## Minnesota Hospital Public Interest Review:

Maple Grove Tri-Care
Partnership Proposal for a New
Inpatient Facility in Maple
Grove, Minnesota

Minnesota Department of Health

March 2005



Office of Health Policy, Statistics and Informatics Health Economics Program PO Box 64882 St. Paul, Minnesota 55164-0882 (651) 282-6367 www.health.state.mn.us



#### Protecting, maintaining and improving the health of all Minnesotans

March 11, 2005

The Honorable Jim Abeler Chair, Health Care Cost Containment Division Minnesota House of Representatives 509 State Office Building 100 Rev. Dr. Martin Luther King Jr. Blvd. Saint Paul, Minnesota 55155

The Honorable Fran Bradley
Chair, Health Policy and Finance
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Minnesota House of Representatives
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The Honorable Linda Berglin
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The Honorable Becky Lourey
Chair, Health and Family Security
Committee
Minnesota Senate
Room G-24, State Capitol
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#### To the Honorable Chairs:

Minnesota Statutes 144.552 requires any hospital seeking to increase its number of licensed beds or an organization seeking to obtain a hospital license to submit a plan to the Commissioner of Health. The Commissioner is required to review each plan submitted under Minnesota Statutes 144.552 and issue a finding on whether the plan is in the public interest. The law requires that the Commissioner provide a copy of the finding on whether the plan is in the public interest to the chairs of the House and Senate committees having jurisdiction over health and human services policy and finance.

In November 2004, the MDH received three proposals from entities planning to seek a license to build a new hospital in Maple Grove, Minnesota. North Memorial Health Care and Fairview Health Services each submitted a proposal, and the third proposal was submitted by a partnership between Allina Hospitals and Clinics, Park Nicollet Health Services, and Children's Hospitals and Clinics (the "Maple Grove Tri-Care Partnership"). Consistent with the requirements of Minnesota Statutes 144.552, we have reviewed each of the three plans that we received. Because the law does not specifically contemplate situations in which more than one proposal may be submitted for the same geographic area, we reviewed each of the plans individually. A separate report and findings for each of the plans submitted to MDH for public interest review is enclosed.

All three of the reports find that it is in the public interest to construct a new hospital in Maple Grove. From a local perspective, the Department concurs that the community can support a hospital of the size and scope proposed, and that a new facility would provide more convenient access to services for residents in the community. From a statewide perspective, the Department finds that existing inpatient hospital capacity is likely to experience increasing strains over the next decade, and that construction of some new capacity may be necessary to relieve those strains. Because hospitals that currently serve the Maple Grove area collectively account for about one third of total hospital admissions in Minnesota, this issue is a statewide concern. The three proposals address this issue to varying degrees. Also to varying degrees, all three proposals specifically address issues of statewide concern such as a shortage of inpatient behavioral health services. In considering whether to grant an exception to the hospital moratorium, the legislature may wish to give strong consideration to whether certain services, such as inpatient behavioral health services, should be included as a requirement under any moratorium exception granted.

While the Department finds that it is in the public interest to construct a new hospital in Maple Grove, we believe that it is unlikely that the construction of three new inpatient facilities in Maple Grove would be in the public interest. As noted above, the legislation establishing the public interest review process did not contemplate a situation in which there would be simultaneous proposals to expand hospital capacity in the same geographic area. A direct comparison of the three proposals and recommendation as to which proposal is best is beyond the scope of the Department's authority under the law.

I look forward to working with into the future on issues of hospital capacity in Minnesota.

Sincerely,

Dianne M. Mandernach

Commissioner P.O. Box 64882

St. Paul, Minnesota 55164-0882

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### 1. Background

Since 1984, Minnesota law has prohibited the construction of new hospitals or expansion of bed capacity of existing hospitals without specific authorization from the Legislature (Minnesota Statutes 144.551). As originally enacted, the law included a few specific exceptions to the moratorium on new hospital capacity; other exceptions have been added over time, and there are currently 18 exceptions to the moratorium that are listed in the statute. Many of these exceptions apply to specific facilities, but some define an exception that applies more broadly (for example, an exception that allows for the relocation of a hospital within five miles of its original site under some circumstances).

The moratorium on licensure of new hospital beds replaced a Certificate of Need (CON) program that provided for case-by-case review and approval of proposals by hospitals and other types of health care providers to undertake large projects such as construction and remodeling or purchases of expensive medical equipment. The CON program was in effect from 1971 until it was replaced by the hospital moratorium in 1984. The CON program was criticized for failing to adequately control growth, but at the same time there was substantial concern among policymakers about allowing the CON program to expire without placing some other type of control on investment in new capacity.

At the time the hospital moratorium was enacted, policymakers were concerned about excess capacity in the state's hospital system, its impact on the financial health of the hospital industry, and its possible impact on overall health care costs. According to a 1986 Minnesota Senate Research Report on the hospital moratorium, "Declining occupancy has resulted in thousands of empty hospital beds across the state, in financial difficulty for some hospitals, and in efforts by hospitals to expand into other types of care. In spite of the excess hospital capacity in the state, hospitals continued to build and expand until a moratorium was imposed...." The moratorium was seen as a more effective means of limiting the expansion of hospital capacity than the Certificate of Need program it replaced. One drawback of the moratorium, however, has been that there is no systematic way of evaluating proposals for exceptions to the moratorium in terms of the need for new capacity or the potential impact of a proposal on existing hospitals.

<sup>&</sup>lt;sup>1</sup> "Hospital and Nursing Home System Growth: Moratoria, Certificate of Need, and Other Alternatives," Minnesota Senate Research Report, by Dave Giel and Michael Scandrett, January 1986.

### 2. Hospital Public Interest Review Process

In 2004, the Legislature established a new process for reviewing proposals for exceptions to the hospital moratorium (Minnesota Statutes 144.552). This "public interest review" process requires that hospitals planning to seek an exception to the moratorium law submit a plan to the Minnesota Department of Health (MDH). Under the law, MDH is required to review each plan and issue a finding on whether the plan is in the public interest. Specific factors that MDH is required to consider in the review include:

- Whether the new hospital or hospital beds are needed to provide timely access to care or access to new or improved services;
- The financial impact of the new hospital or hospital beds on existing acute-care hospitals that have emergency departments in the region;
- How the new hospital or hospital beds will affect the ability of existing hospitals in the region to maintain existing staff;
- The extent to which the new hospital or hospital beds will provide services to nonpaying or low-income patients relative to the level of services provided to these groups by existing hospitals in the region; and
- The views of affected parties.

Finally, the law requires that the public interest review be completed within 90 days, but allows for a review time of up to six months in extenuating circumstances. Authority to approve any exception to the hospital moratorium continues to rest with the Legislature.

