellaneous Metabolic Disorders	1	57	3.1	1,263	217	3.7	1,675	376	4.8	2,128	5.2	2,215	1,811,910	209	1,730,727	1,027	3,450	3,542,637
		2	10	8.3	2,616	39	5.5	2,805	75	8.4	3,482								
		3	-	2.5	4,637	16	9.9	3,157	19	10.1	3,917								
		4	0	n/a	6,081	-	28.0	6,081	-	18.8	6,616								
487	Cystic Fibrosis	1	23	9.3	6,821	12	10.3	6,821	0	n/a	6,821	10.6	7,151	328,955	7	65,742	53	7,447	394,697
		2	-	13.6	7,570	0	n/a	7,570	0	n/a	7,570								
		3	-	13.5	7,574	-	13.0	7,574	0	n/a	7,574								
		4	-	17.0	11,032	-	10.0	11,032	0	n/a	11,032								
488	Inborn Errors of Metabolism	1	15	3.6	3,999	-	6.8	3,999	-	6.3	3,999	4.7	4,024	100,608	-	46,041	-	-	146,649
		2	-	5.0	4,640	0	n/a	4,640	0	n/a	4,640								
		3	0	n/a	6,241	0	n/a	6,241	0	n/a	6,241								
		4	0	n/a	9,424	0	n/a	9,424	0	n/a	9,424								
489	Endocrine Disorders	1	-	4.0	1,452	34	3.4	1,396	19	7.9	2,684	5.9	2,533	187,437	21	155,713	95	3,612	343,149
		2	-	11.0	4,193	-	7.8	4,119	-	8.5	5,252								
		3	0	n/a	4,840	-	12.8	4,840	-	5.0	5,863								
		4	0	n/a	7,325	-	3.0	7,325	0	n/a	7,675								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
DISEASES & DISORDERS OF KIDNEY & URINARY TRACT																			
500	Kidney Transplant	1	-	6.5	10,008	23	7.4	9,628	0	n/a	9,540	8.5	12,148	437,333	-	71,954	-	-	509,287
		2	-	8.0	12,097	-	5.0	12,097	0	n/a	12,298								
		3	-	8.5	14,807	-	9.5	14,807	0	n/a	14,509								
		4	0	n/a	23,486	-	14.4	22,488	0	n/a	21,533								
501	Urinary Diversion and Augmentation	1	0	n/a	8,259	21	10.0	8,259	11	13.0	8,259	12.4	9,857	414,010	7	110,410	49	10,702	524,420
		2	0	n/a	10,332	0	n/a	10,332	-	11.0	10,332								
		3	0	n/a	13,985	-	18.0	13,985	-	16.0	13,985								
		4	0	n/a	20,931	0	n/a	20,931	-	21.7	20,931								
502	Radical Prostatectomy	1	0	n/a	4,208	171	4.9	4,208	25	5.4	4,208	5.2	4,369	921,800	10	85,315	221	4,557	1,007,116
		2	0	n/a	5,611	7	5.6	5,611	0	n/a	5,611								
		3	0	n/a	6,509	-	8.6	6,509	0	n/a	6,509								
		4	0	n/a	8,419	-	12.3	8,419	0	n/a	8,419								
503	Dialysis Procedures	1	-	26.0	2,404	9	4.1	2,094	-	3.0	1,790	14.5	5,677	102,194	18	560,178	36	18,399	662,371
		2	0	n/a	4,563	0	n/a	4,563	-	9.0	5,354								
		3	0	n/a	11,076	-	8.0	10,270	-	66.0	11,736								
		4	0	n/a	22,230	-	52.0	19,398	-	54.0	28,811								
504	Major Urinary Tract Procedures	1	22	2.6	3,814	150	4.3	4,500	56	4.7	4,978	5.0	5,111	1,374,773	25	367,864	294	5,927	1,742,637
		2	0	n/a	6,586	13	6.3	6,438	7	11.7	8,131								
		3	-	12.0	8,228	12	7.8	7,929	-	9.6	9,016								
		4	0	n/a	13,815	-	9.0	13,805	-	21.0	17,081								
505	Reconstructive Urological Procedures	1	0	n/a	2,533	11	3.7	2,533	6	3.8	2,533	5.5	2,955	59,110	-	88,035	-	-	147,144
		2	0	n/a	4,290	0	n/a	4,290	-	16.5	4,290								
		3	0	n/a	7,460	-	13.0	7,460	0	n/a	7,460								
		4	0	n/a	13,498	0	n/a	13,498	0	n/a	13,498								
506	Open Prostatectomy	1	0	n/a	2,930	9	4.3	2,930	7	6.0	2,930	5.0	2,930	46,877	-	15,416	-	-	62,293
		2	0	n/a	4,222	0	n/a	4,222	0	n/a	4,222								
		3	0	n/a	5,184	0	n/a	5,184	0	n/a	5,184								
		4	0	n/a	5,824	0	n/a	5,824	0	n/a	5,824								
507	Vascular and Other Urinary Procedures	1	0	n/a	2,132	7	4.3	2,132	8	2.4	2,132	3.1	2,414	-	7	58,585	-	-	-
		2	0	n/a	6,656	-	1.0	6,656	0	n/a	6,656								
		3	0	n/a	6,717	0	n/a	6,717	0	n/a	6,717								
		4	0	n/a	25,159	0	n/a	25,159	0	n/a	25,159								
508	Minor Upper Urinary Tract Procedures	1	-	3.0	3,408	44	3.1	3,430	17	4.7	3,928	5.8	4,289	330,257	28	349,092	105	6,470	679,350
		2	0	n/a	4,793	-	10.5	4,793	-	29.0	6,441								
		3	-	3.0	6,962	-	11.3	6,962	-	21.5	8,989								
		4	0	n/a	15,364	-	24.0	15,364	-	38.0	15,262								
509	Minor Lower Urinary Tract Procedures	1	-	4.0	2,762	10	2.7	2,762	9	3.6	2,762	3.7	3,450	86,254	-	73,151	-	-	159,405
		2	0	n/a	4,476	0	n/a	4,476	-	4.3	4,476								
		3	0	n/a	6,019	0	n/a	6,019	0	n/a	6,019								
		4	-	7.0	8,789	-	8.0	8,789	0	n/a	8,789								
510	Transurethral Prostatectomy	1	0	n/a	1,899	84	2.3	1,899	182	2.6	1,969	2.8	2,024	562,670	48	413,726	326	2,995	976,396
		2	0	n/a	2,970	-	5.0	2,970	-	5.2	3,368								
		3	0	n/a	3,520	-	12.0	3,520	-	11.5	5,104								
		4	0	n/a	4,782	-	16.0	4,782	0	n/a	5,209								
512	Other Transurethral or Biopsy Procedures (MNRH)	1	-	1.0	1,657	168	1.7	1,494	111	1.9	1,633	2.0	1,652	472,507	40	197,486	326	2,055	669,993
		2	0	n/a	3,028	-	2.0	3,028	-	4.5	3,137								
		3	0	n/a	4,627	0	n/a	4,627	-	23.0	5,680								
		4	0	n/a	12,679	0	n/a	12,679	-	20.5	11,837								
514	Miscellaneous Urinary Tract Procedures (MNRH)	1	0	n/a	1,641	-	1.0	1,641	-	1.0	1,641	1.0	1,641	-	0	0	-	1,641	-
		2	0	n/a	2,445	0	n/a	2,445	0	n/a	2,445								
		3	0	n/a	2,600	0	n/a	2,600	0	n/a	2,600								
		4	0	n/a	2,600	0	n/a	2,600	0	n/a	2,600								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
520	Renal Failure with Dialysis	1	0	n/a	5,241	25	8.1	5,241	9	10.6	5,241	13.8	7,650	589,058	86	1,417,965	163	12,313	2,007,023
		2	0	n/a	6,286	9	13.9	6,286	7	12.6	6,286								
		3	0	n/a	8,866	12	11.8	8,866	6	22.2	8,866								
		4	0	n/a	16,746	-	27.8	16,746	-	34.8	16,746								
521	Renal Failure without Dialysis	1	7	3.9	2,290	104	5.6	2,400	100	7.8	3,057	8.2	3,334	1,057,018	219	1,801,477	536	5,333	2,858,494
		2	0	n/a	3,936	27	8.8	3,972	47	11.1	4,392								
		3	0	n/a	4,220	12	11.3	4,220	14	14.2	5,414								
		4	0	n/a	7,193	-	15.7	7,193	-	27.7	8,026								
522	Urinary Neoplasm	1	-	1.0	2,252	26	5.9	2,339	55	5.9	2,331	8.1	3,438	453,881	101	1,178,278	233	7,005	1,632,159
		2	0	n/a	4,506	9	11.7	4,512	23	11.3	4,140								
		3	0	n/a	6,847	-	10.5	6,847	10	13.4	6,233								
		4	0	n/a	12,747	0	n/a	12,747	-	12.5	9,267								
524	Nephrotic Syndrome	1	-	4.6	2,043	-	4.5	1,934	0	n/a	1,957	6.3	2,650	31,798	-	15,333	-	-	47,131
		2	-	5.0	3,265	-	12.5	3,518	-	4.0	3,546								
		3	0	n/a	3,578	-	10.0	3,867	0	n/a	3,993								
		4	0	n/a	8,317	0	n/a	8,317	0	n/a	8,552								
525	Nephropathy without Nephrotic Syndrome	1	20	3.6	1,984	-	4.6	1,984	-	7.0	1,984	4.6	2,445	78,241	13	33,208	45	2,477	111,449
		2	-	3.0	3,917	-	21.0	3,917	-	9.0	3,917								
		3	-	4.3	4,971	0	n/a	4,971	0	n/a	4,971								
		4	0	n/a	6,627	0	n/a	6,627	0	n/a	6,627								
526	Miscellaneous Nephrological Diagnosis	1	-	1.0	2,152	-	2.0	2,152	-	1.0	2,152	1.4	2,152	10,761	-	40,662	-	-	51,423
		2	0	n/a	4,562	0	n/a	4,562	0	n/a	4,562								
		3	0	n/a	5,708	0	n/a	5,708	0	n/a	5,708								
		4	0	n/a	12,533	0	n/a	12,533	0	n/a	12,533								
527	Upper Urinary Tract Infection	1	27	3.6	1,974	183	3.4	1,498	31	5.2	2,066	4.2	1,893	522,452	53	334,283	329	2,604	856,735
		2	-	6.0	2,704	10	5.0	2,755	7	6.4	3,022								
		3	0	n/a	3,021	6	6.2	3,028	-	15.0	3,641								
		4	0	n/a	6,425	8	11.4	6,425	0	n/a	7,138								
529	Lower Urinary Tract Infection	1	102	3.2	1,856	198	3.5	1,823	394	5.0	2,324	4.8	2,370	1,933,970	140	1,075,007	956	3,147	3,008,977
		2	-	5.0	2,252	16	5.2	3,066	67	6.5	3,614								
		3	0	n/a	3,306	8	4.5	3,484	16	10.6	3,983								
		4	0	n/a	5,856	-	12.7	5,857	10	12.7	6,335								
532	Urinary Retention and Other Functional Disorders of Bladder	1	0	n/a	1,610	26	2.7	1,735	74	3.3	1,520	3.9	1,739	193,006	26	219,986	137	3,015	412,992
		2	0	n/a	2,562	-	7.5	2,562	-	12.2	2,972								
		3	0	n/a	3,136	0	n/a	3,136	-	8.3	3,256								
		4	0	n/a	5,637	-	19.0	5,637	0	n/a	5,993								
534	Miscellaneous Urological Diagnoses (MNRH)	1	9	1.7	1,897	27	2.7	1,291	26	3.5	1,721	3.5	1,804	122,643	14	57,073	82	2,192	179,716
		2	0	n/a	2,998	0	n/a	2,998	-	6.7	3,206								
		3	0	n/a	3,415	-	2.0	3,415	-	10.0	3,528								
		4	0	n/a	9,399	0	n/a	9,399	-	28.0	9,399								
535	Hematuria (MNRH)	1	7	2.1	1,080	33	3.1	1,235	68	3.4	1,440	3.4	1,415	165,570	40	150,198	157	2,011	315,768
		2	0	n/a	1,607	-	2.0	1,607	6	6.5	1,955								
		3	0	n/a	3,060	0	n/a	3,056	-	4.5	3,023								
		4	0	n/a	3,839	0	n/a	3,839	0	n/a	3,815								
536	Urinary Obstruction (MNRH)	1	7	1.4	1,295	387	1.7	1,141	108	3.2	1,688	2.5	1,399	744,082	158	647,843	690	2,017	1,391,925
		2	0	n/a	2,603	9	5.6	2,603	-	7.8	3,463								
		3	0	n/a	2,912	-	6.8	2,913	6	8.0	4,315								
		4	0	n/a	5,255	-	29.3	5,255	-	20.3	5,858								
538	Admission for Dialysis (MNRH)	1	0	n/a	1,085	-	1.5	1,085	0	n/a	1,085	1.5	1,085	6,512	-	6,727	-	-	13,239
		2	0	n/a	1,085	-	1.5	1,085	0	n/a	1,085								
		3	0	n/a	1,085	0	n/a	1,085	0	n/a	1,085								
		4	0	n/a	1,085	0	n/a	1,085	0	n/a	1,085								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
DISEASES & DISORDERS OF MALE REPRODUCTIVE SYSTEM																			
550	Major Pelvic and Retroperitoneum Procedures	1	0	n/a	8,810	-	7.0	8,810	0	n/a	8,810	7.0	8,810	-	0	0	-	8,810	-
		2	0	n/a	9,157	0	n/a	9,157	0	n/a	9,157								
		3	0	n/a	9,931	0	n/a	9,931	0	n/a	9,931								
		4	0	n/a	11,244	0	n/a	11,244	0	n/a	11,244								
551	Penis Procedures	1	-	1.0	2,017	11	2.0	2,017	-	1.0	2,017	1.8	2,017	26,216	-	19,904	-	-	46,120
		2	0	n/a	2,992	0	n/a	2,992	0	n/a	2,992								
		3	0	n/a	3,175	0	n/a	3,175	0	n/a	3,175								
		4	0	n/a	7,801	0	n/a	7,801	0	n/a	7,801								
552	Testes Procedures	1	7	1.0	1,561	21	1.3	1,561	-	2.3	1,561	5.1	2,492	89,706	-	7,125	-	-	96,831
		2	0	n/a	3,050	0	n/a	3,050	-	14.5	3,050								
		3	0	n/a	11,208	0	n/a	11,208	-	44.0	11,208								
		4	0	n/a	22,459	0	n/a	22,459	-	67.0	22,459								
554	Miscellaneous Male Reproductive System Procedures (MNRH)	1	14	1.0	1,118	17	1.2	1,236	8	1.6	1,398	1.2	1,227	47,859	-	16,982	-	-	64,841
		2	0	n/a	2,444	0	n/a	2,444	0	n/a	2,444								
		3	0	n/a	2,467	0	n/a	2,467	0	n/a	2,467								
		4	0	n/a	2,467	0	n/a	2,467	0	n/a	2,467								
555	Circumcision (MNRH)	1	9	1.0	1,344	-	1.0	1,344	-	1.0	1,344	1.0	1,344	20,166	-	13,842	-	-	34,008
		2	0	n/a	1,831	0	n/a	1,831	0	n/a	1,831								
		3	0	n/a	4,467	0	n/a	4,467	0	n/a	4,467								
		4	0	n/a	4,467	0	n/a	4,467	0	n/a	4,467								
560	Malignancy of Male Reproductive Organ	1	0	n/a	3,570	0	n/a	3,570	0	n/a	3,570	n/a	n/a	0	-	61,566	-	-	61,566
		2	0	n/a	3,570	0	n/a	3,570	0	n/a	3,570								
		3	0	n/a	3,570	0	n/a	3,570	0	n/a	3,570								
		4	0	n/a	3,570	0	n/a	3,570	0	n/a	3,570								
561	Male Reproductive System Inflammation	1	6	2.5	1,219	32	4.4	1,742	6	3.3	2,114	4.4	1,863	93,162	-	22,565	-	-	115,727
		2	0	n/a	2,836	-	3.5	2,836	-	10.0	2,913								
		3	0	n/a	2,937	0	n/a	2,937	-	8.0	3,022								
		4	0	n/a	9,808	0	n/a	9,808	0	n/a	9,808								
562	Other Male Reproductive System Diagnoses	1	-	1.5	1,038	-	1.2	1,038	-	2.0	1,038	1.4	1,038	9,346	0	0	9	1,038	9,346
		2	0	n/a	2,627	0	n/a	2,627	0	n/a	2,627								
		3	0	n/a	2,995	0	n/a	2,995	0	n/a	2,995								
		4	0	n/a	2,995	0	n/a	2,995	0	n/a	2,995								
563	Miscellaneous Male Reproductive System Diagnoses (MNRH)	1	-	1.7	1,123	0	n/a	1,123	0	n/a	1,123	1.7	1,123	-	0	0	-	1,123	-
		2	0	n/a	1,123	0	n/a	1,123	0	n/a	1,123								
		3	0	n/a	1,123	0	n/a	1,123	0	n/a	1,123								
		4	0	n/a	1,123	0	n/a	1,123	0	n/a	1,123								
DISEASES & DISORDERS OF FEMALE REPRODUCTIVE SYSTEM																			
576	Radical Hysterectomy and Vulvectomy	1	0	n/a	4,347	39	4.0	4,347	9	4.2	4,347	4.5	4,467	241,216	-	17,556	-	-	258,772
		2	0	n/a	5,263	-	7.5	5,263	0	n/a	5,263								
		3	0	n/a	5,764	-	7.0	5,764	-	14.0	5,764								
		4	0	n/a	19,536	0	n/a	19,536	0	n/a	19,536								
577	Major Gynecological Procedures for Ovarian or Adnexal Malignancy	1	-	3.5	4,160	62	3.9	4,163	10	4.9	4,920	4.8	4,750	422,792	-	29,047	-	-	451,840
		2	0	n/a	5,532	-	6.8	5,532	-	6.5	6,122								
		3	0	n/a	6,556	-	6.3	6,556	-	7.0	6,942								
		4	0	n/a	12,464	-	33.0	12,464	-	18.0	18,433								
578	Major Gynecological Procedures for Malignancy except Ovarian or Adnexal	1	0	n/a	3,201	125	3.5	3,201	26	3.8	3,990	3.7	3,434	542,607	6	97,678	164	3,904	640,285
		2	0	n/a	4,353	-	6.0	4,353	0	n/a	5,290								
		3	0	n/a	5,689	-	7.0	5,689	0	n/a	6,739								
		4	0	n/a	7,499	0	n/a	7,499	-	11.5	7,819								
579	Major Uterine and Adnexal Procedures without Malignancy	1	13	2.6	2,203	1462	2.8	2,603	104	2.8	2,942	2.9	2,685	4,373,175	30	167,308	1,659	2,737	4,540,483
		2	0	n/a	4,201	18	5.6	4,201	-	7.0	4,944								
		3	0	n/a	4,648	22	7.4	4,648	-	7.3	5,185								
		4	0	n/a	6,975	-	10.0	6,975	-	12.0	8,003								

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Source: Manitoba Centre for Health Policy, 2009

CMG	Description	Complexity Level	TYPICAL CASES												ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean		Total Cost for CMG	All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
581	Reconstructive Gynecological Procedures	1	0	n/a	2,301	278	2.3	2,301	96	2.4	2,547	2.4	2,388	905,212	6	20,275	385	2,404	925,487
		2	0	n/a	3,832	-	6.0	3,832	-	3.0	4,600								
		3	0	n/a	4,171	-	10.0	4,171	0	n/a	4,912								
		4	0	n/a	7,561	0	n/a	7,561	0	n/a	7,702								
582	Other Gynecological Procedures	1	-	2.0	2,172	25	3.4	2,266	-	4.0	3,230	3.8	3,522	119,743	-	21,203	-	-	140,946
		2	-	3.0	5,343	0	n/a	5,343	-	7.0	5,343								
		3	0	n/a	7,040	-	14.0	7,040	0	n/a	7,040								
		4	0	n/a	33,443	0	n/a	33,443	-	9.0	33,443								
584	Vagina, Cervix and Vulva Procedures	1	0	n/a	1,842	119	2.2	2,044	54	2.4	2,448	2.3	2,194	-	-	17,142	-	-	-
		2	0	n/a	4,279	-	5.5	4,279	0	n/a	4,279								
		3	0	n/a	5,556	0	n/a	5,556	0	n/a	5,556								
		4	0	n/a	8,141	0	n/a	8,141	0	n/a	8,141								
585	Gynecological Laparoscopy (MNRH)	1	0	n/a	1,524	-	2.0	1,512	0	n/a	1,523	2.0	1,512	-	-	2,149	-	-	-
		2	0	n/a	2,461	0	n/a	2,461	0	n/a	2,461								
		3	0	n/a	4,210	0	n/a	4,210	0	n/a	4,210								
		4	0	n/a	4,323	0	n/a	4,323	0	n/a	4,323								
586	Tubal Interruption (MNRH)	1	0	n/a	1,392	24	1.2	1,392	0	n/a	1,392	1.2	1,392	33,400	0	0	24	1,392	33,400
		2	0	n/a	1,392	0	n/a	1,392	0	n/a	1,392								
		3	0	n/a	1,392	0	n/a	1,392	0	n/a	1,392								
		4	0	n/a	1,392	0	n/a	1,392	0	n/a	1,392								
587	Miscellaneous Gynecological Procedures (MNRH)	1	-	1.0	1,083	59	1.3	920	-	3.8	1,431	1.6	1,034	70,298	14	61,309	82	1,605	131,607
		2	0	n/a	2,839	-	8.0	2,839	0	n/a	2,839								
		3	0	n/a	3,875	0	n/a	3,875	-	4.0	3,875								
		4	0	n/a	3,875	0	n/a	3,875	0	n/a	3,875								
592	Malignancy of Female Reproductive Organ	1	0	n/a	2,471	27	5.0	2,471	12	6.8	2,471	8.1	3,911	222,909	45	431,006	102	6,411	653,915
		2	0	n/a	4,669	6	10.3	4,669	-	4.0	4,669								
		3	0	n/a	8,460	-	13.3	8,460	-	12.7	8,460								
		4	0	n/a	9,989	-	28.0	9,989	0	n/a	9,989								
594	Female Reproductive System Infection	1	-	2.3	1,426	60	3.0	1,470	0	n/a	1,470	3.1	1,492	102,965	17	57,726	86	1,868	160,691
		2	0	n/a	1,816	-	4.8	1,816	0	n/a	1,860								
		3	0	n/a	2,702	0	n/a	2,702	0	n/a	2,702								
		4	0	n/a	2,702	0	n/a	2,702	0	n/a	2,702								
595	Other Female Reproductive System Diagnoses and Injuries	1	-	1.0	926	7	1.6	926	0	n/a	926	1.5	926	-	-	4,227	-	-	-
		2	0	n/a	926	0	n/a	926	0	n/a	926								
		3	0	n/a	926	0	n/a	926	0	n/a	926								
		4	0	n/a	926	0	n/a	926	0	n/a	926								
596	Miscellaneous Gynecological Diagnoses (MNRH)	1	10	1.6	1,015	143	1.6	1,287	6	5.2	1,351	1.8	1,297	211,339	45	87,149	208	1,435	298,488
		2	-	3.0	1,744	-	5.0	1,744	0	n/a	1,801								
		3	0	n/a	3,680	0	n/a	3,663	-	3.0	3,791								
		4	0	n/a	3,680	0	n/a	3,663	0	n/a	3,791								
908	Other Major Procedures for Gynecological Malignancy	1	0	n/a	3,514	-	2.5	3,514	-	7.0	3,514	6.0	3,614	-	0	0	-	3,614	-
		2	0	n/a	3,764	-	9.0	3,764	0	n/a	3,764								
		3	0	n/a	5,480	0	n/a	5,480	0	n/a	5,480								
		4	0	n/a	6,369	0	n/a	6,369	0	n/a	6,369								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
PREGNANCY & CHILDBIRTH																			
599	Premature Labour	9	c	6.0	2,160	45[C]	4.1	2,160	0	n/a	2,160	4.1	2,160	97,207	119	111,709	164	1,274	208,916
600	Major Procedures in Pregnancy or Childbirth	9	c	4.0	3,773	68[C]	4.8	3,773	0	n/a	3,773	4.8	3,773	256,587	-	70,522	-	-	327,109
601	Repeat Caesarean Delivery with Complicating Diagnosis	9	c	4.0	2,611	317[C]	3.6	2,611	0	n/a	2,611	3.6	2,611	827,828	36	215,224	353	2,955	1,043,052
602	Caesarean Delivery with Complicating Diagnosis	9	27	4.3	3,229	731	4.2	3,229	0	n/a	3,229	4.2	3,229	2,447,590	98	987,210	856	4,013	3,434,800
603	Repeat Caesarean Delivery	9	c	3.0	2,058	587[C]	2.7	2,058	0	n/a	2,058	2.7	2,058	1,208,026	208	536,185	795	2,194	1,744,211
604	Caesarean Delivery	9	19	4.1	2,875	862	3.7	2,875	0	n/a	2,875	3.7	2,875	2,532,780	47	193,918	928	2,938	2,726,698
606	Vaginal Delivery with Sterilization Procedures	9	0	n/a	2,922	169	2.6	2,922	0	n/a	2,922	2.6	2,922	493,893	8	31,533	177	2,969	525,425
607	Vaginal Delivery with Minor Procedures	9	c	4.3	2,626	62[C]	2.9	2,626	0	n/a	2,626	3.0	2,626	162,825	7	33,504	69	2,845	196,329
608	Vaginal Delivery after Caesarean (VBAC) with Complicating Diagnosis	9	c	1.0	1,974	157[C]	2.6	1,974	0	n/a	1,974	2.6	1,974	309,978	11	56,613	168	2,182	366,591
609	Vaginal Delivery with Complicating Diagnosis	9	139	2.9	2,339	3139	2.6	1,988	0	n/a	1,988	2.6	2,003	6,565,295	302	1,174,805	3,580	2,162	7,740,100
610	Vaginal Delivery after Caesarean Delivery (VBAC)	9	c	2.3	1,709	296[C]	2.1	1,709	0	n/a	1,709	2.1	1,709	505,738	11	34,547	307	1,760	540,284
611	Vaginal Delivery	9	266	2.4	1,945	6553	2.1	1,650	0	n/a	1,650	2.1	1,662	11,332,257	183	512,835	7,002	1,692	11,845,092
612	Ectopic Pregnancy with Major Procedures	9	c	2.0	2,391	89[C]	2.9	2,391	0	n/a	2,391	2.9	2,391	212,757	7	24,070	96	2,467	236,827
613	Ectopic Pregnancy with Minor Procedures	9	c	2.0	1,601	54[C]	1.4	1,601	0	n/a	1,601	1.4	1,601	86,458	-	1,587	-	-	88,044
614	Ectopic Pregnancy	9	c	1.0	675	58[C]	1.3	675	0	n/a	675	1.3	675	39,159	8	9,328	66	735	48,487
615	Threatened Abortion	9	c	1.5	724	94	1.4	724	0	n/a	724	1.4	724	68,046	34	38,890	128	835	106,935
616	Abortive Outcome with Injection	9	0	n/a	1,563	9	1.2	1,563	0	n/a	1,563	1.2	1,563	14,069	0	0	9	1,563	14,069
617	Abortive Outcome with D and C	9	22	1.2	786	476	1.1	786	0	n/a	786	1.1	786	391,532	59	76,581	557	840	468,114
618	Abortive Outcome	9	13	1.5	1,175	187	1.3	1,175	0	n/a	1,175	1.3	1,175	235,036	38	95,144	238	1,387	330,179
619	False Labour LOS < 3 Days (MNRH)	9	28	1.1	879	744	1.1	879	0	n/a	879	1.1	879	678,548	9	6,672	781	877	685,220
620	Postpartum Diagnosis with Procedures Other than D and C	9	0	n/a	2,093	6	3.0	2,093	0	n/a	2,093	3.0	2,093	12,559	7	73,256	13	6,601	85,815
621	Postpartum Diagnosis with D and C	9	c	2.0	1,032	41[C]	1.6	1,032	0	n/a	1,032	1.6	1,032	42,322	-	9,840	-	-	52,162
622	Postpartum Diagnosis	9	21	2.2	1,263	259	2.4	1,263	0	n/a	1,263	2.4	1,263	353,611	131	270,428	411	1,518	624,039
623	Antepartum Diagnosis with Complicating Diagnosis	9	20	2.6	1,323	567	2.5	1,323	0	n/a	1,323	2.5	1,323	776,514	131	253,680	718	1,435	1,030,194
624	Antepartum Diagnosis	9	63	1.4	930	891	1.5	930	0	n/a	930	1.5	930	886,979	293	477,836	1,247	1,094	1,364,815
NEWBORNS & NEONATES WITH CONDITIONS ORIGINATING IN PERINATAL PERIOD																			
605	Fetal Surgery	9	0	n/a	1,156							n/a	n/a	0	0	0	0	n/a	0
625	Neonates Weight < 750 grams	9	-	179.5	99,612							179.5	99,612	-	45	306,656	-	-	-
626	Neonates Weight 750-999 grams	9	14	91.1	69,582							91.1	69,582	974,151	8	300,584	22	57,942	1,274,734
627	Neonates Weight 1,000-1,499 grams with Catastrophic Diagnosis	9	0	n/a	59,332							n/a	n/a	0	0	0	0	n/a	0
628	Neonates Weight 1,000-1,499 grams without Catastrophic Diagnosis	9	68	54.4	28,587							54.4	28,587	1,943,921	28	1,123,844	96	31,956	3,067,765
630	Neonates Weight 1,500-1,999 grams with Catastrophic Diagnosis	9	0	n/a	14,796							n/a	n/a	0	0	0	0	n/a	0
631	Neonates Weight 1,500-1,999 grams with Major Problem Diagnosis	9	45	32.5	18,561							32.5	18,561	835,257	23	508,213	68	19,757	1,343,470
632	Neonates Weight 1,500-1,999 grams with Moderate or Minor or no Problem Diagnosis	9	90	16.8	9,412							16.8	9,412	847,113	33	442,130	123	10,482	1,289,243

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c - due to small numbers, the # of cases for some CMGs has been combined

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CMG	Description	Complexity Level	TYPICAL CASES												ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean		Total Cost for CMG	All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
636	Neonates Weight 2,000-2,499 grams with Catastrophic Diagnosis	9	0	n/a	10,054							n/a	n/a	0	-	6,875	-	-	6,875
637	Neonates Weight 2,000-2,499 grams with Major Problem Diagnosis	9	32	18.6	11,034							18.6	11,034	353,091	15	300,523	47	13,907	653,614
638	Neonates Weight 2,000-2,499 grams with Moderate Problem Diagnosis	9	79	11.4	6,470							11.4	6,470	511,164	15	121,123	94	6,726	632,287
639	Neonates Weight 2,000-2,499 grams with Minor Problem Diagnosis	9	325	6.4	2,713							6.4	2,713	881,835	44	323,514	369	3,267	1,205,349
640	Neonates Weight 2,000-2,499 grams with no Problem Diagnosis	9	39	2.4	634							2.4	634	24,730	-	3,916	-	-	28,646
643	Neonates Weight > 2,500 grams with Catastrophic Diagnosis	9	-	21.5	12,061							21.5	12,061	-	6	48,534	-	-	-
644	Neonates Weight > 2,500 grams with Major Problem Diagnosis	9	216	5.3	3,851							5.3	3,851	831,818	95	1,148,972	311	6,369	1,980,790
645	Neonates Weight > 2,500 grams with Moderate Problem Diagnosis	9	419	4.1	1,904							4.1	1,904	797,938	141	1,068,440	560	3,333	1,866,378
646	Neonates Weight > 2,500 grams with Caesarean Delivery	9	2394	3.2	914							3.2	914	2,188,341	88	217,133	2,482	969	2,405,474
647	Neonates Weight > 2,500 grams with Minor Problem Diagnosis	9	774	2.7	1,026							2.7	1,026	794,147	215	723,178	989	1,534	1,517,325
648	Neonates Weight > 2,500 grams (Normal Newborn)	9	9743	1.9	525							1.9	525	5,119,161	223	271,766	9,966	541	5,390,928
DISEASES & DISORDERS OF BLOOD, BLOOD-FORMING ORGANS & IMMUNOLOGIC DISORDERS																			
701	Splenectomy	1	-	3.0	3,802	15	3.6	3,880	-	1.0	4,882	4.1	4,381	96,390	-	120,727	-	-	217,117
		2	-	5.0	6,428	-	4.0	6,428	-	17.0	6,428								
		3	0	n/a	9,442	0	n/a	9,442	0	n/a	9,442								
		4	0	n/a	16,807	0	n/a	16,807	0	n/a	16,807								
703	Other Operating Room Procedures of Blood and Blood-forming Organs	1	8	5.9	3,267	9	3.3	3,267	-	2.0	3,267	9.0	5,725	154,583	-	236,101	-	-	390,684
		2	-	8.0	6,646	-	10.3	6,646	0	n/a	6,646								
		3	0	n/a	9,653	0	n/a	9,653	0	n/a	9,653								
		4	-	13.0	20,889	-	53.5	20,889	0	n/a	20,889								
704	Red Blood Cell Disorders	1	14	3.3	1,990	153	2.7	1,726	231	4.1	2,111	4.3	2,360	1,130,202	80	833,395	559	3,513	1,963,597
		2	-	4.8	3,811	12	6.5	3,289	34	7.7	3,627								
		3	-	8.0	4,979	7	3.7	5,189	16	10.6	4,803								
		4	0	n/a	10,360	-	6.7	10,360	-	27.5	7,293								
709	Coagulation Disorders	1	28	3.0	1,126	28	3.6	1,650	22	6.2	2,576	4.6	2,375	228,024	25	154,325	121	3,160	382,349
		2	0	n/a	3,174	-	3.3	3,680	-	3.4	4,180								
		3	-	4.0	4,736	-	19.0	5,060	-	3.8	4,982								
		4	-	15.0	11,080	-	17.0	11,080	0	n/a	10,873								
710	Reticuloendothelial and Immunity Disorders	1	63	3.4	2,714	65	4.6	2,409	21	4.4	2,820	4.7	2,983	527,953	28	303,752	205	4,057	831,705
		2	-	7.0	4,956	7	5.1	3,708	-	7.0	4,447								
		3	-	8.0	5,542	-	6.7	4,249	0	n/a	4,914								
		4	-	4.0	7,604	-	16.2	7,016	0	n/a	9,140								
LYMPHOMA OR LEUKEMIA & NEOPLASM OF UNSPECIFIED SITE																			
583	Radio-implant for Malignancy	1	0	n/a	1,805	0	n/a	1,805	0	n/a	1,805	n/a	n/a	0	0	0	0	n/a	0
		2	0	n/a	1,805	0	n/a	1,805	0	n/a	1,805								
		3	0	n/a	1,805	0	n/a	1,805	0	n/a	1,805								
		4	0	n/a	1,805	0	n/a	1,805	0	n/a	1,805								
700	Bone Marrow Transplant	1	-	40.0	14,154	-	16.5	14,202	0	n/a	14,202	31.3	23,346	1,120,603	-	413,658	-	-	1,534,261
		2	0	n/a	19,831	0	n/a	19,829	0	n/a	19,829								
		3	-	58.0	20,067	-	29.5	20,067	0	n/a	20,067								
		4	-	68.3	37,153	35	26.9	23,284	0	n/a	26,170								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
725	Major Leukemia and Lymphoma Procedures	1	0	n/a	3,646	42	2.4	3,646	10	4.8	3,646	4.5	5,510	341,610	8	412,025	70	10,766	753,635
		2	-	6.0	7,072	-	3.3	7,072	-	7.5	7,072								
		3	0	n/a	9,123	-	22.0	9,123	0	n/a	9,123								
		4	-	16.0	33,493	-	50.0	33,493	-	10.0	33,493								
726	Acute Leukemia without Major Procedures	1	7	7.7	8,732	-	13.0	6,935	8	4.5	3,640	20.2	14,897	715,053	32	549,294	80	15,804	1,264,347
		2	0	n/a	14,194	0	n/a	15,093	-	5.0	9,053								
		3	-	7.6	14,194	-	24.8	15,858	-	24.0	9,053								
		4	-	21.5	26,218	14	41.6	26,381	0	n/a	24,070								
728	Lymphoma and Chronic Leukemia with Other Procedures	1	-	8.3	4,025	32	4.4	4,025	14	7.6	4,025	12.1	8,119	600,797	36	812,333	110	12,847	1,413,129
		2	0	n/a	9,414	6	14.8	9,414	-	27.0	9,414								
		3	0	n/a	12,488	-	14.2	12,488	-	16.7	12,488								
		4	0	n/a	23,777	7	33.7	23,777	-	49.3	23,777								
730	Lymphoma and Chronic Leukemia	1	-	4.5	3,176	57	4.1	3,344	117	5.3	3,139	7.6	4,563	1,127,099	183	2,813,267	430	9,164	3,940,366
		2	-	4.0	5,845	17	8.2	5,778	26	13.0	5,958								
		3	0	n/a	7,248	6	11.7	7,248	-	13.8	7,985								
		4	-	20.0	14,460	7	34.0	15,298	6	19.8	13,459								
733	Major Ill-defined Neoplasm Procedures	1	-	4.0	5,215	7	3.4	5,215	6	3.2	5,215	5.9	6,783	128,872	-	32,925	-	-	161,797
		2	0	n/a	8,561	-	12.0	8,561	-	9.0	8,561								
		3	0	n/a	11,035	0	n/a	11,035	0	n/a	11,035								
		4	0	n/a	21,624	-	27.0	21,624	0	n/a	21,624								
734	Ill-defined Neoplasm with Other Procedures	1	-	3.0	3,401	11	4.5	3,401	6	6.0	3,401	6.7	4,290	94,380	7	232,231	29	11,262	326,611
		2	0	n/a	6,948	0	n/a	6,948	-	11.0	6,948								
		3	0	n/a	8,455	0	n/a	8,455	0	n/a	8,455								
		4	0	n/a	19,403	-	41.0	19,403	0	n/a	19,403								
735	Radiation Therapy	1	-	1.0	1,440	8	2.5	1,480	-	3.0	3,351	2.5	2,143	27,854	11	47,755	24	3,150	75,609
		2	-	2.0	4,518	0	n/a	4,518	0	n/a	5,899								
		3	0	n/a	6,337	0	n/a	6,337	0	n/a	6,584								
		4	0	n/a	9,243	0	n/a	9,243	0	n/a	9,243								
736	Chemotherapy	1	66	3.3	2,401	85	3.8	2,264	-	1.7	1,821	3.7	2,422	385,027	10	33,836	169	2,478	418,863
		2	0	n/a	3,100	-	4.0	3,470	-	7.0	3,896								
		3	-	6.0	5,543	0	n/a	6,150	0	n/a	6,150								
		4	0	n/a	10,572	-	17.0	12,272	0	n/a	11,777								
737	Other Poorly Differentiated Neoplastic Diagnoses	1	-	1.0	3,649	9	7.0	3,649	14	6.4	3,649	6.4	3,831	99,609	60	885,543	86	11,455	985,152
		2	0	n/a	5,339	-	2.0	5,339	0	n/a	5,339								
		3	0	n/a	6,702	0	n/a	6,702	-	10.0	6,702								
		4	0	n/a	11,891	0	n/a	11,891	0	n/a	11,891								
MULTISYSTEMIC OR UNSPECIFIED SITE INFECTIONS																			
750	Multisystemic or Unspecified Site Infections with Surgery	1	6	6.7	4,877	48	7.8	4,877	7	8.4	4,877	17.5	11,517	1,186,298	87	2,350,997	190	18,617	3,537,295
		2	0	n/a	9,362	7	15.1	9,362	0	n/a	9,362								
		3	-	16.0	11,199	15	12.7	11,199	-	54.0	11,199								
		4	-	59.0	35,160	10	47.6	35,160	6	62.2	35,160								
751	Septicemia	1	10	3.7	2,035	57	5.5	2,943	50	6.9	3,233	8.6	5,294	1,058,828	245	2,385,867	445	7,741	3,444,696
		2	-	3.0	4,235	14	5.3	3,940	15	8.3	5,235								
		3	-	6.0	6,434	11	10.9	6,394	13	7.9	6,911								
		4	-	22.5	15,385	17	20.5	15,482	9	22.6	12,284								
756	Post-operative and Post-traumatic Infections	1	16	4.7	1,955	160	4.7	2,201	56	6.2	2,570	5.3	2,490	627,384	64	398,327	316	3,246	1,025,711
		2	-	9.0	3,904	6	6.0	3,944	-	13.8	4,630								
		3	0	n/a	4,561	-	5.2	4,630	-	2.5	6,670								
		4	0	n/a	12,825	-	17.0	12,825	0	n/a	13,715								
757	Viral Illness	1	64	2.3	1,275	68	2.6	1,477	25	5.0	1,854	3.0	1,492	241,731	30	102,619	192	1,793	344,350
		2	-	3.0	1,950	-	17.0	2,711	-	3.0	3,404								
		3	-	4.0	3,356	0	n/a	3,801	0	n/a	4,186								
		4	0	n/a	8,814	0	n/a	9,016	0	n/a	9,934								