In November 2004, MDH received three separate filings for public interest review of a proposal to build a new hospital in Maple Grove, Minnesota. North Memorial Health Care and Fairview Health Services each submitted proposals, and a joint proposal from Allina Hospitals and Clinics, Park Nicollet Health Services, and Children's Hospitals and Clinics (collectively, the "Maple Grove Tri-Care Partnership") was also submitted. The law that established the public interest review process does not specifically contemplate situations in which more than one proposal for an exception may be submitted for the same geographic area. With regard to the three applications for public interest review that MDH has received for the Maple Grove area, we have reviewed each plan separately according to the criteria established in the law. It is important to note that each of the three proposed projects also involves the construction of large new outpatient facilities that will provide a broad range of services such as primary and specialty care, ambulatory surgery, and diagnostic imaging, with construction beginning as early as 2005; however, Minnesota law does not restrict the ability to construct outpatient facilities in the same way as it does for inpatient facilities, and those portions of the proposed projects are therefore outside of the scope of MDH's public interest review.

Our review of each proposal included several different components. Some of these components, such as soliciting public input, reviewing historical and projected data on population demographics and hospital use, and reviewing previously published research on relevant topics, were overlapping among the three proposals. Other aspects of our review, such as estimating the potential impact of the proposed facility on other hospitals in the region and evaluating each proposal in light of the specific criteria listed in the law, were conducted separately for each proposal.

The remainder of this report is organized as follows:

- Section 3 provides a summary of the comments from the public and other affected parties that we received related to the need for a hospital in Maple Grove;
- Section 4 presents information on trends in the use of hospital services and how the use of hospital services is projected to change as a result of future demographic changes, from a statewide and regional perspective and also for the local hospital market serving residents of the Maple Grove area;
- Section 5 evaluates Tri-Care's plan to build a hospital in Maple Grove in light of the criteria for review that are specified in Minnesota Statutes 144.552;
- Section 6 concludes the report with a summary of the analysis and findings, along with other factors that policymakers may wish to consider in evaluating this proposal for an exception to the hospital moratorium.

### 3. Public Input

We used three strategies to collect input on the views of affected parties. First, we sent a letter to all hospital administrators in Minnesota notifying them of the plans that had been filed and soliciting their input if they wished to provide any. Second, we published a notice in the December 6, 2004 State Register as a general notice to interested parties that we had received three plans and providing an opportunity to comment on the proposals. Third, we held a public meeting in Maple Grove on January 11, 2005 to solicit input from the community on the need for a hospital in Maple Grove and the impact that a hospital in Maple Grove might have on other hospitals in the region. In addition, we posted an electronic copy of each of the filings that we received on MDH's website, in order to provide convenient access to the proposals to anyone who might wish to comment. Copies of written comments that we received about this proposal for an exception to the hospital moratorium are included in Appendix 1.

The public meeting that MDH held in Maple Grove on January 11 was intended to provide a forum for public input to MDH on the general need for a hospital in Maple Grove. An estimated 300 people attended the meeting, and 42 citizens provided comments. Many of the comments shared similar themes, which are summarized below:

- Concerns about health and safety:
  - O Citizens are concerned about the distance to the nearest hospital (11 miles to North Memorial in Robbinsdale) and by the amount of time that it takes to travel there due to frequent traffic congestion.
  - O Citizens and health care professionals alike believe that the Maple Grove area needs to have more timely access to emergency and trauma services. According to one person, the closest emergency care is "20 to 30 minutes away on a good day" and there is a need for more timely access.
  - Some health care professionals expressed specific public safety concerns about the lack of access to emergency care. They reported that the distance to the nearest emergency room deters some people from seeking emergency care that they really need (or causes them to delay seeking care), and they reported that urgent care centers currently located in Maple Grove are increasingly being used by people who are too sick to be treated there because of the lack of convenient access to a hospital emergency room.
- Shortages of specific services:
  - O Several people commented on the need for additional mental health and chemical dependency services, due to a shortage of inpatient beds available to treat these conditions.

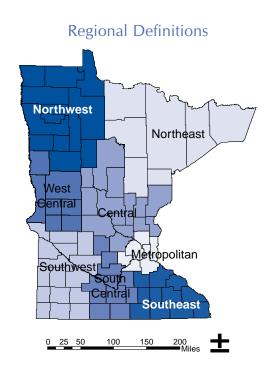
#### Convenient access to services:

- O Community residents expressed a desire for more convenient access to health care services, particularly obstetric care, pediatric care (including specialty pediatric services), and cancer treatment.
- Although many of the comments that focused on convenient access to services related to services that are likely to be provided in an outpatient setting, several people expressed a desire that any hospital that is built in Maple Grove should be a "full service" hospital providing a complete range of care without the need for patients to be transferred to other hospitals to receive more complex services.
- Collaboration between health care providers and the community:
  - Several people provided comments that emphasized the need for any organization that builds a hospital in Maple Grove to work collaboratively with the community (schools, churches, etc.) to identify and address community needs.
- Impact on other hospitals in the region:
  - Several community residents, some of whom are employed by North Memorial, expressed concerns about a potential adverse impact on North Memorial if one of the other two proposals were to be approved, about North Memorial's ability to survive as an independent institution, and about potential further consolidation of the hospital market into a market controlled by one or two large hospital systems.

# 4. Trends in the Use of Inpatient Hospital Services and Projected Impact of Future Demographic Change

#### State and Regional Trends

As noted above, one of the reasons for the original enactment of the hospital moratorium was that there was perceived to be a significant amount of excess capacity in Minnesota's hospital system. Since the moratorium was enacted, occupancy rates for Minnesota's hospital system as a whole have continued to be relatively low in comparison to licensed capacity. For example, in 2003 the system as a whole had an occupancy rate of about 42 percent of licensed beds; however, there is substantial variation in occupancy rates among different regions of the state – in 2003, occupancy rates ranged from a low of 28 percent in the South Central region to a high of 48 percent in the Twin Cities Metropolitan region (see map for region definitions).



In some ways, however, analyzing occupancy rates based on licensed beds can be misleading because many hospitals (particularly in the Twin Cities Metropolitan and Southeast regions) have large numbers of beds that are licensed but are unused. In some cases, these licensed beds may not even be able to be used within a facility's current physical capacity (i.e., a facility would have to undertake a major construction project in order to make use of these licensed beds). As a result, counting all of these licensed hospital beds when calculating occupancy rates is likely to overstate

the true capacity of Minnesota's hospital system. When occupancy rates are calculated based on "available beds", the statewide hospital occupancy rate was 59 percent in 2003, ranging from a low of 28 percent in the Southwest region to a high of 71 percent in the Twin Cities Metropolitan region.