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CMG	Description	Complexity Level	TYPICAL CASES											ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean		Total Cost for CMG	All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
761	Fever of Unknown Origin	1	84	2.3	1,373	59	3.5	1,716	31	5.0	1,979	3.4	1,707	324,266	33	118,361	223	1,985	442,627
		2	-	3.0	2,329	7	5.3	2,817	-	5.5	2,684								
		3	-	2.0	3,351	-	6.5	3,333	-	10.0	3,527								
		4	0	n/a	4,958	0	n/a	4,958	0	n/a	5,382								
763	Other Infectious Diagnoses	1	17	3.6	1,886	27	4.8	2,365	20	7.2	2,864	6.6	3,366	289,444	40	339,848	126	4,994	629,292
		2	0	n/a	4,346	-	9.8	4,931	-	9.2	5,129								
		3	0	n/a	5,762	6	8.7	5,979	-	9.2	5,892								
		4	0	n/a	12,423	-	24.5	12,765	0	n/a	12,871								
MENTAL DISEASES & DISORDERS																			
764	Depressive Mood Disorders with ECT	9	0	n/a	10,772	32	38.7	10,772	15	48.1	10,772	41.7	10,772	506,276	6	252,826	53	14,323	759,102
765	Depressive Mood Disorders without ECT with Axis III Diagnosis	9	14	10.1	6,686	106	22.8	6,026	28	23.1	8,714	21.7	6,597	976,318	31	505,138	179	8,276	1,481,456
766	Depressive Mood Disorders without ECT without Axis III Diagnosis	9	88	11.7	4,302	505	18.8	4,383	65	20.6	5,903	18.0	4,522	2,975,484	161	1,261,986	819	5,174	4,237,470
767	Depressive Mood Disorders LOS < 6 Days	9	55	2.9	1,475	268	2.7	1,280	23	2.5	1,391	2.7	1,319	456,267	0	0	346	1,319	456,267
768	Bipolar Mood Disorders, Manic with ECT	9	0	n/a	14,659	-	52.4	14,659	0	n/a	14,659	52.4	14,659	-	0	0	-	-	-
769	Bipolar Mood Disorders, Manic without ECT with Axis III Diagnosis	9	0	n/a	9,166	28	30.1	9,166	-	30.8	9,166	30.2	9,166	-	10	231,313	-	-	-
770	Bipolar Mood Disorders, Manic without ECT without Axis III Diagnosis	9	14	18.0	7,123	289	22.7	6,000	18	22.3	7,269	22.5	6,120	1,964,468	82	1,014,650	403	7,392	2,979,119
771	Bipolar Mood Disorders LOS < 6 Days	9	-	4.0	1,388	59	2.8	1,388	-	3.8	1,388	2.9	1,388	91,577	0	0	66	1,388	91,577
772	Dementia with or without Delirium with Axis III Diagnosis	9	0	n/a	8,423	9	18.2	8,423	190	28.0	6,741	27.6	6,817	1,356,643	276	9,541,316	475	22,943	10,897,959
773	Dementia with or without Delirium without Axis III Diagnosis	9	0	n/a	5,761	16	10.6	5,761	250	16.8	4,164	16.4	4,260	1,133,126	200	5,460,889	466	14,150	6,594,015
774	Organic Mental Disorders Induced by Drugs	9	8	6.4	2,885	82	6.8	2,243	8	12.9	3,122	7.3	2,367	231,987	31	156,008	129	3,008	387,996
775	Schizophrenia and Other Psychotic Disorders with ECT	9	-	14.0	14,347	6	62.8	14,347	0	n/a	14,347	55.8	14,347	-	8	492,669	-	-	-
776	Schizophrenia and Other Psychotic Disorders without ECT with Axis III Diagnosis	9	-	21.3	11,365	58	19.8	8,565	26	17.6	6,747	19.2	8,118	-	65	1,782,965	-	-	-
777	Schizophrenia and Other Psychotic Disorders without ECT or Axis III Diagnosis	9	41	17.0	6,231	721	22.4	6,231	57	22.8	6,231	22.2	6,231	5,103,592	331	5,279,780	1,150	9,029	10,383,372
778	Schizophrenia and Other Psychotic Disorders LOS < 6 Days	9	10	3.5	1,435	206	3.0	1,435	46	2.5	1,435	2.9	1,435	375,992	0	0	262	1,435	375,992
779	Dissociative Disorders	9	-	6.7	2,711	25	6.5	2,711	-	2.0	2,711	6.4	2,711	78,627	-	40,654	-	-	119,281
780	Alcohol Induced Organic Mental Disorders with Axis III Diagnosis	9	0	n/a	3,310	57	9.4	3,310	8	18.5	6,525	10.5	3,706	240,881	33	1,003,193	98	12,695	1,244,074
781	Alcohol Induced Organic Mental Disorders without Axis III Diagnosis	9	0	n/a	1,454	300	5.4	1,548	23	11.3	3,873	5.8	1,714	553,536	78	536,205	401	2,718	1,089,741
783	Psychoactive Substance Dependence	9	-	6.3	1,510	325	6.6	1,750	18	8.2	3,397	6.7	1,834	-	100	350,227	-	-	-
784	Psychoactive Substance Abuse	9	39	2.2	761	252	4.2	1,209	14	4.3	1,660	3.9	1,172	357,536	101	413,585	406	1,899	771,121
785	Developmental Delay	9	10	11.5	6,373	15	13.1	6,373	0	n/a	6,373	12.5	6,373	159,324	6	189,348	31	11,247	348,672
786	Disruptive Behaviour Disorders	9	59	9.3	3,704	-	6.8	3,704	0	n/a	3,704	9.1	3,704	-	10	34,072	-	-	-
787	Eating Disorders	9	24	20.2	9,356	41	32.2	9,356	-	19.0	9,356	27.6	9,356	-	7	87,316	-	-	-

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
788	Organic Mental Disorders Associated with Physical Disorders with Axis III Diagnosis	9	0	n/a	6,074	16	15.5	6,074	33	15.0	6,074	15.2	6,074	297,615	24	524,024	73	11,255	821,639
789	Organic Mental Disorders Associated with Physical Disorders without Axis III Diagnosis	9	-	10.0	4,082	24	13.7	4,082	26	7.7	4,082	10.6	4,082	-	16	148,668	-	-	-
790	Somatoform Disorders	9	0	n/a	1,731	17	5.1	1,731	9	4.6	1,731	4.9	1,731	45,014	7	37,620	33	2,504	82,634
791	Anxiety Disorders (MNRH)	9	12	4.2	4,760	118	4.0	1,996	78	5.0	1,888	4.4	2,115	439,933	41	328,615	249	3,087	768,548
792	Adjustment Disorders (MNRH)	9	174	5.4	1,912	297	7.7	1,700	12	11.6	2,879	7.0	1,806	872,190	58	312,396	541	2,190	1,184,586
793	Personality Disorders with Axis III Diagnosis (MNRH)	9	0	n/a	3,343	17	9.0	3,343	-	6.0	3,343	8.8	3,343	-	-	60,095	-	-	-
794	Personality Disorders without Axis III Diagnosis (MNRH)	9	-	1.3	1,024	184	7.8	1,875	6	8.8	3,526	7.7	1,914	-	22	167,028	-	-	-
795	Sexual Dysfunction and Sexual Disorders (MNRH)	9	0	n/a	3,782	-	1.0	3,782	0	n/a	3,782	1.0	3,782	-	0	0	-	3,782	-
796	Specific Developmental Disorders (MNRH)	9	-	12.0	4,112	0	n/a	4,112	-	3.0	4,112	7.5	4,112	-	0	0	-	4,112	-
797	Miscellaneous Psychiatric Diagnoses (MNRH)	9	-	3.0	3,378	10	9.4	3,378	-	1.5	3,378	7.4	3,378	47,286	-	22,073	-	-	69,359
909	Obsolete Psychiatric Diagnoses (MNRH)	9	8	8.9	2,123	63	7.5	2,121	25	10.0	2,965	8.3	2,341	224,697	23	271,976	119	4,174	496,673
INJURY, POISONING & TOXIC EFFECTS OF DRUGS																			
803	Extensive Procedures for Injury or Complication of Treatment	1	0	n/a	5,948	27	7.1	5,948	18	8.9	5,948	13.2	9,283	649,817	48	1,151,074	118	15,262	1,800,891
		2	0	n/a	9,142	-	4.5	9,142	-	6.3	9,142								
		3	0	n/a	10,875	9	15.4	10,875	-	10.0	10,875								
		4	-	51.0	31,278	-	75.7	31,278	-	43.5	31,278								
804	Non-extensive Procedures for Injury or Complication of Treatment	1	36	1.7	2,071	87	3.0	2,517	18	5.1	2,802	6.6	4,308	831,376	42	377,031	235	5,142	1,208,407
		2	-	15.5	5,791	13	11.5	5,672	6	12.0	6,223								
		3	0	n/a	9,084	12	10.1	9,049	-	23.0	9,621								
		4	-	16.3	14,374	9	28.0	14,622	-	35.5	14,300								
805	MNRH Procedures for Injury or Complication of Treatment	1	-	2.0	2,025	30	2.9	2,340	9	9.0	2,977	4.9	2,842	130,710	7	79,902	53	3,974	210,612
		2	0	n/a	4,572	-	13.0	4,572	0	n/a	5,716								
		3	0	n/a	7,747	0	n/a	7,747	0	n/a	7,750								
		4	0	n/a	13,913	0	n/a	13,913	-	13.0	13,918								
811	Allergic Reaction	1	11	1.3	815	21	1.1	1,101	7	2.7	1,487	1.7	1,102	46,289	7	23,171	49	1,418	69,460
		2	0	n/a	1,152	-	4.5	1,152	-	5.0	1,487								
		3	0	n/a	3,704	0	n/a	3,704	0	n/a	3,721								
		4	0	n/a	3,704	0	n/a	3,704	0	n/a	3,737								
813	Drug Reactions	1	121	1.5	1,092	332	2.1	1,373	40	3.6	1,875	2.4	1,593	873,132	177	700,041	725	2,170	1,573,172
		2	-	1.0	1,725	17	2.9	2,670	11	6.5	3,484								
		3	-	4.0	2,572	17	4.6	3,414	-	23.0	4,276								
		4	0	n/a	7,318	6	6.3	9,529	0	n/a	7,629								
818	Complications of Treatment	1	38	1.9	1,075	311	2.7	1,558	112	3.8	1,855	3.5	2,046	1,073,934	135	819,869	660	2,869	1,893,803
		2	-	1.0	3,758	29	6.8	4,285	15	7.2	3,995								
		3	0	n/a	5,363	9	3.8	5,704	-	10.5	4,153								
		4	0	n/a	12,840	6	10.8	12,840	-	41.5	8,152								
823	Minor Injuries and Trauma Diagnosis	1	27	1.4	964	76	1.7	1,012	39	5.4	2,034	3.1	1,533	240,675	52	230,295	209	2,253	470,970
		2	-	4.0	2,608	-	5.8	2,634	-	11.3	2,951								
		3	0	n/a	4,459	-	3.3	4,480	-	15.0	4,686								
		4	-	15.0	13,054	0	n/a	12,289	0	n/a	13,288								

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			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
BURNS																			
830	Extensive Burns with Skin Graft Wound Debridement or Other Burn Procedures	1	0	n/a	39,713	-	19.0	39,713	0	n/a	39,713	41.2	52,339	575,730	6	371,258	17	55,705	946,988
		2	-	37.0	40,793	0	n/a	40,793	0	n/a	40,793								
		3	-	53.3	50,105	0	n/a	50,105	0	n/a	50,105								
		4	-	48.0	61,039	-	41.5	61,039	-	39.0	61,039								
831	Extensive Burns without Burn Procedures	1	-	1.0	16,002	-	15.0	16,002	0	n/a	16,002	11.5	16,002	64,010	-	79,563	-	-	143,573
		2	0	n/a	16,046	0	n/a	16,046	0	n/a	16,046								
		3	0	n/a	16,046	0	n/a	16,046	0	n/a	16,046								
		4	0	n/a	34,569	0	n/a	34,569	0	n/a	34,569								
832	Non-extensive Burns with Skin Graft	1	17	8.2	7,429	21	11.3	7,429	-	8.0	7,429	10.5	7,807	327,897	6	131,462	48	9,570	459,359
		2	0	n/a	11,137	-	37.0	11,137	0	n/a	11,137								
		3	0	n/a	19,595	0	n/a	19,595	-	13.0	19,595								
		4	0	n/a	34,171	0	n/a	34,171	0	n/a	34,171								
833	Non-extensive Burns with Wound Debridement or Other Burn Procedures	1	0	n/a	3,347	0	n/a	3,347	0	n/a	3,347	n/a	n/a	0	0	0	0	n/a	0
		2	0	n/a	3,347	0	n/a	3,347	0	n/a	3,347								
		3	0	n/a	3,347	0	n/a	3,347	0	n/a	3,347								
		4	0	n/a	3,347	0	n/a	3,347	0	n/a	3,347								
834	Non-extensive Burns without Burn Procedures	1	21	5.0	2,257	24	4.7	2,625	-	6.8	3,389	5.6	3,268	176,471	12	50,437	66	3,438	226,908
		2	0	n/a	5,850	0	n/a	5,835	-	16.0	5,793								
		3	0	n/a	5,850	0	n/a	5,835	-	8.0	5,821								
		4	0	n/a	18,751	0	n/a	18,751	-	12.5	18,751								
OTHER REASONS FOR HOSPITALIZATION																			
840	Other Admissions with Surgery	1	-	3.0	2,644	49	2.2	3,184	47	28.9	7,024	44.7	17,663	6,341,070	225	11,068,316	584	29,811	17,409,386
		2	-	54.0	12,042	37	30.2	14,701	100	42.6	16,020								
		3	-	66.0	13,031	21	64.3	21,452	25	54.2	20,194								
		4	-	59.0	26,329	28	98.1	48,110	44	79.7	30,262								
841	Rehabilitation	1	-	5.0	4,606	70	18.1	4,606	280	29.5	8,048	36.1	10,607	-	746	15,656,868	-	-	-
		2	0	n/a	12,733	59	41.8	12,733	231	36.7	11,154								
		3	0	n/a	17,070	24	45.3	17,070	72	47.3	13,167								
		4	0	n/a	21,413	14	82.6	21,339	50	56.5	18,638								
842	Signs and Symptoms	1	18	2.4	1,461	132	3.9	1,917	252	6.9	2,729	6.9	2,820	1,331,122	166	2,282,600	638	5,664	3,613,722
		2	-	4.5	2,968	9	6.2	3,076	27	10.9	4,354								
		3	-	1.5	4,098	6	12.0	4,274	15	20.8	6,850								
		4	0	n/a	10,061	-	10.7	10,061	-	41.3	10,072								
846	Aftercare following Surgery or Treatment	1	143	1.1	888	932	1.1	860	292	1.2	1,029	1.1	903	1,239,011	291	632,130	1,663	1,125	1,871,142
		2	0	n/a	1,963	0	n/a	1,956	-	5.0	1,828								
		3	0	n/a	2,208	-	3.0	2,249	-	10.0	2,252								
		4	0	n/a	7,998	0	n/a	7,998	0	n/a	7,998								
847	Other Specified Aftercare	1	-	2.0	957	104	6.9	3,467	93	9.0	3,872	8.7	3,982	911,920	663	7,820,904	892	9,790	8,732,824
		2	0	n/a	5,646	16	13.3	5,628	8	17.3	5,770								
		3	0	n/a	7,715	-	5.5	7,709	-	23.7	7,799								
		4	0	n/a	14,347	-	3.0	14,347	0	n/a	13,289								
849	Multiple or Unspecified Congenital Anomalies	1	-	3.0	2,489	-	5.0	2,489	0	n/a	2,489	7.0	2,712	-	-	61,654	-	-	-
		2	0	n/a	3,158	0	n/a	3,158	0	n/a	3,158								
		3	-	13.0	3,158	0	n/a	3,158	0	n/a	3,158								
		4	0	n/a	42,640	0	n/a	42,640	0	n/a	42,640								
850	Perinatal Conditions Age > 28 Days	1	-	3.0	5,547	0	n/a	5,547	0	n/a	5,547	3.0	5,547	-	-	29,734	-	-	-
		2	0	n/a	13,885	0	n/a	13,885	0	n/a	13,885								
		3	0	n/a	15,133	0	n/a	15,133	0	n/a	15,133								
		4	0	n/a	17,161	0	n/a	17,161	0	n/a	17,161								

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
851	Other Factors Causing Hospitalization	1	112	1.7	1,631	294	1.6	1,003	479	7.0	2,443	5.5	2,170	2,055,077	1,511	17,097,876	2,458	7,792	19,152,952
		2	-	5.7	4,424	13	9.8	4,552	23	15.7	6,821								
		3	0	n/a	5,571	6	16.8	5,510	10	34.2	6,821								
		4	0	n/a	10,606	-	18.0	10,606	-	33.2	11,086								
852	Procedures Cancelled (MNRH)	1	64	1.0	275	244	1.0	369	82	1.0	331	1.0	347	135,835	13	6,991	405	353	142,826
		2	0	n/a	500	-	1.0	500	-	1.0	503								
		3	0	n/a	686	0	n/a	686	0	n/a	675								
		4	0	n/a	686	0	n/a	686	0	n/a	686								
DISEASES AND DISORDERS OF HIV INFECTIONS (AIDS)																			
860	Respiratory Tract Disorders with HIV	9	-	5.0	5,774	19	11.7	5,774	-	9.0	5,774	11.3	5,774	121,248	9	155,233	30	9,216	276,481
861	Central Nervous System Infection with HIV	9	0	n/a	7,817	6	17.0	7,817	0	n/a	7,817	17.0	7,817	46,901	-	96,032	-	-	142,933
862	Gastrointestinal and Hepatobiliary Disorders with HIV	9	0	n/a	3,689	-	3.5	3,689	0	n/a	3,689	3.5	3,689	-	-	29,144	-	-	-
863	Ophthalmic Disorders with HIV	9	0	n/a	8,201	-	19.0	8,201	0	n/a	8,201	19.0	8,201	-	-	7,610	-	-	-
864	Blood Infections with HIV	9	0	n/a	8,936	-	5.0	8,936	0	n/a	8,936	5.0	8,936	-	-	38,346	-	-	-
865	Lymphoma with HIV	9	0	n/a	9,282	0	n/a	9,282	0	n/a	9,282	n/a	n/a	0	-	49,638	-	-	49,638
866	Psychosocial Conditions with HIV	9	0	n/a	9,235	-	20.0	9,235	0	n/a	9,235	20.0	9,235	-	-	40,568	-	-	-
867	Other Conditions Associated with HIV	9	0	n/a	6,122	-	2.0	6,122	0	n/a	6,122	2.0	6,122	-	0	0	-	6,122	-
868	Miscellaneous Conditions with HIV	9	0	n/a	5,051	6	13.5	5,051	0	n/a	5,051	13.5	5,051	30,308	6	153,741	12	15,337	184,048
SIGNIFICANT TRAUMA																			
351	Joint Replacement for Trauma	1	0	n/a	6,755	19	7.9	6,755	83	9.4	6,755	15.7	8,722	1,622,314	209	2,923,737	395	11,509	4,546,052
		2	0	n/a	9,553	6	15.5	9,553	42	22.0	9,553								
		3	0	n/a	11,088	-	24.0	11,088	16	19.1	11,088								
		4	0	n/a	16,127	-	36.0	16,127	14	36.3	16,127								
650	Tracheostomy and Gastrostomy Procedures for Trauma	1	0	n/a	20,406	-	10.0	20,406	0	n/a	20,406	35.5	49,973	299,839	13	1,015,854	19	69,247	1,315,693
		2	0	n/a	29,431	0	n/a	29,431	0	n/a	29,431								
		3	0	n/a	47,101	-	15.0	47,101	0	n/a	47,101								
		4	0	n/a	58,083	-	47.0	58,083	0	n/a	58,083								
651	Intracranial Procedures with Spinal Procedures for Trauma	9	0	n/a	28,482	0	n/a	28,482	0	n/a	28,482	n/a	n/a	0	0	0	0	n/a	0
652	Intracranial Procedures with Femur Procedures for Trauma	9	0	n/a	29,804	0	n/a	29,804	0	n/a	29,804	n/a	n/a	0	-	5,755	-	-	5,755
653	Intracranial or Femur Procedures with Thoraco-abdominal Procedures for Trauma	9	-	8.0	26,299	-	36.5	26,299	-	15.0	26,299	24.0	26,299	105,196	-	65,306	-	-	170,502
654	Intracranial Procedures with Wound Debridement or Lower Extremity Procedure for Trauma	9	-	5.0	10,217	0	n/a	10,217	0	n/a	10,217	5.0	10,217	-	-	23,103	-	-	-
655	Spinal Procedures with Femur Procedures for Trauma	9	0	n/a	22,590	0	n/a	22,590	0	n/a	22,590	n/a	n/a	0	-	15,202	-	-	15,202
656	Spinal Procedures with Thoraco-abdominal Procedures for Trauma	9	0	n/a	25,624	0	n/a	25,624	0	n/a	25,624	n/a	n/a	0	0	0	0	n/a	0
657	Spinal Procedures with Wound Debridement or Lower Extremity Procedure for Trauma	9	0	n/a	14,039	-	10.0	14,039	0	n/a	14,039	10.0	14,039	-	0	0	-	14,039	-
658	Femur Procedures with Wound Debridement or Lower Extremity Procedure for Trauma	9	-	6.0	14,038	-	14.7	14,554	0	n/a	13,628	11.2	14,348	71,739	11	263,660	16	20,962	335,398
659	Thoraco-abdominal Procedure with Wound Debridement or Lower Extremity Procedure for Trauma	9	0	n/a	34,542	-	36.0	34,542	0	n/a	34,542	36.0	34,542	-	0	0	-	34,542	-

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
660	Intracranial Procedures for Trauma	1	-	5.8	4,877	12	2.9	4,877	7	3.0	4,877	12.0	9,343	298,989	27	250,429	59	9,312	549,418
		2	0	n/a	11,696	-	28.0	11,696	0	n/a	11,696								
		3	-	16.0	11,836	0	n/a	11,836	0	n/a	11,836								
		4	-	41.8	29,341	-	59.0	29,341	0	n/a	29,341								
661	Spinal Procedures for Trauma	1	0	n/a	6,395	7	8.1	6,608	0	n/a	8,403	8.1	6,608	46,254	12	104,785	19	7,949	151,039
		2	0	n/a	13,172	0	n/a	13,396	0	n/a	12,587								
		3	0	n/a	13,654	0	n/a	13,654	0	n/a	14,346								
		4	0	n/a	27,149	0	n/a	26,073	0	n/a	26,183								
662	Femur or Pelvic Procedures for Trauma	1	34	4.9	3,249	86	6.8	4,682	209	8.0	5,639	8.8	5,774	2,223,125	374	2,965,720	759	6,836	5,188,845
		2	0	n/a	6,245	10	13.7	7,067	18	13.2	8,167								
		3	-	7.0	9,374	-	15.5	9,432	15	17.9	9,368								
		4	-	13.5	17,896	0	n/a	18,215	8	32.4	13,657								
663	Thoraco-abdominal Procedures for Trauma	1	9	5.8	5,222	34	6.4	5,212	-	8.5	5,547	9.1	7,275	487,441	28	293,013	95	8,215	780,454
		2	-	12.3	7,097	8	9.9	7,131	0	n/a	7,336								
		3	0	n/a	8,928	-	12.2	9,010	0	n/a	9,010								
		4	0	n/a	22,709	-	17.8	21,260	-	57.0	22,442								
664	Wound Debridement and Skin Graft for Trauma	1	11	6.8	5,354	48	8.1	5,354	-	9.6	5,354	9.2	6,394	460,344	14	200,063	86	7,679	660,407
		2	-	12.5	10,833	-	12.5	10,833	0	n/a	10,833								
		3	0	n/a	14,781	-	31.0	14,781	0	n/a	14,781								
		4	-	23.0	22,405	0	n/a	22,405	-	16.0	22,405								
665	Elevated Skull Fractures	1	-	7.0	4,809	0	n/a	4,809	0	n/a	4,809	8.3	7,002	21,005	-	5,984	-	-	26,989
		2	0	n/a	7,967	-	4.0	7,967	0	n/a	7,967								
		3	0	n/a	8,230	0	n/a	8,230	0	n/a	8,230								
		4	-	14.0	8,230	0	n/a	8,230	0	n/a	8,230								
666	Major Lower and Upper Extremity Procedures for Trauma	1	52	2.3	2,227	556	3.3	2,614	35	5.1	3,639	3.6	2,803	1,860,930	207	1,236,660	871	3,556	3,097,590
		2	-	8.0	6,869	17	11.4	7,054	0	n/a	6,988								
		3	0	n/a	8,758	-	3.0	8,991	0	n/a	8,820								
		4	0	n/a	21,827	-	20.0	21,827	0	n/a	22,205								
667	Minor Lower Extremity Procedures for Trauma	1	-	1.5	2,205	10	2.8	2,205	0	n/a	2,205	2.6	2,205	-	0	0	-	-	-
		2	0	n/a	5,328	0	n/a	5,328	0	n/a	5,328								
		3	0	n/a	5,328	0	n/a	5,328	0	n/a	5,328								
		4	0	n/a	13,063	0	n/a	13,063	0	n/a	13,063								
668	Miscellaneous Musculoskeletal Procedures for Trauma	1	16	3.1	2,634	117	3.0	2,634	0	n/a	2,634	3.3	2,805	384,309	27	176,732	164	3,421	561,041
		2	0	n/a	6,292	-	10.0	6,292	0	n/a	6,292								
		3	0	n/a	8,343	-	3.0	8,343	-	27.0	8,343								
		4	-	9.0	11,023	0	n/a	11,023	0	n/a	11,023								
669	Vascular Repair for Trauma	1	-	3.0	2,959	30	2.7	3,008	0	n/a	3,290	3.0	3,072	101,375	6	21,501	39	3,151	122,875
		2	0	n/a	5,223	-	11.0	5,223	0	n/a	5,223								
		3	0	n/a	6,375	0	n/a	6,375	0	n/a	6,407								
		4	0	n/a	14,828	0	n/a	14,828	0	n/a	14,828								
670	Upper Extremity Procedures for Trauma	1	135	1.5	1,685	329	2.4	2,147	42	3.8	2,405	2.4	2,105	1,084,162	55	364,379	570	2,541	1,448,542
		2	0	n/a	4,807	-	5.6	5,272	-	8.0	5,734								
		3	0	n/a	6,469	0	n/a	6,469	0	n/a	7,311								
		4	0	n/a	15,810	0	n/a	15,810	0	n/a	15,636								
674	Intracranial Injuries with Spinal Injuries	9	-	7.0	12,821	-	14.8	12,821	0	n/a	12,821	13.2	12,821	64,106	6	52,912	11	10,638	117,018
675	Intracranial Injuries with Fractures of Femur or Pelvis	9	0	n/a	11,127	-	5.0	11,127	0	n/a	11,127	5.0	11,127	-	-	66,731	-	-	-
676	Intracranial Injuries with Thoraco-abdominal Injuries	9	6	18.7	10,413	-	5.8	10,413	0	n/a	10,413	13.5	10,413	-	-	28,014	-	-	-
677	Spinal Injuries with Fractures of Femur	9	-	9.0	4,783	6	13.2	5,140	-	15.2	6,970	13.7	5,873	70,475	-	60,852	-	-	131,327
678	Spinal Injuries with Thoraco-abdominal Injuries	9	6	2.2	4,917	10	6.7	4,204	-	9.5	6,723	5.9	4,922	-	6	37,579	-	-	-

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CMG	Description	Complexity Level	TYPICAL CASES											Total Cost for CMG	ATYPICAL CASES		ALL CASES		
			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
679	Fractures of Femur with Thoraco-abdominal Injuries	9	-	6.0	4,920	7	9.9	4,920	-	17.5	4,920	10.6	4,920	54,125	9	149,363	20	10,174	203,488
680	Femur or Pelvic Fractures and Dislocations	1	17	7.4	3,881	41	7.7	2,562	77	11.3	3,664	12.4	4,056	669,237	290	1,521,798	455	4,815	2,191,035
		2	0	n/a	3,881	6	9.8	3,373	12	26.0	6,281								
		3	-	9.0	9,692	0	n/a	9,886	-	29.0	8,227								
		4	0	n/a	15,457	0	n/a	15,457	6	33.8	11,604								
681	Frostbite	1	-	8.0	5,005	9	6.9	5,005	0	n/a	5,005	7.0	5,005	-	-	5,659	-	-	-
		2	0	n/a	5,005	0	n/a	5,005	0	n/a	5,005								
		3	0	n/a	5,005	0	n/a	5,005	0	n/a	5,005								
		4	0	n/a	5,005	0	n/a	5,005	0	n/a	5,005								
682	Spinal Injuries	1	11	2.0	1,379	79	4.2	2,062	46	8.3	3,642	6.6	3,253	523,745	67	500,809	228	4,494	1,024,553
		2	0	n/a	3,354	8	3.8	3,579	10	12.9	6,568								
		3	0	n/a	5,555	0	n/a	5,555	-	12.3	8,458								
		4	0	n/a	13,820	-	32.0	13,820	-	32.0	14,882								
683	Intracranial Injuries	1	22	2.8	1,926	29	3.1	2,117	19	4.9	2,601	4.5	2,729	221,044	67	361,894	148	3,939	582,937
		2	0	n/a	5,519	-	9.3	5,783	-	4.0	4,776								
		3	0	n/a	6,170	-	10.5	6,945	-	14.3	5,990								
		4	0	n/a	16,168	0	n/a	15,977	0	n/a	15,225								
684	Fracture of Humerus	1	-	1.0	1,074	18	2.3	1,275	37	7.3	2,481	8.4	2,582	165,276	47	379,758	111	4,910	545,034
		2	0	n/a	4,298	-	6.0	4,298	6	27.5	6,329								
		3	0	n/a	6,652	0	n/a	6,652	-	57.0	7,190								
		4	0	n/a	16,971	0	n/a	16,971	0	n/a	16,971								
685	Hip and Thigh Injuries	1	-	1.0	1,809	19	2.4	1,809	46	6.3	2,316	5.7	2,363	174,855	13	62,757	87	2,731	237,611
		2	-	1.0	3,920	-	17.0	3,920	-	10.0	3,938								
		3	0	n/a	4,612	0	n/a	4,612	0	n/a	4,545								
		4	0	n/a	4,612	-	21.0	4,612	0	n/a	4,612								
686	Major Nerve Injuries	1	0	n/a	5,771	0	n/a	5,771	0	n/a	5,771	n/a	n/a	0	-	9,440	-	-	9,440
		2	0	n/a	5,771	0	n/a	5,771	0	n/a	5,771								
		3	0	n/a	5,771	0	n/a	5,771	0	n/a	5,771								
		4	0	n/a	5,771	0	n/a	5,771	0	n/a	5,771								
687	Thoraco-abdominal Injuries	1	28	4.1	2,249	134	3.4	2,279	47	7.3	2,791	5.3	2,770	681,401	61	307,304	307	3,221	988,705
		2	-	2.0	3,801	12	6.5	3,835	10	9.7	5,019								
		3	-	8.0	4,449	-	6.8	4,480	-	24.4	6,059								
		4	0	n/a	9,716	0	n/a	9,610	-	22.5	10,425								
688	Weight Bearing Injuries	1	38	1.8	1,193	87	3.2	1,502	28	8.2	2,839	4.6	1,948	321,402	145	647,203	310	3,125	968,605
		2	-	4.5	3,575	-	8.3	3,657	-	13.5	4,868								
		3	-	10.0	6,060	0	n/a	6,154	-	18.5	6,754								
		4	0	n/a	14,682	0	n/a	14,682	-	59.0	14,843								
689	Genito-urinary Injuries	1	9	2.4	1,499	10	3.6	1,499	-	2.0	1,499	3.0	1,797	43,132	6	15,869	30	1,967	59,001
		2	-	3.0	3,290	-	3.3	3,290	0	n/a	3,290								
		3	0	n/a	5,903	0	n/a	5,903	0	n/a	5,903								
		4	0	n/a	7,117	0	n/a	7,117	0	n/a	7,117								
690	Crushing Injuries and Contusions	1	6	1.0	1,270	38	1.9	1,379	45	4.9	2,027	3.9	1,830	179,387	18	177,694	116	3,078	357,081
		2	0	n/a	1,553	0	n/a	1,553	-	6.0	2,027								
		3	0	n/a	2,632	-	1.5	2,632	-	18.7	2,698								
		4	0	n/a	8,310	0	n/a	8,310	-	9.0	8,692								
691	Minor Lower Extremity Fractures	1	-	1.0	1,322	11	1.5	1,322	-	6.5	1,322	3.0	1,913	32,525	-	3,303	-	-	35,829
		2	0	n/a	3,516	0	n/a	3,516	0	n/a	3,516								
		3	0	n/a	4,185	0	n/a	4,185	0	n/a	4,185								
		4	0	n/a	11,374	-	19.0	11,374	0	n/a	11,374								
692	Wounds	1	66	1.7	1,222	284	1.8	1,479	33	3.4	2,082	2.1	1,546	616,820	131	409,226	530	1,936	1,026,046
		2	0	n/a	2,601	-	8.6	2,610	-	5.8	2,813								
		3	0	n/a	2,738	-	5.8	2,738	-	8.0	2,968								
		4	-	8.0	6,543	0	n/a	6,543	0	n/a	7,282								

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			Age 0-17			Age 18-70			Age 70+			Weighted Mean			All Ages		All Ages		
			# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	# of Cases	Average LOS	Cost per Case	LOS	Cost per Case		# of Cases	Total Cost for CMG	# of Cases	Cost per Case	Total Cost for CMG
693	Amputations or Vascular and Other Nerve Injuries	1	10	1.9	1,661	45	1.8	1,661	7	1.9	1,661	1.9	1,751	112,096	27	118,134	91	2,530	230,230
		2	0	n/a	3,578	-	3.0	3,578	0	n/a	3,578								
		3	0	n/a	5,553	0	n/a	5,553	-	3.0	5,553								
		4	0	n/a	9,088	0	n/a	9,088	0	n/a	9,088								
694	Facial Injuries	1	7	1.4	1,285	43	1.8	1,525	-	7.0	2,097	2.4	1,616	90,516	38	84,983	94	1,867	175,499
		2	0	n/a	3,502	-	4.0	3,502	-	15.0	4,075								
		3	0	n/a	3,523	0	n/a	3,523	0	n/a	4,075								
		4	0	n/a	3,523	0	n/a	3,523	0	n/a	3,637								
695	Other Cranial Injuries	1	54	1.4	744	96	1.6	1,084	21	3.5	1,834	2.2	1,307	240,509	69	358,891	253	2,369	599,400
		2	-	6.0	3,287	-	1.0	3,453	-	8.0	3,915								
		3	-	1.0	3,287	-	9.0	3,941	-	15.0	4,596								
		4	-	4.0	11,665	0	n/a	12,106	0	n/a	12,763								
696	Upper Extremity Fractures	1	85	1.2	900	87	1.7	1,398	42	5.5	2,315	2.8	1,527	348,232	102	560,821	330	2,755	909,053
		2	0	n/a	3,116	8	5.3	3,116	-	18.5	4,656								
		3	0	n/a	4,239	-	5.0	4,239	-	38.0	5,055								
		4	0	n/a	5,221	0	n/a	5,221	0	n/a	5,700								
OTHER																			
900	Extensive Unrelated Operating Room Procedures	1	-	3.0	7,011	27	4.7	7,510	12	12.4	6,367	11.8	11,029	727,935	76	3,086,502	142	26,862	3,814,437
		2	0	n/a	9,065	-	9.5	9,065	-	16.6	13,785								
		3	-	5.0	14,078	-	8.0	14,114	-	15.0	15,613								
		4	-	7.0	24,170	-	35.0	32,399	-	42.4	22,104								
901	Non-extensive Unrelated Operating Room Procedures	1	19	4.8	4,117	106	5.5	3,411	41	11.2	5,849	12.5	6,950	1,681,791	139	4,297,248	381	15,693	5,979,040
		2	-	15.0	6,923	18	14.8	7,161	13	16.7	9,592								
		3	-	48.0	8,312	14	18.4	9,527	-	25.8	10,959								
		4	-	26.0	29,438	13	39.5	24,816	8	45.8	19,603								
902	Post-operative Complications with Unrelated Operating Room Procedures	1	6	5.8	3,708	8	3.8	3,708	-	2.0	3,708	10.1	9,295	204,486	10	243,915	32	14,013	448,401
		2	0	n/a	10,113	-	2.0	10,113	0	n/a	10,113								
		3	0	n/a	16,278	-	20.0	16,278	0	n/a	16,278								
		4	-	33.0	29,971	0	n/a	29,971	-	29.5	29,971								
906	Unrelated Operating Room Procedures (MNRH)	1	8	4.9	2,698	24	5.0	3,464	10	12.6	4,593	9.8	5,161	304,500	29	453,940	88	8,619	758,440
		2	0	n/a	5,459	-	12.4	5,386	6	14.7	7,115								
		3	0	n/a	6,870	-	11.0	6,870	-	31.0	7,502								
		4	0	n/a	17,495	-	23.3	17,495	-	31.0	17,354								