Because of advances in technology (e.g., the ability to do many procedures on an outpatient basis that formerly would have required a hospital stay), changes in standards of care, changes in health insurance payment systems, and other factors, use of inpatient hospital services in Minnesota (both admissions and total number of inpatient days) declined through the mid-1990s despite population growth. As shown in Table 1, even though Minnesota's population grew by about 20 percent from 1987 to 2003, the number of hospital admissions grew more slowly over the same period (14 percent) and the number of inpatient hospital days actually declined by 16 percent.

Table 1

Historical Trends in Use of Inpatient Hospital Services

	Pe	ercent change	in:
	Inpatient Admissions	Inpatient Days	Minnesota Population
1987 to 1994	-6.5%	-20.2%	8.9%
1994 to 1998	7.9%	-1.6%	4.4%
1998 to 2003 1987 to 2003	13.4% 14.4%	7.1% -15.9%	5.2% 19.6%

Source: MDH, Hospital Cost Containment Information System, 1987 to 2003. 1987 was the first year of data collection.

There are several factors that are likely to influence future use of hospital services. Population growth will continue to play an important role, and aging will begin to be a more important factor as the baby boom generation reaches the age at which use of hospital services begins to increase sharply. In addition, technological advance will continue to be a very important determinant of future use of hospital services, with some new technologies likely increasing the use of inpatient services and others decreasing the use of services. Changes in the prevalence of disease (for example, due to rising rates of overweight and obesity) are also likely to play a role.

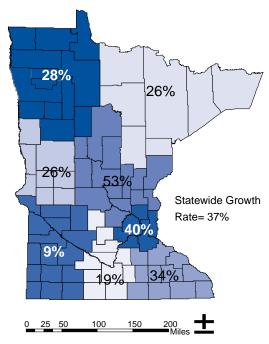
According to MDH estimates, population growth and the changing age distribution of the population are expected to result in an overall 36 percent increase in inpatient hospital days statewide between 2000 and 2020. As shown in Figure 1, this estimated increase varies by region: growth in the Central and Metropolitan regions is expected to be strongest, with growth in inpatient days of 53 percent and 40 percent, respectively. As a result, if the number of available beds were unchanged, occupancy rates would rise as well. The highest projected occupancy rates in

<sup>&</sup>lt;sup>2</sup> The definition of "available beds" is the number of acute care beds that are immediately available for use or could be brought on line within a short period of time.

2020 are for the Metropolitan region (94 percent), Southeast region (85 percent) and Central region (76 percent), compared to a statewide average of 77 percent (see Figure 2). If occupancy rate calculations are performed using the number of hospital beds licensed in 2003 instead of available beds, the estimated future occupancy rates are much lower – 63 percent in the Metropolitan region, 53 percent in the Southeast region, 64 percent in the Central region, and 55 percent statewide.

Figure 1

Projected Growth in Inpatient Days by Region, 2000 to 2020



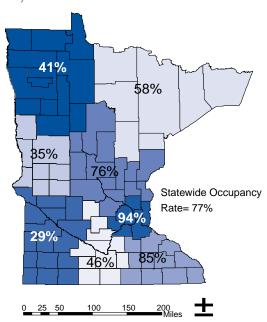


Figure 2

Projected Occupancy Rates as % of 2003 Available Beds by Region, 2020

In other words, there is clearly no shortage of licensed hospital beds in the state as a whole, nor is a shortage likely to materialize in the next fifteen years. However, the fact that the aggregate number of licensed beds in the state appears to be sufficient over this time period does not necessarily mean that there is no need for new physical hospital capacity, particularly in certain areas of the state experiencing rapid growth. There are several reasons why this may be the case:

- First, as noted earlier, occupancy rates vary widely across the state. Based on the number of currently available beds, occupancy rates projected for 2020 in the Metropolitan region (94 percent) and Southeast region (85 percent) are very high. The degree to which hospitals in these regions may be able to expand the number of available beds to meet future demand without undertaking major construction projects to increase physical capacity is uncertain. (This issue is discussed more specifically with regard to the Maple Grove area below.)
- In addition, average occupancy rates measured over a full-year period do not capture variations in occupancy rates that occur during the year. This consideration is important because even though a hospital's annual occupancy rate may not seem high enough to create concerns about whether capacity is sufficient, there are likely a number of times during the year when the hospital's occupancy rate is substantially higher than the average experienced over the entire year. As a result, using occupancy rates that measure capacity use over a full-year period may understate the degree to which the hospital system may be operating at or near capacity constraints at certain times.

It should also be noted that hospitals' ability to make full use of their licensed beds within existing facilities is limited by the relatively recent shift in the hospital market (both in Minnesota and nationally) toward private instead of semi-private hospital rooms. Consumer preferences have played an important role in many hospitals' business decisions to convert semi-private to private rooms, as well as concerns about patient safety and compliance with patient privacy laws.<sup>3</sup>

While Minnesota's hospitals likely have the ability to expand the number of available beds to some degree at existing facilities to meet projected future demand, it may also be the case that future demand in high-growth areas cannot be met without some major construction projects, either the construction of new hospitals or the expansion of existing facilities. If it is likely that some type of major construction project will be necessary to meet future needs, then the question before legislators as they consider granting an exception to the hospital moratorium becomes more a question not of whether new hospital capacity is needed, but where the new capacity should be located.

#### Trends in the Maple Grove Area

The Maple Grove area is experiencing rapid population growth. Although each of the proposals for an exception to the hospital moratorium in Maple Grove defines the area somewhat differently, population growth is projected to be much faster than the statewide average regardless of the specific geographic definition chosen. The Maple Grove area is expected to grow approximately 3 to 4 times faster than the projected statewide growth rates of 4.7 percent from 2003 to 2009 and 5.0 percent from 2009 to 2015.

The plans submitted to MDH by the hospitals seeking an exception to the moratorium identify several hospitals that currently serve significant numbers of residents of the Maple Grove area. Figure 3 shows the locations of each of the eleven hospitals that currently serve most residents of the Maple Grove area. Key utilization and financial indicators for these hospitals in 2003 (the most recent year of data that is available) are listed in Table 2. Recent trends in admissions, the total number of inpatient days, and occupancy rates are described in Table 3. For these eleven hospitals as a group, the occupancy rate as a percentage of available beds increased from 69 percent in 1999 to 74 percent in 2003.

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<sup>&</sup>lt;sup>3</sup> Michael Romano, "Going Solo: Private-Rooms-Only Provision for New Hospital Construction Stirs Controversy," Modern Healthcare, November 29, 2004.