"-" denotes values suppressed due to small numbers

Source: Manitoba Centre for Health Policy, 2009

Table 4.2: Cost List for Day Procedure Groups (DPG), Manitoba, 2005/06

DPG	Description	# of Cases	Cost per Case ($)	Total Cost for DPG ($)
1	Nervous System Procedures	1,508	627	945,988
2	Minor Spinal Procedures	41	413	16,929
3	Major Spinal Procedures	60	676	40,580
4	Nerve Injections	32	231	7,381
5	Myelogram	23	560	12,873
6	Eye - Grade 1	*	243	*
7	Eye - Grade 2	*	385	*
8	Eye - Grade 3	*	861	*
9	Eye - Grade 4	*	896	*
11	Ear Nose and Throat Procedures	288	677	194,871
12	Tympanoplasty	213	927	197,470
13	Other Internal Ear Procedures	1,087	513	557,968
14	Sinus Procedures	195	948	184,814
15	Dental Surgery	2,449	1,084	2,654,511
16	Tonsillectomy/Adenoidectomy/Gland Procedures	1,124	937	1,053,334
17	Minor Nasal Procedures	136	501	68,083
18	Major Nasal Procedures	912	995	907,725
19	Minor Respiratory Procedures	148	382	56,562
20	Major Respiratory Procedures	957	722	691,067
21	Minor Cardiac Procedures	1,977	1,696	3,353,321
22	Major Cardiac Procedures	1,135	2,539	2,881,522
23	Cardioversion	68	547	37,174
24	Pacemakers	436	6,007	2,619,190
25	Angiography	501	488	244,295
26	Minor Vascular Procedures	185	319	58,955
27	Major Vascular Procedures	1,141	1,322	1,508,361
28	Other Vascular Procedures	354	1,059	374,715
29	Gastro-Intestinal Procedures	25,086	399	10,009,592
30	Minor Ano-Rectal Procedures	750	372	279,101
31	Major Ano-Rectal Procedures	1,450	574	832,947
32	Minor Hernia Procedures	702	986	692,490
33	Major Hernia Procedures	1,727	1,346	2,325,367
34	Hepatobiliary Procedures	1,360	727	989,311
35	Cholecystectomy	1,511	1,346	2,034,082
36	Maxillo-Facial Procedures	163	1,114	181,637
37	Upper Limb Procedures	362	1,343	486,035
38	Elbow Procedures	29	1,004	29,121
39	Lower Limb Procedures	120	1,142	137,087
40	Knee Procedures	2,355	970	2,283,450
41	Hand and Foot Procedures	443	1,071	474,549
42	Other Bone Procedures	175	479	83,834
43	Open Reduction and Fusion	213	1,226	261,196
44	Closed Reduction With Fixation	150	1,027	154,081
45	Closed Reduction No Fixation	429	383	164,334
46	Removal Internal Orthopaedic Device	397	776	308,021
47	Manipulations	58	144	8,359
48	Tendon and Muscle Procedures	934	878	819,833
49	Soft Tissue Procedures	872	694	604,963

Table 4.2 Continued

DPG	Description	# of Cases	Cost per Case ($)	Total Cost for DPG ($)
50	Plastic Procedures	649	825	535,168
51	Breast Plastic Procedures	403	1,562	629,518
52	Mastectomy	861	950	818,312
53	Skin Procedures	1,470	229	337,340
54	Minor Upper Urinary Tract Procedures	271	577	156,475
55	Major Upper Urinary Tract Procedures	637	868	552,740
56	Minor Lower Urinary Tract Procedures	2,107	346	729,948
57	Major Lower Urinary Tract Procedures	1,389	724	1,005,894
58	Urological Diagnostic Procedures	19	228	4,332
60	Lithotripsy	801	894	716,338
61	Transurethral Prostatectomy	229	925	211,897
62	Minor Male Genital Procedures	431	423	182,412
63	Major Male Genital Procedures	53	1,420	75,261
64	Other Male Genital Procedures	428	909	388,956
65	Circumcision	361	749	270,281
66	Minor Gynecological Procedures	759	367	278,639
67	Major Gynecological and Peritoneal Procedures	2,356	829	1,952,507
68	Aspirations and Endoscopic Gynecological Procedures	1,265	760	961,302
69	Evacuations	4,316	544	2,348,014
70	Lymph and Blood Form Organ Procedures	366	1,038	379,850
71	Transfusions	60	402	24,100
72	Chemotherapy	65	480	31,215
73	Electroshock Therapy	247	297	73,461
97	Procedure Cancelled	1,526	206	315,037
98	Miscellaneous Day Procedure	1,079	393	424,159
99	Ungroupable Day Procedure	90	1,108	99,759

Source: Manitoba Centre for Health Policy, 2009

* These results have been excluded because not all of the procedures are performed in acute care hospitals so our results would be incomplete

CHAPTER 5: CONCLUSION, DISCUSSION AND SUMMARY

This report has described the methodology that has been used to determine the direct cost of inpatient care and day surgery in Manitoba hospitals in 2005/06. It also provides guidance to those who, for economic evaluations, wish to determine the full cost of inpatient care.

The cost list that we present here will be valuable to policy-makers to see the cost associated with different types of hospitalization. We report both the average cost for an individual experiencing a particular type of hospitalization and the total cost for all individuals who were hospitalized for the condition. In addition, we use this information to present costs for hospital inpatient and day surgery by sex and age group. Other examples of how the cost list can be used are shown through three *top 10* lists (Tables E.1, E.2, and E.3):

- The 10 most frequent types of cases that account for 33% of all hospital discharges and 20% of the total costs
- The 10 most costly types of cases that account for 0.1% of cases and 2% of the total costs
- The 10 types of cases that account for the greatest total costs—23% of all costs and 30% of all cases
- The CPWC that we calculated here will be useful for researchers conducting population-based studies where it is appropriate to use standard costing techniques. Examples of population-based studies that use this type of information include ongoing research into the cost of chronic disease, the association between socioeconomic status and health care costs, and the costs of care at the end of life. This work is an update to our earlier work that was based on 1997/98 hospitalizations. Several studies used the 1997/98 value, often using an inflationary factor to update the cost. Using an inflated value rather than an actual one has the potential for introducing some bias into these studies.

In the process of preparing this report we developed a method of routinely (i.e., on an annual basis) calculating the provincial average cost per weighted case. Consideration should be given to updating the CPWC on a regular basis, thereby allowing individuals who are conducting economic evaluations to access the most current values. Implementing this would require a commitment on the part of the RHAs to review preliminary results to ensure that the data they submitted are accurate for these purposes. Staff in Manitoba RHAs and MHHL are continually working to improve the quality of data that are reported, both within and between facilities. In addition to costs changing over time, methods of assigning resource intensity weights to cases changes—in this report we used CIHI's CMG Plx method. A newer method, CMG+ is now available and has been used by CIHI in recent reports that have been published.

Alternative approaches can be used to costing hospital services. We developed this cost list using one approach to estimating the standard (or average) cost of care for different types of cases. After consultation with individuals who will use this cost list, we determined that this approach will be the most meaningful and have the most value to them.

The last cost list for Manitoba hospital services was published in 1999 using 1993–1995 data. This report represents an important update to our ability to answer questions about cost within the Manitoba hospital system.

REFERENCES

Canadian Institute for Health Information. *Canadian MIS Database Hospital Financial Performance Indicators, 1999–2000 to 2003–2004.* Ottawa, ON, 2006.

Finlayson G, Jacobs P, Watson D, Bogdanovic B. *A Comparison of Preliminary and Adjusted Cost per Weighted Case Determinations for Manitoba Hospitals: Impact for Evaluation and Report Cards*. Winnipeg, MB: Manitoba Centre for Health Policy, November 2001.

Finlayson G, Nowicki D, Roos NP, Shanahan M, Black C. *Hospital Case-Mix Costing Project: Using the Manitoba Management Information System: A First Step*. Winnipeg, MB: Manitoba Centre for Health Policy and Evaluation, July 1999.

Finlayson G, Roos NP, Jacobs P, Watson D. *Using the Manitoba Hospital Management Information System: Comparing Average Cost Per Weighted Case and Financial Ratios of Manitoba Hospitals. The Next Step*. Winnipeg, MB: Manitoba Centre for Health Policy and Evaluation, January 2001.

Jacobs P, Shanahan M, Roos NP, Farnworth M. *Cost List for Manitoba Health Services.* Winnipeg, MB: Manitoba Centre for Health Policy and Evaluation, July 1999.

GLOSSARY

Table G.1 List of Acronyms used in the Report

Acronym	Full Name
CIHI	Canadian Institute for Health Information
CMG™	Case Mix Group
CMG Plx™	Case Mix Group with Complexity Overlay
CPWC	Average Cost per Weighted Case
DAD	Discharge Abstract Database
DPG™	Day Procedure Group
DRG	Diagnosis Related Group
LOS	Length of Stay
MCC	Major Clinical Categories
MCHP	Manitoba Centre for Health Policy
MHHL	Manitoba Health and Healthy Living
MIS	Management Information System
MNRH	May Not Require Hospitalization
RDRG®	Refined Diagnostic Related Groups
RHA	Regional Health Authority
RIW™	Resource Intensity Weight
TWC	Total Weighted Cases

CMG™ – is a registered trademark of the Canadian Institute for Health Information
CMG Plx ™ – is a registered trademark of the Canadian Institute for Health Information
DPG™ – is a registered trademark of the Canadian Institute for Health Information
RDRG® – is a registered trademark of Health Systems Consultants Inc.
RIW ™ – is a registered trademark of the Canadian Institute for Health Information

Acute Care Hospitals

Hospitals providing acute care services such as emergency services and general medical and surgical treatment for acute disorders. Excludes long term and rehabilitation hospitals (e.g., Deer Lodge, Riverview) and special purpose facilities such as the Manitoba Adolescent Treatment Centre and Eden Mental Health Centre.

Alternative Payment Plan

Type of compensation for physicians who are not paid on a **fee-for-service** basis, but are either salaried, sessional or hired on contract. These physicians submit claims (**shadow billings**) for administrative purposes only.

Ambulatory Care

Medical services provided on an **outpatient** service. This includes: **day surgery** procedures, emergency department services and services provided in outpatient clinics such as rehabilitation and diagnostic services.

Average Cost per Weighted Case (CPWC)

A financial indicator that provides a measure of the cost to provide care to a standard hospital patient. It is a relative, average cost calculated by summing the weights assigned to all cases treated by a hospital, and dividing this number into the hospital's total inpatient expenditure.

Canadian Institute for Health Information (CIHI)
An independent, not-for-profit organization that provides essential data and analysis on Canada's health system and the health of Canadians.

Case Mix Groups (CMG™)
A Canadian patient classification system developed by the Canadian Institute for Health Information (**CIHI**), based on most responsible diagnosis, used to group and describe types of inpatients discharged from acute care hospitals. Each patient case is initially assigned to one of 25 mutually exclusive major clinical categories which are based on body systems (e.g., circulatory, respiratory), then further classified as medical or surgical, and finally the CMG is assigned to create homogeneous groups. Cases within the same CMG are subsequently assigned to typical or atypical categories, and classified according to age group and complexity level.

Case Weights
A measure representing the relative resources consumed by different types of hospital cases.

Day Procedure Group (DPG™)
A classification system for **ambulatory care** provided in hospitals, most commonly surgical procedures that can be performed without the need for an overnight stay. Patients are assigned a code according to the principle procedure recorded on the patient abstract. Patients within the same DPG™ category will be similar in terms of resource utilization and clinical episodes. A resource intensity weight is assigned to each DPG™reflecting the average relative resource requirements for the type of procedure.

Day Surgery (Outpatient Surgery)
Diagnostic or surgical services provided in a hospital setting without admission to hospital as an inpatient.

Diagnosis Related Group (DRG)
An American case-mix classification system that groups together patients who are similar clinically in terms of diagnosis and treatment and in their consumption of hospital resources, thus allowing comparisons of resource use across hospitals with varying mixes of patients. This system is used primarily in the United States of America as a method of funding hospitals.

Direct Costs of Inpatient Care
Those costs that can be identified as being directly attributable to **inpatient** services. Examples would include nursing services, drugs and other medical supplies. Direct costs exclude those costs that are shared by all hospital users, for example, information technology and human resources. The **Management Information System** (MIS) is used to identify these costs.

Discharge Abstract Database (DAD)
A data file maintained by Canadian Institute for Health Information (**CIHI**) containing information about almost every case that is discharged from an **acute care hospital** in Canada. CIHI uses these data to assign individual cases to **case mix groups** (CMGs) and to calculate the appropriate **resource intensity weight** (RIW) to every case.

Fee-For-Service
A method of payment whereby physicians bill for each service rendered, according to a pre-arranged schedule of fees and services. Physicians who are paid on a fee-for-service basis file a claim for each service rendered and are responsible for their operating costs. Other physicians are compensated under the **alternate payment plan**.

Hospital Discharge Abstracts Database
Contains summary records of demographic and clinical information (e.g., diagnosis and procedure codes [up to 16 diagnosis codes and 12 procedure codes]) completed at the point of discharge from hospital. Hospitals are required to submit these abstracts as part of the global operating budget funding process, which is covered by funding transfers from the provinces and the territorial Departments of Health. This contains records of both Manitoba residents and non-Manitoba residents hospitalized in Manitoba facilities. It includes information about inpatient and day surgery services.

Inpatient
Someone who is admitted and discharged from hospital with a **Length of Stay** (**LOS**) of one or more days.

Length of Stay (LOS)
The number of days of care counted from the admission date to the **separation** (discharge) date for residents within a health care facility.

Long Term Care
Chronic and rehabilitative services provided by a long term care hospital or personal care home.

Management Information System (MIS)
A standardized set of financial and statistical reporting guidelines and definitions developed for use in reporting health care activities. It was developed to facilitate timely, effective management information by enabling historical and inter-facility comparisons. The MIS standards are national standards that provide an integrated approach to managing financial and statistical data related to the operations of Canadian health services organizations. In Manitoba, aggregated or summarized financial and statistical administrative data are submitted to Manitoba Health and Healthy Living (MHHL) by **Regional Health Authorities** (RHAs). The data span the range of services provided by the RHAs, including acute, chronic, and rehabilitation hospital services, personal care homes, and community services including primary care clinics, home care, mental health, and public health. MHHL submits the annual provincial MIS database file to the Canadian Institute for Health Information (**CIHI**).

Manitoba Health Insurance Registry
The registration file of the health insurance program in the province of Manitoba. It records information on birth date, gender, residential postal code and limited data on family structure.

Outpatient
A patient who receives treatment or surgery from a hospital, but who is not admitted as an **inpatient**.

Population Health Research Data Repository (Repository)
A comprehensive collection of administrative, registry, survey and other databases primarily comprised of residents of Manitoba. This repository is housed at the Manitoba Centre for Health Policy (MCHP). It was developed to describe and explain patterns of health care and profiles of health and illness, facilitating inter-sectoral research in areas such as health care, education, and social services. The administrative health database, for example, holds records for virtually all contacts with the provincial health care system, the Manitoba Health Services Insurance Plan (including physicians, hospitals, personal care homes, home care, and pharmaceutical prescriptions) of all registered individuals. MCHP acts as a steward of the information in the Repository for agencies such as Manitoba Health and Healthy Living (MHHL).

Physician Claims
Claims (billings) that are submitted to the provincial government by individual physicians for services they provide. **Fee-for-service** physicians receive payment based on these claims, while those submitted by physicians on **alternate payment plans** are for administrative purposes only.

Refined Diagnostic Related Groups (RDRG®)
A refined version of the **Diagnosis Related Group** (**DRG**) case-mix system that classifies cases into levels of severity and complexity based on the presence of comorbidities and complications and their impact on resource use. This system has been used by the Manitoba Centre for Health Policy in earlier case-mix costing work.

Regional Health Authorities (RHAs)
Regional governance structure set up by the province to be responsible for the delivery and administration of selected health services in specified areas. In Manitoba, as of July 1, 2002, there are 11 RHAs.

Resource Intensity Weights (RIW™)
The relative **case weights** for CMGs™ used to measure the intensity of resource use (relative cost) associated with different diagnostic, surgical procedure and demographic characteristics of an individual. RIWs are assigned according to the case mix group to which an individual is assigned as well as their age, health status, and discharge status and are based upon micro-costing. In this report, we have used RIWs assigned using the CMG Plx methodology.

Salaried Physicians
Physicians who are paid on an annual or sessional salary (rather than **fee-for-service**). The claims they submit are for administrative purposes only.

Separation
A separation from a health care facility occurs anytime a patient (or resident) leaves because of death, discharge, sign-out against medical advice or transfer.

Shadow Billings
Claims submitted to the provincial government by physicians on **alternate payment plans,** including **salaried physicians,** for services they provide. Unlike **physician claims** submitted by **fee-for-service** physicians for payment, these claims are for administrative purposes only (i.e., as a record of services provided).

Total Weighted Cases (TWC)
For a hospital, type of hospital, regional health authority, or province, this equals the sum of the case weights (i.e., **RIWs**) for all cases discharged during a specified period of time.

APPENDIX 1: CALCULATING INPATIENT NET COSTS

Note: * is a wildcard indicating that all accounts starting with the numbers given (and additional numbers following) are included.

Setup Data

1. Pulled 2005/06 MIS transaction records.
2. Excluded records for facilities that report hospital data, but are not general acute care hospitals: Misericordia, Riverview, Deer Lodge, Manitoba Adolescent Treatment Centre, Winnipeg River Health District, Leaf Rapids, Gilbert Plains, Eden Mental Health Centre, Whitemouth Health Centre, Oak Bank Personal Care Home.

Determine Total Net Cost

1. Identified work function for each record based on primary account numbers.
    - 01. Inpatient Acute: 7120*-7126*, 71270*-71276*, 71290*, 71296* (excluding 71260*, 71265*)
    - 02. Operating Room: 71260*, 71265*
    - 03. Day Care: 7134020-7134025*
    - 04. Inpatient Long Term Care: 71295*, 71297*
    - 05. Inpatient Rehabilitation: 71280*, 71285*
    - 06. Outpatient: 7130*-7133*, 7135*-7139*, 71341*-71349*, 713404*-713409*, 7134000-7134009, 7134010, 7134035-7134039 (excluding 71310*)
    - 07. Emergency Department: 71310*
    - 08. Community: 715*
    - 09. Diagnostic and Therapeutic Services: 714*, exclude 7141010, 7141510, 71449*
    - 10. Other: all other primary accounts except 71185*, 71195*, 7141010, 7141510, 71449*
    - 11. Patient Transportation: 71185*
    - 12. Patient Food Services: 71195*
    - 13. Diagnostic and Therapeutic Services–Laboratory Administration: 7141010
    - 14. Diagnostic and Therapeutic Services–Imaging Administration: 7141510
    - 15. Diagnostic and Therapeutic Services–Rehabilitation Administration: 71449*

2. Identified the financial accounts:
    - Sector = '1' (hospitals)
    - Secondary Account Type = 'F' (financial)
    - Recoveries (secondary account codes): 120*-122*
    - Expenses (secondary account codes): 3*-9*, exclude 75*-79*, 39*, 955*, 95080*, 95065*, 69000*, 95020*, 95040*, 95060*, 95100*

3. Sum all recoveries and expenses for each work function within each facility.

4. Determine the net cost by subtracting recoveries from expenses.

Determine Workload Balances

1. Identified work function for each record based on primary account numbers.
    01. Inpatient Acute: 7120*-7126*, 71270*-71276*, 71290*, 71296* (excluding 71260*, 71265*)
    02. Operating Room: 71260*, 71265*
    03. Day Care: 7134020-7134025*
    04. Inpatient Long Term Care: 71295*, 71297*
    05. Inpatient Rehabilitation: 71280*, 71285*
    06. Outpatient: 7130*-7133*, 7135*-7139*, 71341*-71349*, 713404-713409, 7134000-7134009, 7134010, 7134035-7134039 (excluding 71310*)
    07. Emergency Department: 71310*
    08. Community: 715*
    09. Diagnostic and Therapeutic Services: 714*, exclude 7141010, 7141510, 71449*
    10. Other: all other primary accounts except 71185*, 71195*
    11. Patient Transportation: 71185*
    12. Patient Food Services: 71195*

2. Three Diagnostic and Therapeutic Service Administration areas require the use of the primary accounts beginning with 714 which are already assigned to the Diagnostic and Therapeutic Services work function (09), so the accounts needed to determine allocation percentage for the three administration areas need to be pulled separately.
    13. Diagnostic and Therapeutic Services –Laboratory Administration: 71410*
    14. Diagnostic and Therapeutic Services–Imaging Administration: 71415*
    15. Diagnostic and Therapeutic Services–Rehabilitation Administration: 71450*-71465*

3. Combined the two datasets above and identified statistical accounts:
    Sector = '1' (hospitals)
    Secondary Account Type = 'S' (statistical)
    Balance <>0

    From the secondary account code:
    01. Inpatient Workload Units: 10210*, 10710*, 10810*, 11510*, 11610*
    02. Resident Workload Units: 10240*
    03. Client Workload Units: 10220*, 10720*, 10721*, 10724*, 10820*, 11520*, 11521*, 11540*, 11620*
    04. Referred-In Workload Units: 10230*, 10730*, 10830*, 11530*, 11630*
    05. Other Workload Units: 10250, 10260*, 11500*, 11550*, 11560*, 11570*, 190*
    06. Inpatient Days: 40310*
    07. Newborn Days: 40340*
    08. Resident Days: 40410*
    09. Inpatient Surgical Visits: 43710*, 4379010
    10. Day/Night Care Surgical Visits: 43722*, 4379020

11. Other Client Surgical Visits: 43724*
12. Inpatient Face-to-Face Visits: 45010*
13. Day/Night Care Face-to-Face Visits: 4502012, 4502013, 4502022
14. Resident Face-to-Face Visits: 45040*
15. Client Face-to-Face Visits: 4502010, 4502011, 4502020, 4502051-4502055, 45120, 925
16. Inpatient Face-to-Face Attendance Days: 48310*, 48410*
17. Resident Face-to-Face Attendance Days: 48340*, 48440*
18. Client Face-to-Face Attendance Days: 48320*, 48420*
19. Inpatient Exams/Procedures: 45710*, 45810*, 45910*, 46810*
20. Client Exams/Procedures: 45720*, 45721*, 45724*, 45820*, 45821*, 45840*, 45920*, 46820*
21. Referred-in Exams/Procedures: 45730*, 45830*, 45930*, 46830*
22. Other Procedures: 45800*, 45850*, 45860*, 45870*

4. Sum all balances for each workload statistical type for each work function within each facility.

Determine Inpatient Allocation Percentages

Based on the actual data reported, percentage allocation rules were developed. Had different patterns of data been reported, different rules would have been established.

1. Apply inpatient allocation percentage rules based on work function and type of data available.
    - 01. Inpatient Acute:
        - 1. if inpatient or newborn days and outpatient visits available then
          allocation = (inpatient days+newborn days)/((inpatient days+newborn days)+(day/night care visits/5)+(client face-to-face visits/10))
        - 2. otherwise use default value (100%)
    - 02. Operating Room:
        - 1. if inpatient surgical visits and day/night care surgical visits available then
          allocation = (inpatient surgical visits)/((inpatient surgical visits)+((other client surgical visits+day/night care surgical visits)/2))
        - 2. or else, if inpatient surgical visits and day/night care face-to-face visits available then
          allocation = (inpatient surgical visits)/((inpatient surgical visits)+client face-to-face visits+day/night care face-to-face visits)/2))
        - 3. otherwise use default value (100%)
    - 03. Day Care:
        - 1. if inpatient surgical visits and day/night care surgical visits available then
          allocation = (inpatient surgical visits)/((inpatient surgical visits)+((other client surgical visits+day/night care surgical visits)/2))

2. or else, if inpatient face-to-face visits and client face-to-face visits available then

allocation = (inpatient face-to-face visits)/((inpatient face-to-face visits)+((client face-to-face visits+day/night care face-to-face visits)/2))

3. otherwise use default value (0%)

04. Inpatient Long Term Care:

1. use default value (100%)

05. Inpatient Rehabilitation:

1. use default value (100%)

06. Outpatient:

1. if inpatient face-to-face visits and client face-to-face visits available then

allocation = (inpatient face-to-face visits)/(inpatient face-to-face visits+client face-to-face visits+day/night care face-to-face visits+resident face-to-face visits)

2. otherwise use default value (5%)

07. Emergency Department:

1. if inpatient face-to-face visits and client face-to-face visits available then

allocation = (inpatient face-to-face visits*4)/((inpatient face-to-face visits*4)+client face-to-face visits)

2. or else, if inpatient or newborn days and client face-to-face visits are available and inpatient face-to-face visits are not available then

allocation = ((inpatient days+newborn days)*4)/((((inpatient days+newborn days)*4)+ client face-to-face visits)

3. otherwise use default value (5%)

08. Community:

1. use default value (0%)

09. Diagnostic and Therapeutic Services:

1. if inpatient workload units available then

allocation = (inpatient workload units)/(inpatient workload units+resident workload units+outpatient workload units+referred-in workload units+other workload units)

2. otherwise use default value (70%)

10. Other:

1. if inpatient workload units available then

allocation = (inpatient workload units)/(inpatient workload units+resident workload units+client workload units+referred-in workload units+other workload units)

2. otherwise use default value (0%)

11. Patient Transportation:

1. use default value (80%)

12. Patient Food Services:

1. use default value (95%)

13. Diagnostic and Therapeutic Services–Laboratory Administration:

1. if inpatient workload units available then

allocation = (inpatient workload units)/(inpatient workload units+resident workload units+client workload units+referred-in workload units+other workload units)

14. Diagnostic and Therapeutic Services–Imaging Administration:
    1. if inpatient workload units available then

    allocation = (inpatient workload units)/(inpatient workload units+resident workload units+ client workload units + referred-in workload units+other workload units)

15. Diagnostic and Therapeutic Services–Rehabilitation Administration:
    1. if inpatient workload units available then

    allocation = (inpatient workload units)/(inpatient workload units+resident workload units+client workload units+ referred-in workload units+other workload units)

Calculate Inpatient Net Cost

1. Merge together the net cost and the inpatient allocation percentage by facility and work function.
2. Exclude any cases for the three Diagnostic and Therapeutic Services administration areas where no financial data are recorded.
3. If no allocation percentage has been determined for a work function that reports costs (i.e., net cost available but statistical data not), then use the default allocation percentage values.

    01. Inpatient Acute–100%
    02. Operating Room–100%
    03. Day Care–0%
    04. Inpatient Long Term Care–100%
    05. Inpatient Rehabilitation–100%
    06. Outpatient–5%
    07. Emergency Department–5%
    08. Community–0%
    09. Diagnostic and Therapeutic Services–70%
    10. Other–0%
    11. Patient Transport–80%
    12. Patient Food Services–95%

4. For facility/work function that we have both net cost and an allocation percentage, calculate the inpatient net cost:

    Inpatient net cost = net cost*allocation%

APPENDIX 2: IN-YEAR ADJUSTMENT

In-Year adjustment accounts for the fact that some cases are in the hospital over a year end. As a result, the weights that are assigned to these cases are not matched with the costs that are reported for a fiscal year. In addition, some people stay in hospital for over a year—in this case, the weight that they are assigned when they are discharged reflects their entire stay, not just that which occurred during the fiscal year. This adjustment involves using both the 2005/06 and 2006/07 hospital abstracts files. This involves:

- Selecting only the hospitalizations that entirely or partially occur within the 2005/06 fiscal year.
- LOSs are adjusted to include only the days that occurred in 2005/06 and RIWS are adjusted accordingly.
- Inpatient days are then adjusted to match the MIS-reported data and the RIWs are adjusted accordingly.

Specifically the steps are as follows:

- Pull 2005 CIHI RIW Table (applicable to 2005/06 and 2006/07 hospital data). Contains CMG, Complexity Indicator, Age Category, Typical RIW, Average Per Diem Weight, Blended Outlier Per Diem Weight, and Trim Point.

- Pull 2005/06 inpatient days file. Contains hospital number and the associated number of inpatient days at that hospital in the fiscal year. Calculated from 2005/06 MIS data.

- Pull 2005 CIHI Death Cost Curve Factors (applicable to 2005/06 and 2006/07 hospital data). Contains a medical/surgical identifier, LOS variable (up to max of 10) and separate cost curve factors for each of the five complexity levels.

- Pull 2005 CIHI Transfer Cost Curve Factors (applicable to 2005/06 and 2006/07 hospital data). Contains a medical/surgical identifier, LOS variable (up to max of 10), a complexity level, and separate cost curve factors for transfers in and transfers out.

- Pull CIHI list of CMGs with surgical/medical identifier.

- Pull 2005/06 and 2006/07 hospital abstracts. Select only inpatients. Remove hospitalization for Manitobans that are reported in the discharge abstract database that occurred in out-of-province hospitals. Assign 'weight' variable as the RIW value. Using formats assign RHA of hospital, type of hospital, age category of patient, and facility name of hospital. If facility name is missing then it is a hospital that we are not including in our analysis and any hospitalization to these hospitals are removed. The portions of hospitalizations that occurred only in the fiscal year 2005/06 are kept (the lengths of stays are adjusted to reflect only time spent in hospital during 2005/06 and RIWs will have to be adjusted accordingly). Duplicate

records based on patient, hospital, admission date, **separation** date and readmit code are removed.

- Attach the surgical/medical identifier to the hospitalization based on the CMG.

- For hospitalizations categorized as death cases, cost curve factors are attached. For any hospitalization that came from the 2005/06 hospital abstracts, the cost curves are attached from the 2005 CIHI Death Cost Curves table based on surgical/medical identifier, LOS and complexity level. For any hospitalization that came from the 2006/07 hospital abstracts, the cost curves are also attached from the 2005 CIHI Death Cost Curves table based on surgical/medical identifier, LOS and complexity level.

- For hospitalizations categorized as transfer cases, cost curve factors are attached. For any hospitalization that came from the 2005/06 hospital abstracts, the cost curves are attached from the 2005 CIHI Transfer Cost Curves table based on surgical/medical identifier, LOS, complexity level and whether it was a transfer in or transfer out case. For any hospitalization that came from the 2006/07 hospital abstracts, the cost curves are also attached from the 2005 CIHI Transfer Cost Curves table based on surgical/medical identifier, LOS, complexity level and whether it was a transfer in or transfer out. For any cases which are both a transfer in and transfer out, the cost curve associated with the transfer out is used.

- All hospitalizations that occur with time spent in other years other than just 2005/06 need to be adjusted to reflect only the time spent in 2005/06. For hospitalizations that came off the 2005/06 hospitals abstracts, the CIHI variables (trim point, per diem, blended outlier per diem, etc.) are attached from the 2005 CIHI tables based on CMG, complexity level and age category. For hospitalizations that came off the 2006/07 hospitals abstracts, the CIHI variables (trim point, per diem, blended outlier per diem, etc.) are also attached from the 2005 CIHI tables based on CMG, complexity level and age category.

- Each type of hospitalization (typical, outlier, transfer, sign out, death, 910 and 999 CMG) require a different equation for adjusting the RIW.

- TWCs and the number of inpatient days (adjusted LOS) for each hospital are initially calculated. The hospitals, with their TWCs and total number of inpatient days, are merged to the 2005/06 inpatient days file (inpatient days determined by MIS data). The total number of days reported in MIS (*MIS days*) and in the Discharge Abstract Administrative Database (*Admin days*) are calculated. The hospitals are separated into three groups: a) where MIS days = Admin days, b) where MIS days > Admin days, and c) where MIS days < Admin days. Adjustments must be made where MIS days does not equal Admin days.

- For cases where the MIS days are less than Admin days for a hospital, we go back and select all the hospitalizations for that hospital. A trim point (i.e., the point after which a LOS is

determined to be abnormally long and any additional days are classified as outlier days) is then added from the 2005 CIHI RIW table (for the 2005/06 and 2006/07 hospital abstracts hospitalizations). Hospitalizations where the adjusted LOS is greater than the trim point are separated out. These hospitalizations are put into random order and one day from each hospitalization is removed until the sum of the adjusted LOSs equals the MIS inpatient days for the hospital. If the trim point is reached, no more days are removed from that hospitalization. The weights for these hospitalizations are adjusted by: adjwgt = (adjwgt– ((blended outlier per diem weight)*(# of days removed from the case))). Hospitalizations which had adjusted LOS which was not greater than the trim point are added back to the newly adjusted hospitalizations. The total Admin days for these hospitals will now equal the total inpatient days from the MIS data.

- For cases where the MIS days are greater than Admin days for a hospital, we go back and select all the hospitalizations for those hospitals. A trim point is then added from the 2005 CIHI RIW table (for the 2005/06 and 2006/07 hospital abstracts hospitalizations). Hospitalizations where the adjusted LOS is greater than the trim point are separated out. For these 'outlier' hospitalizations, the average daily weight for each hospital is calculated (sum of the adjusted weights for the hospital divided by the sum of the adjusted LOS for the hospital). A new record is created for each hospital with MIS days > Admin days and adjusted LOS > trim point. This new record has an adjusted LOS equal to the number of days more the MIS data has than the Admin days. The weight is then calculated as that number of days multiplied by the average daily weight for the outliers. These records act as a hospitalization record and are added to all the other hospitalizations in hospitals where MIS days > Admin days. The total Admin days for these hospitals will now equal the total inpatient days from the MIS data.

- For cases where the MIS days equal Admin days for a hospital, we go back and select all the hospitalizations for those hospitals. No adjustments need to be made here.

- All the hospitalizations are combined again now with their inpatient days and weights properly adjusted.

- Total weighted cases and total inpatient days are calculated for each hospital, for each hospital type, for each hospital RHA and for Manitoba overall.

APPENDIX 3: MIS DATA QUALITY IMPROVEMENT OPPORTUNITIES

As mentioned in Section 3.1.2 (Calculating Direct Inpatient Costs), the CIHI/Hay Group approach to calculating the inpatient costs is dependent on complete reporting of statistical data in MIS. There are several types of statistical data that were not reported with consistency. These are noted here, to assist in future MIS data quality initiatives.

1. Workload Measurement Data–The methodology requires that various disciplines (e.g., nursing, and diagnostic and therapeutic services) report workload units at their respective functional centre levels. For Diagnostic and Therapeutic Services, the Diagnostic Imaging and Clinical Laboratory disciplines report workload unit data relatively well. In the Therapeutics area, there is a little more room for improvement in reporting of workload unit data. Nursing workload measurement systems have never been mandated or implemented in Manitoba. This is the major gap in workload unit statistical reporting; however, the CIHI/Hay methodology allows for a surrogate statistic to be used for the nursing-related functional centres (e.g., inpatient days, client visits face-to-face). It was found that the Manitoba hospitals did report inpatient days in the Nursing Unit Inpatient functional centres (only one facility did not) and face-to-face client visits in Emergency Departments fairly consistently.
2. Outpatient Visits–Manitoba has mandated their own type of statistical data collection for Oncology and Renal Dialysis. Therefore, there are sites that do not report the face-to-face visits in these Ambulatory Care functional centres. This would be needed to calculate the cost of inpatient care that is described here, resulting in the use of the default assignment of costs.
3. Surgical Visits–The methodology requires that surgical visits be reported by the type of service recipient (e.g., inpatient versus day surgery). There were three small hospitals that did not report any inpatient surgical visits, but that may not be incorrect. These sites may only perform day surgery cases in their operating rooms.
4. Attendance Days–The Therapeutics functional centres (e.g., Speech/Language, Occupational Therapy, Physiotherapy, Social Work, Clinical Nutrition) are required to report attendance day statistics which were missing in certain instances. There could be improvement in this area.
5. Procedures/Exams–The Diagnostic functional centres (e.g., Diagnostic Imaging, Clinical Laboratory) are required to report exams or procedures as an activity statistic. There were several small sites that reported Diagnostic costs, but no activity.
6. Emergency Departments–There are many small rural facilities that reported Emergency Department statistics (face-to-face visits), but did not report any associated costs. It should be emphasized, that where possible, costs should be allocated to the Emergency Department for external reporting rather than reporting all staff and supply costs in the Inpatient Nursing Units.

APPENDIX 4: ANNUAL AVERAGE DIRECT HOSPITAL COSTS, BY AGE AND SEX

The following tables provide the direct annual inpatient and day surgery hospital costs by sex and age group. It also provides the mean cost for the population (i.e., total costs for the sex/age group divided by the total number of people in that sex/age group) and the mean cost for those who were hospitalized (i.e., total costs for the sex/age group divided by the number of people in the sex/age group who were hospitalized during the year). These tables provide a wealth of information for a variety of purposes. For example, one can look at the patterns of cost throughout the lifespan or aggregate data to look at costs associated with larger age groups (e.g., people over 65 years old). The total costs, the mean cost for the population and the mean cost for hospital users all tell different stories, that depending upon the research question, can provide useful insights into how hospital costs are distributed.

The total cost column is calculated by summing all of the weights (RIWs) for the sex/age group and multiplying this value by the CPWC for the province.

Note that the population values that are reported are the population at a given point in time (December 31, 2005) while the users' values are accumulated over the course of the year. This results in the population of males less than one year old being less than the number of users, reflecting that some of the boys who were hospitalized during the year did not survive to December 31 or moved out of the province after birth. Similar events will result in a small mis-match between the population and users in all sex/age groups. Also note that for the oldest age group (101–110) the numbers are very small. For inpatient hospitalizations, the two 5-year age groups were collapsed. For day surgery, the numbers were fewer than five cases, so these numbers have been suppressed.