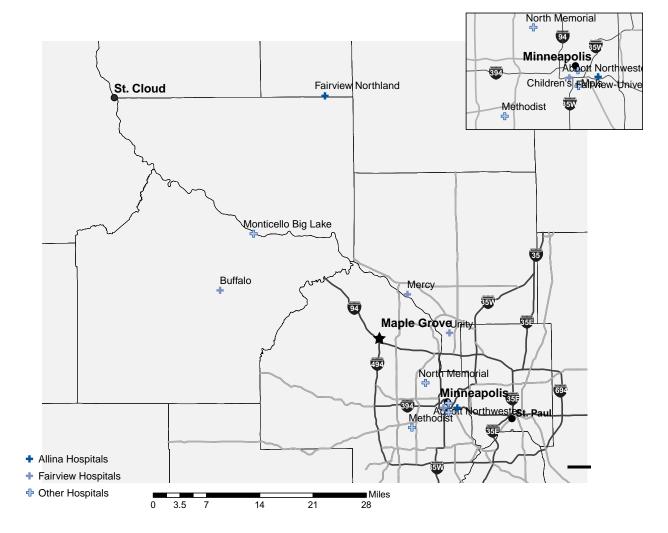


Table 2

Hospitals Serving Maple Grove Area Patients: Capacity and Financial Indicators for 2003

								Uncompensated
				Occupancy Rate		Net Income		Care as % of
	Distance from			(as % of	Net Income	as % of	Uncompensated	Operating
	Maple Grove	Licensed Beds	Available Beds	Available Beds)	(\$ millions)	Revenue	Care* (\$ millions)	Expenses
Abbott Northwestern Hospital	20 miles	926	627	75.5%	\$44.1	7.5%	\$6.0	1.1%
Buffalo Hospital	32 miles	65	34	29.7%	\$2.9	8.8%	\$0.7	2.4%
Children's Hospitals and Clinics, Minneapolis	19 miles	153	153	84.6%	\$12.1	2.9%	\$1.8	%6:0
Fairview Northland Regional Hospital	35 miles	41	41	51.4%	(\$2.2)	-3.6%	\$1.5	2.3%
Fairview-University Medical Center	20 miles	1,700	729	%9.69	\$39.5	2.7%	\$3.8	%9.0
Hennepin County Medical Center	19 miles	910	422	71.3%	(\$7.2)	-1.8%	\$21.8	5.3%
Mercy Hospital	11 miles	271	212	%9'82	\$15.3	6.8%	\$3.4	1.6%
Methodist Hospital Park Nicollet Health Services	17 miles	426	370	71.3%	\$17.5	5.3%	\$2.3	0.7%
Monticello-Big Lake Hospital	22 miles	39	18	57.1%	\$1.2	5.4%	\$1.0	3.9%
North Memorial Medical Center	11 miles	518	432	74.0%	\$23.6	7.8%	\$3.3	1.0%
Unity Hospital	14 miles	275	211	66.1%	\$1.7	1.1%	\$3.0	2.0%
Statewide average				59.4%		2.3%		1.6%

\*Uncompensated care is adjusted by a ratio of hospital costs to charges. Source: MDH, Health Care Cost Information System.

Distance from Maple Grove is measured as the driving distance from the Maple Grove Community Center, according to MapQuest.

Table 3

Trends for Maple Grove Area Hospitals

	1999	2000	2001	2002	2003
Total available beds			3,260	3,158	3,249
Inpatient admissions	176,550	180,772	185,029	190,882	190,475
Inpatient days	822,799	849,862	854,346	857,519	858,746
Occupancy rate*	69.1%	71.4%	71.8%	74.4%	72.4%

<sup>\*</sup>calculated based on available beds. For 1999 and 2000, calculation is based on 2001 available beds (data were not collected in 1999 and 2000).

Source: MDH, Health Care Cost Information System.

#### Projections for Hospitals Currently Serving the Maple Grove Area

Each of the three plans that were submitted to MDH for a public interest review contained an analysis of the ability of the Maple Grove area to sustain a hospital. While the question of whether the community can support a hospital is important, it is a different question from whether there is a need for a new hospital in the community. The legislation that established the public interest review process directs MDH to evaluate proposals for exceptions to the hospital moratorium based on the question of the need for the proposed facility, not whether the community can support a new facility.

As the starting point for MDH's analysis of the Maple Grove area, we analyzed the need for a new hospital from the perspective of the hospital system as a whole. Our analysis began with an estimate of what will happen to occupancy rates at hospitals that currently serve the majority of patients living in the Maple Grove area in the absence of a new hospital being built in Maple Grove. These "baseline" estimates incorporate projected changes in population and demographics in the market areas served by these hospitals. The baseline estimates also incorporate a range of assumptions about future hospital use rates, due to the inherent uncertainty in projecting changes in use of services due to factors like technological change. This set of estimates formed the starting point for our analysis, and was the same for each of the three plans submitted to MDH for public interest review.

The overall results from this baseline analysis are presented in Table 4. As shown in the table, the occupancy rate for the eleven hospitals included in this analysis was 74 percent of available beds in 2003.<sup>5</sup> The occupancy rate is projected to increase to 79.4 percent in 2009, and 85.5 percent in 2015 (assuming no increase in available beds). It is important to note that this increasing strain on hospital capacity affects more than just residents of the Maple Grove area. Because the eleven

<sup>&</sup>lt;sup>4</sup> More detail on the methodology we used to create the baseline estimates is included in Appendix 2. This discussion of the results of our analysis does not identify individual hospitals because the data we used to perform the analysis were collected under MDH's authority provided by Minnesota Statutes 62J.301, and Minnesota Statutes 62J.321 Subd. 5(e) prohibits the release of analysis that names any institution without a 21-day period for review and comment.

<sup>&</sup>lt;sup>5</sup> This figure differs from Table 3 because it uses a different data source.

hospitals included in our analysis account for about one-third of total hospital admissions in Minnesota, the issue of rising occupancy rates is an issue that will likely have a much broader impact.

2003 Actual

Table 4
Projections for Hospitals Serving Maple Grove Residents

2009 Projected

2015 Projected

		-	•
Number of discharges	193,402	207,828 Range: 187,045 to 228,610	224,267 Range: 201,840 to 246,304
Number of inpatient days	877,448	943,712 Range: 849,341 to 1,038,084	1,016,040 Range: 914,436 to 1,115,288
Occupancy rate: 2003 available beds	74.0%	79.4% Range: 71.5% to 87.4%	85.5% Range: 77.0% to 93.9%
Occupancy rate: as % of maximum physical capacity		69.6% Range: 62.7% to 76.6	75.0% Range: 67.5% to 82.3%

Source: MDH Health Economics Program. Data sources include Minnesota hospital discharge database, Health Care Cost Information System (HCCIS), and population projections from Claritas, Inc.

As part of the public interest review process, we also conducted an informal survey of hospitals that currently serve patients living in the Maple Grove area to find out whether those hospitals have the physical capacity to expand the number of available beds at their current locations to meet expected growth in demand. We asked these hospitals about the maximum number of beds that they could operate on a permanent basis without undergoing major construction. While there may be issues with the quality of this self-reported data, based on the results of that informal survey, if each of the eleven hospitals increased its number of available beds to the maximum level that would be feasible with its current physical capacity, the projected occupancy rates for 2009 and 2015 are 69.6 percent and 75.0 percent, respectively. One important thing to note about this analysis, however, is that the hospitals that currently serve the largest numbers of Maple Grove area residents did not report much ability to expand the number of available beds without a major construction project; the only hospital that reported having the ability to make a large number of additional beds available without a major construction project is one of the hospitals that is most distant from Maple Grove, and currently serves a small share of the Maple Grove market.