Table A.4.1: Total Direct Inpatient Cost by Age Group and Sex, Manitoba, 2005/06

Age Group (years)	MALES					FEMALES					TOTAL				
	Population (N)	Users (n)	Total Cost ($)	Population Mean Cost ($)	User Mean Cost ($)	Population (N)	Users (n)	Total Cost ($)	Population Mean Cost ($)	User Mean Cost ($)	Population (N)	Users (n)	Total Cost ($)	Population Mean Cost ($)	User Mean Cost ($)
<1	7,174	7,269	12,813,899	1,786	1,763	6,968	6,916	10,931,933	1,569	1,581	14,142	14,185	23,745,832	1,679	1,674
1-5	36,693	1,142	3,970,908	108	3,477	34,830	849	2,571,379	74	3,029	71,523	1,991	6,542,287	91	3,286
6-10	39,922	671	2,078,720	52	3,098	37,897	501	1,349,125	36	2,693	77,819	1,172	3,427,845	44	2,925
11-15	43,931	799	2,898,292	66	3,627	42,006	789	2,740,692	65	3,474	85,937	1,588	5,638,984	66	3,551
16-20	42,900	1,245	5,990,016	140	4,811	41,316	2,715	8,210,733	199	3,024	84,216	3,960	14,200,749	169	3,586
21-25	39,882	1,048	5,027,725	126	4,797	39,050	4,315	11,621,411	298	2,693	78,932	5,363	16,649,136	211	3,104
26-30	37,096	892	4,484,299	121	5,027	37,739	5,551	14,829,920	393	2,672	74,835	6,443	19,314,219	258	2,998
31-35	38,221	1,079	5,580,375	146	5,172	38,226	4,753	13,648,911	357	2,872	76,447	5,832	19,229,286	252	3,297
36-40	39,643	1,197	6,026,644	152	5,035	39,860	2,897	10,029,226	252	3,462	79,503	4,094	16,055,870	202	3,922
41-45	46,981	1,582	8,620,862	183	5,449	46,967	2,288	9,889,504	211	4,322	93,948	3,870	18,510,366	197	4,783
46-50	44,922	1,792	11,456,329	255	6,393	44,350	2,168	10,853,636	245	5,006	89,272	3,960	22,309,966	250	5,634
51-55	39,418	2,059	14,444,227	366	7,015	40,056	2,192	12,694,972	317	5,792	79,474	4,251	27,139,199	341	6,384
56-60	33,678	2,242	16,786,335	498	7,487	34,146	2,193	14,502,710	425	6,613	67,824	4,435	31,289,045	461	7,055
61-65	24,892	2,200	18,477,238	742	8,399	25,641	2,071	16,814,324	656	8,119	50,533	4,271	35,291,561	698	8,263
66-70	19,251	2,367	20,870,191	1,084	8,817	20,814	2,205	18,612,580	894	8,441	40,065	4,572	39,482,770	985	8,636
71-75	16,680	2,705	28,382,927	1,702	10,493	19,347	2,621	24,794,448	1,282	9,460	36,027	5,326	53,177,375	1,476	9,984
76-80	13,184	2,884	31,364,951	2,379	10,876	17,863	3,145	33,048,226	1,850	10,508	31,047	6,029	64,413,177	2,075	10,684
81-85	8,902	2,496	29,394,896	3,302	11,777	15,372	3,432	42,232,200	2,747	12,305	24,274	5,928	71,627,096	2,951	12,083
86-90	4,164	1,419	18,280,211	4,390	12,882	8,552	2,465	29,842,680	3,490	12,107	12,716	3,884	48,122,891	3,784	12,390
91-95	1,451	610	7,231,746	4,984	11,855	3,957	1,266	15,575,369	3,936	12,303	5,408	1,876	22,807,116	4,217	12,157
96-100	231	113	1,558,477	6,747	13,792	925	307	3,898,864	4,215	12,700	1,156	420	5,457,342	4,721	12,994
101-110	26	13	293,770	11,299	22,598	111	38	573,039	5,163	15,080	137	51	866,809	6,327	16,996

*Population as of December 31, 2005

Source: Manitoba Centre for Health Policy, 2009

Table A.4.2: Total Direct Day Surgery Cost by Age Group and Sex, Manitoba, 2005/06

Age Group (years)	MALES					FEMALES					TOTAL				
	Population (N)	Users (n)	Total Cost ($)	Population Mean Cost ($)	User Mean Cost ($)	Population (N)	Users (n)	Total Cost ($)	Population Mean Cost ($)	User Mean Cost ($)	Population (N)	Users (n)	Total Cost ($)	Population Mean Cost ($)	User Mean Cost ($)
1-5	36,693	1,706	1,524,016	42	893	34,830	1,316	1,211,947	35	921	71,523	3,022	2,735,963	38	905
6-10	39,922	913	687,856	17	753	37,897	657	503,077	13	766	77,819	1,570	1,190,933	15	759
11-15	43,931	642	446,272	10	695	42,006	555	379,038	9	683	85,937	1,197	825,310	10	689
16-20	42,900	707	596,338	14	843	41,316	1,451	1,021,764	25	704	84,216	2,158	1,618,102	19	750
21-25	39,882	787	673,446	17	856	39,050	1,936	1,362,077	35	704	78,932	2,723	2,035,523	26	748
26-30	37,096	848	668,384	18	788	37,739	2,123	1,593,180	42	750	74,835	2,971	2,261,564	30	761
31-35	38,221	1,128	882,733	23	783	38,226	2,358	1,826,764	48	775	76,447	3,486	2,709,498	35	777
36-40	39,643	1,423	1,150,173	29	808	39,860	2,631	2,040,161	51	775	79,503	4,054	3,190,334	40	787
41-45	46,981	2,043	1,696,686	36	830	46,967	3,224	2,472,866	53	767	93,948	5,267	4,169,552	44	792
46-50	44,922	2,460	2,208,281	49	898	44,350	3,311	2,534,908	57	766	89,272	5,771	4,743,188	53	822
51-55	39,418	2,681	2,412,584	61	900	40,056	3,317	2,566,500	64	774	79,474	5,998	4,979,084	63	830
56-60	33,678	2,975	2,753,978	82	926	34,146	3,213	2,479,155	73	772	67,824	6,188	5,233,134	77	846
61-65	24,892	2,590	2,424,870	97	936	25,641	2,616	2,074,736	81	793	50,533	5,206	4,499,607	89	864
66-70	19,251	2,426	2,315,333	120	954	20,814	2,298	1,887,082	91	821	40,065	4,724	4,202,415	105	890
71-75	16,680	2,288	2,264,284	136	990	19,347	2,192	1,826,698	94	833	36,027	4,480	4,090,982	114	913
76-80	13,184	2,012	2,025,765	154	1,007	17,863	2,038	1,798,483	101	882	31,047	4,050	3,824,248	123	944
81-85	8,902	1,236	1,289,780	145	1,044	15,372	1,412	1,276,072	83	904	24,274	2,648	2,565,851	106	969
86-90	4,164	457	514,495	124	1,126	8,552	591	591,760	69	1,001	12,716	1,048	1,106,255	87	1,056
91-95	1,451	111	155,825	107	1,404	3,957	180	199,533	50	1,109	5,408	291	355,358	66	1,221
96-100	231	11	21,926	95	1,993	925	20	23,323	25	1,166	1,156	31	45,249	39	1,460
101-110	26	-	399	15	-	111	-	7,402	67	-	137	-	7,801	57	-

*Population as of December 31, 2005

"-" denotes values surpressed due to small numbers

Source: Manitoba Centre for Health Policy, 2009

APPENDIX 5: IN-YEAR ADJUSTED TOTAL WEIGHTED CASES (TWC) BY HOSPITAL

The following table reports the *in-year adjusted total weighted cases* (TWC) for each acute care hospital in the province. RHAs may use these adjusted values to calculate the CPWC for an individual facility by dividing the total costs for inpatient care for the facility by the TWCs for the facility. This may be a useful tool to consider how facilities compare on this measure of operational performance.

Table A.5.1: In-Year Adjusted Total Weighted Cases (TWCs) by Hospital

Hospital	In-Year Adjusted TWCs	Hospital	In-Year Adjusted TWCs
Altona Community	842.73	Morris District	518.79
Arborg and Districts	323.78	Neepawa	1,048.78
Baldur Health District	235.83	Notre Dame	326.85
Beausejour District	1,217.88	Pembina Manitou	208.43
Bethesda	3,293.83	Pinawa	656.75
Birtle Health Services	271.43	Pine Falls	923.59
Boissevain Health Centre	412.64	Portage District	3,955.02
Boundary Trails Health Centre	4,784.03	Reston District Health Centre	378.59
Brandon	13,670.37	Riverdale Health Centre	173.33
Carberry Plains Health Centre	309.63	Roblin District Health Centre	607.52
Carman Memorial	1,010.54	Rock Lake Health Centre	392.83
Centre-Medico-Social Desalaberry	457.81	Rossburn District	332.07
Churchill Health Centre	625.24	Russell District	729.31
Concordia-Winnipeg	12,318.08	Selkirk and District	2,282.25
Dauphin Regional	4,012.86	Seven Oaks-Winnipeg	15,052.49
Deloraine Health Centre	359.37	Seven Regions Health Centre	370.32
E.M. Crowe Memorial	562.48	Shoal Lake Strathclair	404.96
Emerson	43.15	Souris District	770.67
Erickson District Health Centre	234.97	St. Boniface-Winnipeg	31,602.96
Flin Flon	1,237.43	St. Claude	303.14
Gillam	171.84	Ste. Anne	878.10
Glenboro District	152.89	Ste. Rose	1,085.97
Grace-Winnipeg	14,913.49	Stonewall and District	687.08
Grandview District	811.36	Swan River Valley	1,737.21
Hamiota District Health Centre	703.78	The Pas Health Complex	1,626.46
Health Sciences Centre-Winnipeg	47,533.97	Thompson	3,161.94
Hunter Memorial	595.35	Tiger Hills Health Centre	320.08
Johnson Memorial	854.90	Tri-Lake Health District Centre	547.39
Lakeshore District	340.63	Victoria-Winnipeg	11,674.69
Lorne Memorial	499.83	Virden District	682.45
Lynn Lake	287.86	Vita and District Health Centre	310.89
MacGregor and District	219.50	Wawanesa and District	111.88
Melita Health Centre	417.13	Winnipegosis	505.96
Minnedosa District	884.73		

Source: Manitoba Centre for Health Policy, 2009

APPENDIX 6: TOP 10 LISTS FOR REGIONAL HEALTH AUTHORITIES (RHAS)

The following tables show two types of *top 10* typical hospitalizations from two different perspectives. First, we show the hospitalizations with the highest total cost and then the 10 most common hospitalizations. These are presented for all of the residents of a region, regardless of where they were hospitalized, in their home region or elsewhere. This describes the types of hospital care that residents of each region are receiving. Then, we present the same lists for all of the hospitals in each region, knowing that some of the people being treated come from outside of the region. These lists show the type of care that the hospitals in the region are providing.[6]

The tables are laid out to allow regions to compare their hospitalization profile to that of the entire province, and to other regions. In addition to the rank of the type of hospitalization, details concerning the number of cases, the weighted mean average cost for the cases, and the total direct costs for the hospitalizations are included. It should be noted that the weighted mean cost may vary by region, not because of different costs in the regions, but rather because of differences in the mix of ages treated and the complexity of individual cases. These costs have not been calculated using RHA- or hospital-specific costs—they have used the provincial CPWC.

[6] See http://umanitoba.ca/faculties/medicine/units/mchp/projects/HospCost.html

Table A.6.1: Case Mix Groups with the Highest Total Costs, Typical Cases, All People Living in Each RHA, 2005/06

CMG	DESCRIPTION	MANITOBA	ASSINIBOINE	BRANDON	BURNTWOOD	CENTRAL	INTERLAKE	NOR-MAN	NORTH EASTMAN	PARKLAND	SOUTH EASTMAN	WINNIPEG
611	Vaginal Delivery	**1** n* 6,819 $/n 1,662 T $ 11,332,257	**7** 255 1,661 423,496	**2** 225 1,657 372,808	**1** 549 1,678 921,065	**1** 703 1,660 1,166,694	**2** 391 1,659 648,537	**1** 185 1,668 308,558	**3** 203 1,671 339,147	**7** 177 1,670 295,649	**1** 428 1,657 709,013	**1** 3,357 1,659 5,570,651
354	Knee Replacement	**2** 1,593 5,939 9,484,218	**4** 87 5,932 516,048	**3** 58 5,851 339,340		**4** 111 6,004 666,414	**1** 132 5,806 766,457	**4** 31 5,866 181,853	**2** 58 5,932 344,040	**5** 60 5,821 349,243	**2** 59 6,091 359,353	**2** 934 5,951 5,558,120
143	Simple Pneumonia and Pleurisy	**3** 2,496 2,827 7,056,063	**2** 234 2,699 631,631	**10** 70 2,644 185,081	**4** 118 2,614 308,510	**3** 285 2,652 755,748	**3** 184 2,851 524,604	**2** 106 2,235 236,910	**1** 131 2,755 360,942	**2** 181 2,684 485,756	**6** 112 2,612 292,548	**9** 884 3,188 2,817,851
352	Hip Replacement	**4** 1,017 6,760 6,888,157	**5** 71 6,573 466,672	**5** 47 6,478 304,468		**6** 88 6,786 597,139	**4** 77 6,758 520,394		**7** 29 6,640 192,556	**8** 42 6,634 278,609	**5** 47 6,368 299,315	**4** 557 6,857 3,819,269
609	Vaginal Delivery with Complicating Diagnosis	**5** 3,278 2,003 6,565,295	**10** 143 1,995 285,331	**4** 165 1,999 329,767	**2** 231 2,030 469,037	**9** 221 2,002 442,496	**9** 174 2,008 349,412	**6** 79 2,023 159,854	**6** 101 1,998 201,836		**10** 122 1,991 242,883	**5** 1,789 1,998 3,573,651
840	Other Admissions with Surgery	**6** 359 17,663 6,341,070		**1** 22 17,268 379,887	**7** 8 21,584 172,670	**5** 41 16,218 664,954	**7** 16 23,039 368,619					**3** 232 18,089 4,196,607
294	Esophagitis, Gastroenteritis and Miscellaneous Digestive Disease	**7** 3,697 1,636 6,056,341	**1** 482 1,691 815,111	**8** 138 1,473 203,292	**6** 123 1,436 176,686	**2** 520 1,600 831,829	**5** 299 1,585 474,050	**3** 146 1,457 212,771	**4** 193 1,582 305,397	**1** 387 1,689 653,500	**7** 179 1,567 280,518	
253	Major Intestinal and Rectal Procedures	**8** 807 6,987 5,638,667		**6** 43 6,138 263,926		**10** 59 6,705 395,573	**8** 52 6,989 363,409		**9** 25 6,356 158,899		**8** 43 6,491 279,132	**7** 467 7,305 3,411,650
222	Heart Failure	**9** 6,987 3,225 5,446,784	**8** 143 2,908 415,809			**7** 201 2,871 577,068	**6** 131 3,124 409,253		**5** 70 3,064 214,461	**4** 121 3,055 369,684		**8** 825 3,440 2,837,599
648	Neonates Weight > 2,500 grams (Normal Newborn)	**10** 9,743 525 5,119,161			**3** 788 525 414,030	**8** 943 525 495,470	**10** 555 525 291,607	**7** 258 525 135,558	**10** 297 525 156,049		**3** 579 525 304,217	**10** 4,837 525 2,541,451
851	Other Factors Causing Hospitalization		**3** 234 2,459 575,500									
140	Chronic Obstructive Pulmonary Disease (COPD)		**6** 142 3,267 463,942							**3** 142 3,289 467,000		
142	Chronic Bronchitis		**9** 125 2,711 338,818									
186	Permanent Pacemaker Implant without Complicating Cardiac Conditions			**7** 30 7,425 222,755								
777	Schizophrenia and Other Psychotic Disorders without ECT or Axis III Diagnosis			**9** 32 6,231 199,407	**10** 24 6,231 149,556			**5** 27 6,231 168,250		**9** 43 6,231 267,954		**6** 570 6,231 3,551,946
623	Antepartum Diagnosis with Complicating Diagnosis				**5** 137 1,323 181,230							

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CMG	DESCRIPTION	MANITOBA	ASSINIBOINE	BRANDON	BURNTWOOD	CENTRAL	INTERLAKE	NOR-MAN	NORTH EASTMAN	PARKLAND	SOUTH EASTMAN	WINNIPEG
579	Major Uterine and Adnexal Procedures without Malignancy				63 **8** 2,654 167,177			41 **9** 2,755 112,944	64 **8** 2,623 167,881		112 **4** 2,693 301,654	
317	Laparoscopic Cholecystectomy				77 **9** 2,068 159,199							
624	Antepartum Diagnosis							142 **8** 930 132,024				
179	Coronary Bypass with Heart Pump without Cardiac Catheter							11 **10** 9,296 102,253		32 **6** 10,041 321,323	25 **9** 10,194 254,855	
483	Diabetes									107 **10** 2,453 262,500		

n= Number of Cases, **$/n** = Weighted Cost per Case, **T$**= Total Cost

The values for the Churchill Regional Health Authority have not been reported due to small numbers

Source: Manitoba Centre for Health Policy, 2009

See http://umanitoba.ca/faculties/medicine/units/mchp/projects/hospcosts.html for results for an individual RHA

Table A.6.2: Case Mix Groups with the Most Typical Cases, All People Living in Each RHA, 2005/06

CMG	DESCRIPTION	MANITOBA	ASSINIBOINE	BRANDON	BURNTWOOD	CENTRAL	INTERLAKE	NOR-MAN	NORTH EASTMAN	PARKLAND	SOUTH EASTMAN	WINNIPEG
648	Neonates Weight > 2,500 grams (Normal Newborn)	**1** n 9,743 $/n 525 T $ 5,119,161	**2** 386 525 202,812	**1** 349 525 183,371	**1** 788 525 414,030	**1** 943 525 495,470	**1** 555 525 291,607	**1** 258 525 135,558	**1** 297 525 156,049	**2** 298 525 156,575	**1** 579 525 304,217	**1** 4,837 525 2,541,451
611	Vaginal Delivery	**2** 6,819 1,662 11,332,257	**3** 255 1,661 423,496	**2** 225 1,657 372,808	**2** 549 1,678 921,065	**2** 703 1,660 1,166,694	**2** 391 1,659 648,537	**2** 185 1,668 308,558	**2** 203 1,671 339,147	**4** 177 1,670 295,649	**2** 428 1,657 709,013	**2** 3,357 1,659 5,570,651
294	Esophagitis, Gastroenteritis and Miscellaneous Digestive Disease	**3** 3,697 1,636 6,056,341	**1** 482 1,691 815,111	**4** 138 1,473 203,292	**6** 123 1,436 176,686	**3** 520 1,600 831,829	**3** 299 1,585 474,050	**3** 146 1,457 212,771	**3** 193 1,582 305,397	**1** 387 1,689 653,500	**3** 179 1,567 280,518	**5** 1,122 1,739 1,951,627
609	Vaginal Delivery with Complicating Diagnosis	**4** 3,278 2,003 6,565,295	**9** 143 1,995 285,331	**3** 165 1,999 329,767	**3** 231 2,030 469,037	**6** 221 2,002 442,496	**5** 174 2,008 349,412	**6** 79 2,023 159,854	**5** 101 1,998 201,836		**5** 122 1,991 242,883	**3** 1,789 1,998 3,573,651
143	Simple Pneumonia and Pleurisy	**5** 2,496 2,827 7,056,063	**4** 234 2,699 631,631	**6** 70 2,644 185,081	**8** 118 2,614 308,510	**4** 285 2,652 755,748	**4** 184 2,851 524,604	**5** 106 2,235 236,910	**4** 131 2,755 360,942	**3** 181 2,684 485,756	**7** 112 2,612 292,548	**7** 884 3,188 2,817,851
646	Neonates Weight > 2,500 grams with Caesarean Delivery	**6** 2,394 914 2,188,341	**6** 157 914 143,513	**5** 122 914 111,519	**5** 137 914 125,231	**5** 264 914 241,320	**9** 117 914 106,949	**7** 67 914 61,244			**4** 126 914 115,176	**4** 1,196 914 1,093,255
222	Heart Failure	**7** 1,687 3,225 5,446,784	**8** 143 2,908 415,809			**7** 201 2,871 577,068	**8** 131 3,124 409,253		**6** 70 3,064 214,461	**6** 121 3,055 369,684		**9** 825 3,440 2,837,599
579	Major Uterine and Adnexal Procedures without Malignancy	**8** 1,629 2,685 4,373,175		**7** 65 2,783 180,912					**7** 64 2,623 167,881		**6** 112 2,693 301,654	**8** 879 2,687 2,362,033
354	Knee Replacement	**9** 1,593 5,939 9,484,218		**9** 58 5,851 339,340			**6** 132 5,806 766,457		**8** 58 5,932 344,040			**6** 934 5,951 5,558,120
846	Aftercare Following Surgery or Treatment	**10** 1,372 903 1,239,011					**7** 132 926 122,198					**10** 657 906 595,367
851	Other Factors Causing Hospitalization		**5** 234 2,459 575,500			**9** 158 2,259 356,897			**9** 56 1,955 109,487		**8** 110 1,788 196,728	
237	Arrhythmia		**7** 149 1,830 272,744	**8** 59 1,947 114,889		**8** 162 1,918 310,755						
140	Chronic Obstructive Pulmonary Disease (COPD)		**10** 142 3,267 463,942							**5** 142 3,289 467,000		
647	Neonates Weight > 2,500 grams with Minor Problem Diagnosis			**10** 52 1,026 53,353	**10** 65 1,026 66,692							
623	Antepartum Diagnosis with Complicating Diagnosis				**4** 137 1,323 181,230							
624	Antepartum Diagnosis				**7** 119 930 110,640			**4** 142 930 132,024				

Continued on next page

CMG	DESCRIPTION	MANITOBA	ASSINIBOINE	BRANDON	BURNTWOOD	CENTRAL	INTERLAKE	NOR-MAN	NORTH EASTMAN	PARKLAND	SOUTH EASTMAN	WINNIPEG
317	Laparoscopic Cholecystectomy				**9** 77 2,068 159,199					**9** 97 2,066 200,410	**10** 87 2,111 183,664	
619	False Labour LOS < 3 Days (MNRH)					**10** 156 879 137,116		**8** 67 879 58,889			**9** 93 879 81,742	
242	Chest Pain						**10** 107 1,263 135,098	**10** 42 1,290 54,199		**7** 111 1,287 142,867		
93	Tonsillectomy and Adenoidectomy Procedures (MNRH)							**9** 53 1,142 60,529				
704	Red Blood Cell Disorders								**10** 54 2,111 113,976			
483	Diabetes									**8** 107 2,453 262,500		
213	Unstable Angina without Cardiac Catheter without Specified Cardiac Conditions									**10** 94 1,996 187,599		

n= Number of Cases, **$/n** = Weighted Cost per Case, **T$**= Total Cost

Source: Manitoba Centre for Health Policy, 2009

The values for the Churchill Regional Health Authority have not been reported due to small numbers

MNRH - May not require hospitalization

See http://umanitoba.ca/faculties/medicine/units/mchp/projects/hospcosts.html for results for an individual RHA.

Table A.6.3: Case Mix Groups with the Highest Total Costs, Typical Cases, All Hospitals in Each RHA, 2005/06

CMG	DESCRIPTION	MANITOBA	ASSINIBOINE	BRANDON	BURNTWOOD	CENTRAL	INTERLAKE	NOR-MAN	NORTH EASTMAN	PARKLAND	SOUTH EASTMAN	WINNIPEG
611	Vaginal Delivery	**1** n 6,819 $/n 1,662 T $ 11,332,257		**1** 418 1,659 693,392	**1** 385 1,669 642,753	**1** 584 1,660 969,416	**4** 145 1,659 240,483	**1** 284 1,667 473,417		**6** 171 1,671 285,746	**1** 234 1,655 387,367	**2** 4,518 1,662 7,507,343
354	Knee Replacement	**2** 1,593 5,939 9,484,218		**2** 113 5,821 657,787		**10** 53 6,101 323,338						**1** 1,431 5,942 8,503,081
143	Simple Pneumonia and Pleurisy	**3** 2,496 2,827 7,056,063	**2** 221 2,665 588,911		**4** 68 2,438 165,816	**3** 289 2,616 756,131	**1** 179 2,838 508,089	**2** 176 2,197 386,652	**1** 117 2,733 319,780	**2** 194 2,721 527,921	**2** 103 2,634 271,318	
352	Hip Replacement	**4** 1,017 6,760 6,888,157				**6** 69 6,596 455,156						**3** 905 6,788 6,143,424
609	Vaginal Delivery with Complicating Diagnosis	**5** 3,278 2,003 6,565,295		**3** 313 1,998 625,389	**3** 83 2,026 168,156			**6** 80 2,019 161,491				**5** 2,523 2,002 5,051,750
840	Other Admissions with Surgery	**6** 359 17,663 6,341,070		**7** 24 16,199 388,776		**5** 36 15,076 542,754						**4** 289 18,162 5,248,678
294	Esophagitis, Gastroenteritis and Miscellaneous Digestive Disease	**7** 3,697 1,636 6,056,341	**1** 457 1,680 767,582		**6** 88 1,339 117,817	**2** 508 1,599 812,136	**2** 296 1,598 473,035	**3** 179 1,444 258,409	**2** 139 1,586 220,414	**1** 411 1,668 685,604	**3** 160 1,627 260,337	
253	Major Intestinal and Rectal Procedures	**8** 807 6,987 5,638,667		**4** 81 6,648 538,460							**6** 29 6,313 183,069	**7** 594 7,148 4,245,634
222	Heart Failure	**9** 6,987 3,225 5,446,784	**5** 124 2,911 360,991			**4** 202 2,855 576,654	**3** 118 3,021 356,512	**9** 37 3,030 112,106	**3** 52 2,843 147,824	**4** 132 3,030 399,988	**4** 64 3,190 204,163	
648	Neonates Weight > 2,500 grams (Normal Newborn)	**10** 9,743 525 5,119,161		**9** 659 525 346,251	**2** 492 525 258,506	**7** 732 525 384,607		**5** 365 525 191,778			**8** 295 525 154,999	**10** 6,630 525 3,483,526
851	Other Factors Causing Hospitalization		**3** 237 2,448 580,262			**8** 163 2,256 367,673	**8** 101 1,856 187,471	**8** 61 1,941 118,383		**7** 77 3,247 250,003	**5** 109 1,777 193,656	
140	Chronic Obstructive Pulmonary Disease (COPD)		**4** 147 3,212 472,196			**9** 104 3,134 325,977	**5** 72 3,113 224,129			**3** 144 3,301 475,388		
142	Chronic Bronchitis		**6** 124 2,670 331,095				**6** 76 2,753 209,259		**5** 43 2,770 119,093			
237	Arrhythmia		**7** 140 1,866 261,299									
483	Diabetes		**8** 106 2,367 250,895				**7** 78 2,567 200,239		**9** 27 2,863 77,288	**5** 118 2,435 287,303		
447	Cellulitis		**9** 95 2,367 224,841									

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CMG	DESCRIPTION	MANITOBA	ASSINIBOINE	BRANDON	BURNTWOOD	CENTRAL	INTERLAKE	NOR-MAN	NORTH EASTMAN	PARKLAND	SOUTH EASTMAN	WINNIPEG
529	Lower Urinary Tract Infection		95 **10** 2,309 219,390						35 **7** 2,447 85,632	95 **8** 2,360 224,219		
777	Schizophrenia and Other Psychotic Disorders without ECT or Axis III Diagnosis			73 **5** 6,231 454,898				37 **4** 6,231 230,565		33 **10** 6,231 205,639		633 **8** 6,231 3,944,529
186	Permanent Pacemaker Implant without Complicating Cardiac Conditions			57 **6** 7,638 435,353								
579	Major Uterine and Adnexal Procedures without Malignancy			130 **8** 2,716 353,135	32 **9** 2,653 84,890						50 **9** 2,657 132,868	1,300 **9** 2,689 3,495,246
766	Depressive Mood Disorders without ECT without Axis III Diagnosis			68 **10** 4,530 308,014								
623	Antepartum Diagnosis with Complicating Diagnosis				100 **5** 1,323 132,285							
317	Laparoscopic Cholecystectomy				49 **7** 2,118 103,761					104 **9** 2,061 214,295	82 **7** 2,147 176,021	
604	Caesarean Delivery				32 **8** 2,875 91,996							
646	Neonates Weight > 2,500 grams with Caesarean Delivery				87 **10** 914 79,526							
208	AMI without Cardiac Catheter without Specified Cardiac Conditions						51 **9** 3,522 179,617					
13	Specific Cerebrovascular Disorders except Transient Ischemic Attacks						37 **10** 4,518 167,167		17 **8** 4,739 80,570			
624	Antepartum Diagnosis							166 **7** 930 154,338				
813	Drug Reactions							73 **10** 1,389 101,423				
842	Signs and Symptoms								41 **4** 2,934 120,288			
704	Red Blood Cell Disorders								51 **6** 2,130 108,614			
730	Lymphoma and Chronic Leukemia								19 **10** 4,045 76,855			
485	Nutritional and Miscellaneous Metabolic Disorders										50 **10** 2,193 109,666	
179	Coronary Bypass with Heart Pump without Cardiac Catheter											485 **6** 10,171 4,933,103

n= Number of Cases, **$/n** = Weighted Cost per Case, **T$**= Total Cost
The values for the Churchill Regional Health Authority have not been reported due to small numbers.

Source: Manitoba Centre for Health Policy, 2009

See http://umanitoba.ca/faculties/medicine/units/mchp/projects/hospcosts.html for results for an individual RHA.

Table A.6.4: Case Mix Groups with the Most Typical Cases, All Hospitals in Each RHA, 2005/06

CMG	DESCRIPTION	MANITOBA	ASSINIBOINE	BRANDON	BURNTWOOD	CENTRAL	CHURCHILL	INTERLAKE	NOR-MAN	NORTH EASTMAN	PARKLAND	SOUTH EASTMAN	WINNIPEG
648	Neonates Weight > 2,500 grams (Normal Newborn)	**1** n 9,743 $/n 525 T $ 5,119,161		**1** 659 525 346,251	**1** 492 525 258,506	**1** 732 525 384,607	**10** 10 525 5,254	**2** 186 525 97,728	**1** 365 525 191,778		**2** 282 525 148,168	**1** 295 525 154,999	**1** 6,630 525 3,483,526
611	Vaginal Delivery	**2** 6,819 1,662 11,332,257		**2** 418 1,659 693,392	**2** 385 1,669 642,753	**2** 584 1,660 969,416		**4** 145 1,659 240,483	**2** 284 1,667 473,417		**4** 171 1,671 285,746	**2** 234 1,655 387,367	**2** 4,518 1,662 7,507,343
294	Esophagitis, Gastroenteritis and Miscellaneous Digestive Disease	**3** 3,697 1,636 6,056,341	**1** 457 1,680 767,582	**5** 183 1,506 275,599	**4** 88 1,339 117,817	**3** 508 1,599 812,136	**7** 14 1,274 17,840	**1** 296 1,598 473,035	**3** 179 1,444 258,409	**1** 139 1,586 220,414	**1** 411 1,668 685,604	**3** 160 1,627 260,337	**7** 1,266 1,712 2,167,561
609	Vaginal Delivery with Complicating Diagnosis	**4** 3,278 2,003 6,565,295		**3** 313 1,998 625,389	**7** 83 2,026 168,156				**7** 80 2,019 161,491				**3** 2,523 2,002 5,051,750
143	Simple Pneumonia and Pleurisy	**5** 2,496 2,827 7,056,063	**3** 221 2,665 588,911	**10** 91 2,722 247,731	**8** 68 2,438 165,816	**4** 289 2,616 756,131	**1** 54 2,023 109,255	**3** 179 2,838 508,089	**4** 176 2,197 386,652	**2** 117 2,733 319,780	**3** 194 2,721 527,921	**5** 103 2,634 271,318	**9** 1,004 3,162 3,174,450
646	Neonates Weight > 2,500 grams with Caesarean Delivery	**6** 2,394 914 2,188,341		**4** 262 914 239,492	**5** 87 914 79,526	**5** 209 914 191,045			**8** 77 914 70,385			**9** 51 914 46,619	**4** 1,574 914 1,438,782
222	Heart Failure	**7** 1,687 3,225 5,446,784	**6** 124 2,911 360,991			**6** 202 2,855 576,654		**5** 118 3,021 356,512		**3** 52 2,843 147,824	**6** 132 3,030 399,988	**8** 64 3,190 204,163	
579	Major Uterine and Adnexal Procedures without Malignancy	**8** 1,629 2,685 4,373,175		**6** 130 2,716 353,135								**10** 50 2,657 132,868	**6** 1,300 2,689 3,495,246
354	Knee Replacement	**9** 1,593 5,939 9,484,218		**7** 113 5,821 657,787									**5** 1,431 5,942 8,503,081
846	Aftercare Following Surgery or Treatment	**10** 1,372 903 1,239,011											**8** 1,133 903 1,022,753
851	Other Factors Causing Hospitalization		**2** 237 2,448 580,262		**10** 43 1,506 64,739	**7** 163 2,256 367,673	**5** 14 2,358 33,007	**7** 101 1,856 187,471	**10** 61 1,941 118,383			**4** 109 1,777 193,656	
140	Chronic Obstructive Pulmonary Disease (COPD)		**4** 147 3,212 472,196				**8** 11 2,817 30,991				**5** 144 3,301 475,388		
237	Arrhythmia		**5** 140 1,866 261,299			**8** 162 1,925 311,833		**8** 86 1,857 159,745		**8** 30 1,934 58,017			
142	Chronic Bronchitis		**7** 124 2,670 331,095			**10** 143 1,268 181,262	**4** 15 2,710 40,649	**10** 76 2,753 209,259		**5** 43 2,770 119,093			
483	Diabetes		**8** 106 2,367 250,895					**9** 78 2,567 200,239			**7** 118 2,435 287,303		
447	Cellulitis		**9** 95 2,367 224,841				**6** 14 2,075 29,053						
529	Lower Urinary Tract Infection		**10** 95 2,309 219,390							**7** 35 2,447 85,632			
792	Adjustment Disorders (MNRH)			**8** 100 1,776 177,617									

Continued on next page

CMG	DESCRIPTION	MANITOBA	ASSINIBOINE	BRANDON	BURNTWOOD	CENTRAL	CHURCHILL	INTERLAKE	NOR-MAN	NORTH EASTMAN	PARKLAND	SOUTH EASTMAN	WINNIPEG
647	Neonates Weight > 2,500 grams with Minor Problem Diagnosis			**9** 93 1,026 95,421									
623	Antepartum Diagnosis with Complicating Diagnosis				**3** 100 1,323 132,285								
624	Antepartum Diagnosis				**6** 85 930 79,028				**5** 166 930 154,338				
317	Laparoscopic Cholecystectomy				**9** 49 2,118 103,761						**9** 104 2,061 214,295	**6** 82 2,147 176,021	
619	False Labour LOS < 3 Days (MNRH)					**9** 153 879 134,479			**6** 84 879 73,832			**7** 74 879 65,042	
242	Chest Pain							**6** 118 1,259 148,521			**8** 117 1,287 150,563		
145	Tracheobronchitis						**2** 27 1,586 42,829			**10** 29 1,876 54,397			
147	Other Respiratory Diagnoses						**9** 10 1,551 15,513						
813	Drug Reactions						**3** 18 1,264 22,748		**9** 73 1,389 101,423				
704	Red Blood Cell Disorders									**4** 51 2,130 108,614			
842	Signs and Symptoms									**6** 41 2,934 120,288			
329	Biliary Tract Diseases									**9** 29 1,986 57,599			
269	Bilateral or Complex Unilateral Hernia Procedures										**10** 98 2,023 198,277		
352	Hip Replacement												**10** 905 6,788 6,143,424

n= Number of Cases, **$/n** = Weighted Cost per Case, **T$**= Total Cost

Source: Manitoba Centre for Health Policy, 2009

The values for the Churchill Regional Health Authority have not been reported due to small numbers

MNRH - May not require hospitalization

See http://umanitoba.ca/faculties/medicine/units/mchp/projects/hospcosts.html for results for an individual RHA.

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2007

Next Steps in the Provincial Evaluation of the BabyFirst program: Measuring Early Impacts on Outcomes Associated with Child Maltreatment by Marni Brownell, Rob Santos, Anita Kozyrskyj, Noralou Roos, Wendy Au, Natalia Dik, Mariette Chartier, Darlene Gerard, Okechukwu Ekuma, Monica Sirski, Nadine Tonn, and Jennifer Schultz.

Allocating Funds for Healthcare in Manitoba Regional Health Authorities: A First Step—Population-Based Funding by Greg Finlayson, Evelyn Forget, Okechukwu Ekuma, Shelley Derksen, Ruth Bond, Patricia Martens, and Carolyn De Coster.

Waiting Times for Surgery, Manitoba: 1999/2000 to 2003/04, by Carolyn De Coster, Dan Chateau, Matt Dahl, Ruth-Ann Soodeen, and Nancy McKeen.

2006

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Profiling Primary Care Practice in Manitoba by Norman Frohlich, Alan Katz, Carolyn De Coster, Natalia Dik, Ruth-Ann Soodeen, Diane Watson and Bogdan Bogdanovic.

Defining and Validating Chronic Diseases: An Administrative Data Approach by Lisa Lix, Marina Yogendran, Charles Burchill, Colleen Metge, Nancy McKeen, David Moore and Ruth Bond.

Application of Patient Safety Indicators in Manitoba: A First Look by Sharon Bruce, Heather Prior, Alan Katz, Mark Taylor, Steven Latosinsky, Patricia Martens, Carolyn De Coster, Marni Brownell, Ruth-Ann Soodeen and Carmen Steinbach.

2005

Sex Differences in Health Status, Health Care Use, and Quality of Care: A Population-Based Analysis for Manioba's Regional Health Authorities by Randy Fransoo, Patricia Martens, *The Need to Know* Team (funded through CIHR), Elaine Burland, Heather Prior, Charles Burchill, Dan Chateau, and Randy Walld.

Health and Health Care Use Among Older Adults: Using Population-Based Information Systems to Inform Policy in Manitoba, Canadian Journal on Aging, Volume 24, Supplement 1, 2005.

High-Cost Users of Pharmaceuticals: Who Are They? by Anita Kozyrskyj, Lisa Lix, Matthew Dahl and Ruth-Ann Soodeen.

Primary Prevention: An Examination of Data Capabilities in Manitoba by Lisa Lix, Greg Finlayson, Marina Yogendran, Ruth Bond, Jennifer Bodnarchuk, and Ruth-Ann Soodeen.

Aboriginal Health Research and Policy: First Nations-University Collaboration in Manitoba, Canadian Journal of Public Health, Volume 96, Supplement 1, January/February 2005.

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