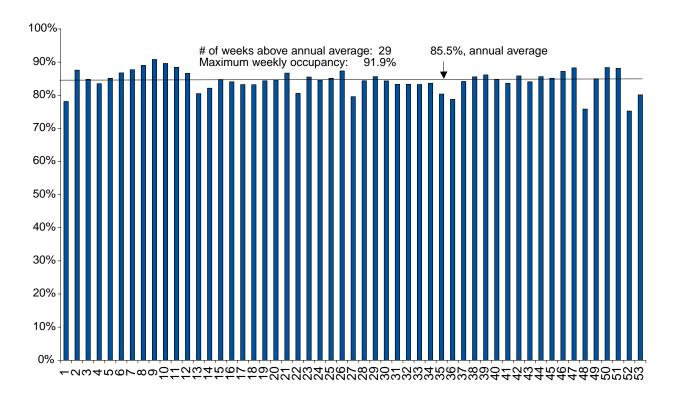
At certain times during the year the occupancy rate for the group of eleven hospitals currently serving most Maple Grove residents is expected to be substantially higher than the average occupancy rate over the entire year. In 2009, the highest projected weekly occupancy rate for the eleven hospitals as a group is 85.4 percent; in 2015, the peak weekly occupancy rate is projected to

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<sup>&</sup>lt;sup>6</sup> We asked the hospitals to answer this question within the context of their current business plan – for example, if their business plan calls for all private rooms and they would not consider converting rooms to semi-private rooms in order to serve a larger number of patients, then they would report their maximum physical capacity based on a configuration of all private rooms.

be 91.9 percent for the group of hospitals currently serving residents of the Maple Grove area. Figure 4 provides an illustration of the variation in projected occupancy rates at different times of the year for the group of eleven existing hospitals that serve residents of the Maple Grove area.

2015 Weekly Projected Occupancy Rates for Hospitals Serving Residents of the Maple Grove Area



Occupancy rates calculated based on available beds.

One key question that arises from this analysis is at what point should a hospital's (or group of hospitals') occupancy rate be considered "too high"? Unlike some other industries, which strive to operate at or near full capacity, hospitals are different. Because the level of demand at any given time is somewhat unpredictable, hospitals generally attempt to operate at a level below full capacity in order to be able to meet unexpected surges in the need for services. In addition, operating at a level too close to full capacity can lead to costly inefficiencies, such as delays in the ability to admit new patients or transfer patients between units.

One approach to answering the question of the "right" occupancy rate would be to define a specific benchmark level above which the occupancy rate is considered too high. Alternatively, one could define a specific number of hospital beds that is needed given an area's population. Both of these approaches have been used extensively in the past, particularly under Certificate of Need regulatory structures. However, more recent analysis of this question has pointed out that the question of

what an appropriate occupancy rate should be requires a much more complex approach than identifying a single number that applies to all hospitals, but instead depends on both hospital size and the number and size of distinct units within the hospital. There is no agreed-upon standard for occupancy rates or threshold for when an occupancy rate should be considered too high in either hospital industry trade publications or peer-reviewed academic research publications. Industry experts that we spoke to indicated that 70 to 80 percent occupancy is an appropriate range, and that costly inefficiencies may occur at occupancy levels above 85 percent.

#### **Analysis of Specific Proposals**

After projecting what occupancy rates at hospitals serving patients from the Maple Grove area would be in the absence of a new hospital, the next step in our analysis was to estimate the impact of a new facility in Maple Grove on admissions, inpatient days, and occupancy rates at these hospitals. Since each of the three proposals to build a hospital in Maple Grove is unique, this analysis was performed separately for each proposal and the results are presented below in the discussion of the specific proposal as it relates to each of the criteria specified in the law.

Importantly, the analysis of each proposal is specific to the service area that was defined by the applicant as the proposed primary service area. The three proposed service areas range in size from 10 to 22 zip codes. For a variety of reasons, such as variation in existing physician affiliations and referral patterns, we believe it is possible that the proposed Maple Grove hospital's service area (the geographic area from which it draws most of its patients) may vary depending on which, if any, of the three proposals is approved by the Legislature. The "true" service area for any new hospital can only be observed after the fact; as a result, it is likely that all of the applicants' proposed service areas are different from what the service area for a hospital built in Maple Grove would eventually be. In this case, there is an especially high degree of uncertainty about the proposed hospital's service area due to the likelihood that as many as three large new ambulatory care centers may be built in the community, which we would expect to have an impact on patterns of hospital referrals. For these reasons, MDH did not attempt to independently define a service area for the proposed Maple Grove hospital.

We used a similar approach to analyze the impact on hospitals currently serving patients from the Maple Grove area in terms of the potential financial impact on these hospitals, including the potential impact on their ability to provide services to nonpaying or low-income patients. These results are also included below in the discussion of how the proposal relates to each of the evaluation criteria in the law.

<sup>&</sup>lt;sup>7</sup> See, for example, Linda V. Green, "How Many Hospital Beds?" Inquiry v. 39, Winter 2002/2003.

## 5. Review of Tri-Care's Proposal for an Exception to the Hospital Moratorium

This section describes the joint proposal by Park Nicollet Health System, Allina Hospitals and Clinics, and Children's Hospitals and Clinics for an exception to the hospital moratorium in order to build a new hospital in Maple Grove. Following a brief description of the proposed project, we evaluate the proposal in light of each of the five factors specified in the statute that established the public interest review process.

#### **Background and Project Description**

This application for a public interest review for an exception to the hospital moratorium involves three large Minnesota-based health care systems: Park Nicollet Health System, Allina Hospitals and Clinics, and Children's Hospitals and Clinics. The parties involved are equity partners in the venture. The three parties involved have adopted the name Maple Grove Tri-Care Partnership to describe their venture. The name "Tri-Care" will be used in this review.

Park Nicollet Health System owns Methodist Hospital in St. Louis Park and operates a large multispecialty clinic, providing care in 45 medical specialties and subspecialties with 543 physicians on staff. Methodist Hospital in St. Louis Park has 426 licensed beds of which 326 are available for patient care. In addition to other areas around the Twin Cities metropolitan region, Park Nicollet currently also has clinics located in Maple Grove and Plymouth, in the service area for the proposed hospital. Methodist hospital currently serves patients in the Maple Grove area.

Allina Hospitals & Clinics owns and operates 11 hospitals in Minnesota, 42 clinics, hospice services, pharmacies, medical equipment, and emergency medical transportation services. Allina owns four of the hospitals currently serving Maple Grove residents: Mercy Hospital, Unity Hospital, Buffalo Hospital, and Abbott Northwestern Hospital. In addition, Allina operates hospitals in Cambridge, New Ulm, Owatonna, Minneapolis, River Falls, Shakopee, and St. Paul. Allina clinics operate around the Twin Cities and in areas beyond the metropolitan area borders. In or near the service area proposed for the Maple Grove hospital, Allina operates clinics in Maple Grove, Plymouth, Champlin, Elk River, and Buffalo.

Children's Hospitals and Clinics is a large pediatric health care organization with pediatric specialty hospitals in Minneapolis and in St. Paul. The Minneapolis Children's hospital serves pediatric patients in the Maple Grove area. Children's also operates an outpatient surgery, diagnostic and rehabilitation center in Minnetonka.

Figure 5 shows the locations of hospitals currently owned and operated by members of the proposed Tri-Care partnership.

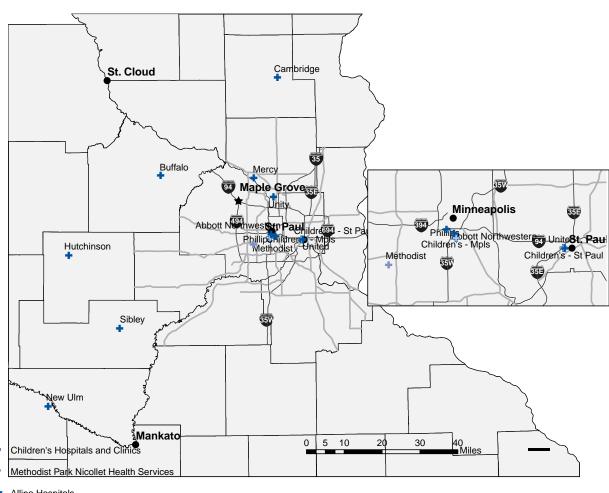


Figure 5 Hospitals Owned by Tri-Care Partners

Allina Hospitals

The Tri-Care application also noted collaboration with various community organizations including the Northwest Hennepin Family Collaborative, Osseo School District 279, and St. Mary's Carondolet Caring Clinics.

Tri-Care proposes to build an acute care hospital on an 84-acre site located at the intersection of Dunkirk Lane and 97th Avenue North in Maple Grove, Minnesota. In addition to the proposed acute care hospital, Tri-Care proposes to construct physician clinic offices, outpatient diagnostic and treatment services, and other ancillary services. Park Nicollet currently holds an option to purchase the parcel of land located at the site, which, according to the information submitted to MDH, requires no transportation infrastructure upgrades for public access to the site.

Tri-Care is proposing a phased construction timetable with 60 to 100 new acute care beds to be built on the Park Nicollet site by 2008. Tri-Care further propose to expand the facility to 100 to 150 acute care beds by 2012, and to 250 beds by 2020. The first phase of the hospital project is

projected to cost \$72 million. No cost figures for the additional hospital phases or the cost of other components of the proposed campus were provided in the application. As noted earlier, Minnesota law does not restrict the ability of a health care provider to construct outpatient facilities, and the ambulatory care center portion of Tri-Care's proposed Maple Grove campus is outside of the scope of the public interest review process established under Minnesota Statutes 144.552.

The proposed hospital-based services to be provided by Tri-Care are as follows:

- Inpatient general medical/surgical services
- Intensive care
- Maternal labor and delivery
- Level II neonatal intensive care
- Normal newborn care
- Inpatient behavioral health services may be added in the future
- Level II trauma and emergency services<sup>8</sup>
- Diagnostic and treatment services:
- Imaging
  - o CT
  - o MRI
  - o Radiographic Fluoroscope
  - Ultrasound
  - o Nuclear medicine
  - o DEXA scan
  - o Mammography
  - o Stereotactic local, breast
- Non-invasive cardiac diagnostics:
  - o EKG
  - Echocardiography
  - Cardiovascular stress test
  - o Cerebrovascular arterial studies
  - Holter monitoring
  - o Non-invasive vascular studies
  - o Pacemaker analysis
- Other Diagnostic Services
  - Audiologic testing
  - Speech evaluation
  - o Pulmonary function testing
  - Laboratories

<sup>&</sup>lt;sup>8</sup> See Appendix 3 for a description of the differences between Level I, II, III, and IV emergency services as defined by the American College of Surgeons.

- Therapies
  - o Physical therapy
  - Occupational therapy
  - o Cardiac rehabilitation
  - Speech therapy
  - o Dialysis
  - o Radiation therapy
- Procedural Care
  - Outpatient surgery
  - Endoscopy

The proposed hospital bed complement is for all new licensed beds, not currently licensed beds to be reallocated from existing capacity. The initial bed configuration proposed by Tri-Care is shown in Table 5.

Table 5

#### Tri-Care's Proposed Breakdown of Inpatient Beds by Service Category

Medical/Surgical/Pediatric48 to 64 bedsIntensive Care8 to 16 bedsSubtotal, Acute Care56 to 80 bedsObstetrics12 to 16 bedsTotal68 to 96 bedsLevel II Neonatal Intensive Care Unit6 to 8 bedsNewborn Nursery12 to 16 bassinets

Source: Tri-Care submission to MDH

#### **Primary Service Area**

Tri-Care proposes a hospital primary service area of twenty-two Zip Codes, spanning Hennepin, Sherburne, and Wright counties in the northwest corridor of the Twin Cities metropolitan area. The communities included in the service area are Albertville, Big Lake, Maple Grove, Buffalo, Champlin, Dayton, Elk River, Hamel, Hanover, Loretto, Monticello, Osseo, Rockford, Rogers, St. Michael, New Hope, Plymouth, and Brooklyn Park.

The population in Tri-Care's proposed service area is projected to increase by 16.2 percent between 2003 and 2009, and by an additional 16.2 percent between 2009 and 2015; these growth rates are substantially higher than the projected statewide population growth of 4.7 percent between 2003 and 2009 and 5.0 percent from 2009 to 2015. In addition to rapid population growth in the proposed service area, the most rapid projected population growth is among the population aged 55 years or older; while this is also true for the state as a whole, growth among this population is

<sup>&</sup>lt;sup>9</sup> Population projections for 2009 are from Claritas, Inc.; projections for 2015 were developed by MDH assuming the same annual growth rate from 2009 to 2015 as projected by Claritas for 2004 to 2009.

expected to be much faster in the service area defined by Tri-Care compared to statewide growth (32.9 percent from 2003 to 2009 compared to 13.5 percent statewide). This combination of rapid population growth and an aging population is expected to increase the demand for hospital services by residents of this area. Based on MDH's analysis, the number of hospitalizations of residents of this area is expected to increase by 20.6 percent from 2003 to 2009, and by an additional 21.0 percent from 2009 to 2015.

## Factor 1: Whether the new hospital or hospital beds are needed to provide timely access to care or access to new or improved services

In order to assess the impact of all three proposals for a Maple Grove hospital that MDH received in terms of whether the hospital is needed to provide timely access to care, we analyzed the impact of each of the proposals on future occupancy rates at existing hospitals that serve residents of the Maple Grove area. We also looked at how the proposals addressed specific service areas such as mental health, obstetrics, and emergency services that were identified by community members as areas of need for additional services.

#### Capacity of existing facilities

Residents of the Maple Grove area were hospitalized in many hospitals throughout the state during 2003, but eleven metro area hospitals provided the bulk of inpatient acute care to residents during that year. These facilities are also dependent, to varying degrees, upon this area for an ongoing proportion of their inpatient volume. The eleven hospitals are: North Memorial, Mercy, Methodist, Abbott Northwestern, Buffalo, Monticello-Big Lake, Hennepin County, Fairview-University, Minneapolis Children's, Unity, and Fairview Northland.

As noted earlier, MDH analysis projects that in the absence of any new hospital capacity being built, occupancy rates at these 11 hospitals are projected to increase from 74.0 percent in 2003 to 79.4 percent and 85.5 percent in 2009 and 2015, respectively. In 2009, six of the eleven hospitals are projected to have occupancy rates above 75 percent; by 2015, ten of the eleven will have occupancy rates above 75 percent and four will exceed 90 percent. As discussed earlier, the usefulness of annual occupancy rates as a measure of the degree to which existing capacity is strained has some limitations, but it can still be useful as a rough guide.

If Tri-Care's proposal for an exception to the hospital moratorium is approved, the addition of new hospital capacity is expected to reduce occupancy rates at existing area hospitals below the rates that are projected if no new hospital is built. Because Tri-Care's proposal involves expanding the size of the hospital over time, the effect of the new hospital on existing hospitals would also increase over time. In our analysis of Tri-Care's proposal, we assumed that the Maple Grove hospital would have 80 beds in 2009 and 120 beds in 2015. Under this scenario, the projected occupancy rate for the group of eleven existing area hospitals would be 77.8 percent in 2009 (compared to 79.4 percent if

<sup>&</sup>lt;sup>10</sup> Additional assumptions and the methodology we used for our analysis are described in more detail in Appendix 2.

no hospital were built), and 82.4 percent in 2015 (compared to 85.5 percent if no hospital were built). In other words, the impact of Tri-Care's proposed Maple Grove hospital would be to reduce occupancy rates at existing hospitals serving the Maple Grove area by 1.6 percentage points in 2009 and 3.1 percentage points in 2015. It is important to note that our projections show that, even if a new facility is built and a certain level of volume is diverted to the new facility, occupancy rates for the existing hospitals are projected to continue to increase due to the combination of population aging and population growth that are projected.

Some hospitals that currently serve Maple Grove area residents would experience a larger impact than others as a result of the Tri-Care proposal. Hospitals that currently serve the largest share of patients from the service area that Tri-Care anticipates for the Maple Grove hospital would likely experience the largest impact. At the eleven existing hospitals, the impact of Tri-Care's proposal on occupancy rates ranges from a decline of 0.5 percentage points to 9.6 percentage points in 2009 compared to the projection with no new hospital; for 2015, the decline in occupancy rates ranges from 0.7 percentage points to 17.4 percentage points compared to no new hospital being built.

Although it is not possible to state definitively what occupancy level is "right" for a hospital or the hospital system as a whole, it seems reasonable to conclude that hospitals in the Maple Grove area will experience increasing strains on capacity in the absence of any new capacity being added to serve patients from this area over the next ten years. As noted earlier, if no new capacity is added, MDH projections show that in 2015 ten of the eleven existing area hospitals will have occupancy rates above 75 percent, and four would have occupancy rates above 90 percent. Under Tri-Care's proposal, we estimate that these strains on capacity would be modestly reduced: only 8 of the eleven hospitals would have occupancy rates above 75 percent in 2015, and only 2 would have occupancy rates above 90 percent.

As noted earlier in this review, it is also important to recognize the considerable diversity of size and service capability among these eleven hospitals. For example, the tertiary care facilities operate many specialty units, such as cardiac, cardiovascular, stroke, orthopedic, and research services that often require specially equipped beds. Some of these beds may not be open to other patients. In another example, the American College of Obstetrics and Gynecologists recommends a target occupancy level of 75% for maternity units given the emergent nature of the care provided. Given the current trend toward specialty units, an overall occupancy level may be more a reflection of the mix of services available than generally available capacity to be filled

#### Distance and Time to Existing Facilities

The plan submitted by Tri-Care argues "the combination of an aging population, traffic congestion, and general population growth poses serious challenges for medical and emergency services in the Maple Grove area. Because many times it can take up to 30 minutes to reach an emergency room, community leaders have openly expressed strong concern about urgent care needs for the area." At the public meeting in Maple Grove, we heard anecdotal stories of people who delay seeking emergency treatment due to the distance from a hospital emergency room, or people who inappropriately use urgent care clinics when they really need to go to a hospital emergency room.

In addition, a recurring theme expressed by numerous Maple Grove residents at the MDH public hearing January 11, 2005 was a concern about family and children's safety, given the driving distance to the nearest Level I trauma center at North Memorial, traffic congestion, and the number of traffic lights encountered en route. North Memorial Health Care and Hennepin County Medical Center are the only American College of Surgeons-verified Level I Trauma Centers in Hennepin County. Driving times can vary substantially depending upon the route taken, time of day, weather and traffic conditions. Helicopter transport with advanced life support is available in the area for the most critical medical emergencies.

Ambulance transport times from Albertville, Buffalo, Champlin, Hanover, Otsego, Rockford and St. Michael to North Memorial averaged over 30 minutes. Within the Hennepin County portion of the service area, North Ambulance provides EMS transportation, both ground and air. EMS transport times may be extended if a emergency department is diverting ambulances to other facilities. EMS diversions may occur if emergency department beds or other beds are full at a hospital, a staff shortage exists, or on-call specialist physicians are unavailable.

Although a reduction in travel time will mean quicker access to hospital care for Maple Grove area residents, it is unclear to what degree having more timely access will improve health outcomes. As part of the public interest review process, MDH conducted a review of published research on the impact that distance and/or travel time to a hospital have on health outcomes. While there is not a large amount of published research on this topic, some researchers have found evidence that increased distance to the nearest hospital is associated with higher mortality from emergent conditions such as heart attacks and unintentional injuries. However, other non-distance or non-time-related factors, such as short Emergency Medical Service (EMS) response times and sophisticated on-scene medical interventions can also improve survival and, in some time-sensitive conditions such as heart attack, stroke, and certain traumas, sustain longer advanced life support transport distances and times. So, while distance to a hospital ER may be a factor for consideration, a well-functioning and timely EMS system also plays an important role in ensuring patient outcomes.

#### Access to Specific Services: Mental Health, Obstetrics, and Emergency Services

At the public meeting on January 11, 2005, residents of the Maple Grove area expressed concerns about access to three specific types of hospital services: mental health, obstetrics, and emergency services. Several community residents stated that there was a shortage of inpatient mental health services; for obstetrics and emergency/trauma services, convenience and a desire for more timely access were the main concerns.

With regard to inpatient mental health services, MDH analysis shows that about 92 percent of all hospitalizations of residents of the Maple Grove area (as defined by Tri-Care) occur at one of the eleven hospitals that we identified as serving a significant number of Maple Grove area residents.

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<sup>&</sup>lt;sup>11</sup> Thomas C. Buchmueller, Mireille Jacobson, and Cheryl Wold, "How Far to the Hospital? The Effect of Hospital Closures on Access to Care," National Bureau of Economic Research Working Paper No. 10700, August 2004.

For psychiatry and chemical dependency services, however, when residents of the Maple Grove area are hospitalized they are much more likely to be hospitalized at a facility other than one of the eleven hospitals that serve most of this market (20 percent and 14 percent of the time for psychiatric and chemical dependency services, respectively). In other words, residents of the Maple Grove area who need to be hospitalized for psychiatric care or chemical dependency are much more likely to leave their local hospital market to receive care than residents who are hospitalized for other reasons. This is consistent with a statewide pattern that individuals who are hospitalized for psychiatric or chemical dependency services are less likely to be hospitalized in their local area. The issue of mental health and chemical dependency inpatient capacity in Minnesota has been discussed at length elsewhere.<sup>12</sup>

Tri-Care's proposal for a Maple Grove hospital, noting that "community demand for behavioral health services is high," indicates a plan in Phase I to provide outpatient and observation services in these areas, as they "construct a viable model for inpatient services." Thus, the initial focus of Tri-Care on behavioral health will be around outpatient services and the use of inpatient behavioral health inpatient beds at other facilities operated by the three partners in Tri-Care.

An additional area of concern for Maple Grove area residents was timely access to obstetric services. Because the population in this area is younger on average than the state as a whole, obstetric admissions represent a higher share of total inpatient admissions from the Maple Grove area than for the state as a whole. In 2003, about 21 percent of hospital admissions from the service area defined by Tri-Care were for obstetric services, compared to 16 percent statewide. The Maple Grove hospital proposed by Tri-Care would include 12 to 16 obstetric beds in Phase I.

Finally, Maple Grove area residents have expressed concerns about timely access to emergency and trauma services. As noted above, there is not much clear evidence about how closer access to an emergency room will affect health outcomes. It should be noted, however, that the emergency services proposed by Tri-Care would meet the American College of Surgeons (ACS) criteria for designation as a level II trauma center, which means that the hospital would provide "comprehensive trauma care either as a supplement to a level I trauma center in a large urban area or as the lead hospital in a less population-dense area." The ACS notes that "Level II centers must meet essentially the same criteria as level I (facilities) but volume performance standards are not required..."

In summary, Tri-Care's proposed Maple Grove hospital does include the obstetric and emergency services mentioned as being of most concern to community residents. The Phase I plans for Tri-Care do not include plans for inpatient behavioral health services, focusing rather on outpatient services. The application does indicate the potential for future inpatient mental health services. The proposed hospital would not offer new or improved services that are not already available at other hospitals nearby.

<sup>&</sup>lt;sup>12</sup> See, for example, "Minnesota Mental Health and Chemical Dependency Treatment Utilization Trends: 1998 to 2002," Minnesota Department of Health, Health Economics Program Issue 2004-07, November 2004.

#### Factor 2: The financial impact of the new hospital or hospital beds on existing acutecare hospitals that have emergency departments in the region

For a number of reasons, there is a high degree of uncertainty involved in predicting the financial impact of any of the three proposals to build a Maple Grove hospital on existing hospitals that currently serve residents of the Maple Grove area. The potential for three large new ambulatory care centers in Maple Grove providing a wide range of specialty care services would almost certainly have a significant impact on which hospitals residents of the Maple Grove area are referred to by their physicians for inpatient services. The combination of this change (which may occur even if the Legislature does not approve any exceptions to the hospital moratorium) with the addition of a new hospital makes it especially difficult to predict the impact on existing hospitals.

In addition, although MDH has access to hospital discharge data that allowed us to analyze and project hospital discharges, inpatient days, and occupancy rates, we do not have any data that allows us to translate the impact of a new hospital on the volume of services provided into an estimate of the specific financial impact of a new hospital on existing hospitals in the region. If a hospital loses patients that it would have served in the absence of the new hospital being built, it not only loses potential revenue but also avoids costs (such as staffing and supplies) that it would have otherwise incurred. Because we do not have information available to us that allows us to calculate the net financial impact of the proposed hospital on other existing hospitals in the region, in this section we focus instead on changes in the volume of business and occupancy rates.

#### Applicant's analysis

Tri-Care's analysis submitted to MDH concludes that because hospitals located in the area are currently at, or nearing, their functional capacity, and because population growth in the Maple Grove service area is expected to add demand for nearly 200 beds in the next fifteen years, the net impact of a new hospital upon existing hospitals will be limited. They hypothesize that most of the admissions to the Maple Grove hospital will occur at the expense of the nearby Allina hospitals in Coon Rapids, Fridley, and Buffalo, with additional primary and secondary care admissions diverted from Abbott Northwestern in Minneapolis and Methodist Hospital in St. Louis Park. Because the level of care for the proposed Tri-Care Maple Grove hospital excludes high intensity, tertiary level services, the impact upon other existing facilities offering such services is predicted by Tri-Care to be small.

Tri-Care cites two recent examples in the Twin Cities metropolitan area where new hospitals or hospital beds have been constructed without an adverse impact upon surrounding facilities. The Woodwinds Hospital in Woodbury and St. Francis in Shakopee share some demographic and projected growth similarities with a potential new facility in Maple Grove. Tri-Care's application analysis concluded that "after three years in operation, the greatest decrease any one hospital experienced was Healtheast's St. John's, who despite a 3.9% decrease in volume from the Woodwinds service area, has experienced an increase in total admissions." "Although the new St. Francis facility in Shakopee has seen a 76% increase in average daily census since 1999, it hasn't hurt other facilities in the southwest metro, which have grown 4%."

#### MDH analysis

There are two ways of looking at the financial impact of a new hospital on existing hospitals: first, in relation to a hospital's current business; and second, in relation to what would have occurred in the absence of the new hospital. The impact of Tri-Care's proposal on existing hospitals in the Maple Grove area varies by hospital, with hospitals that currently serve a large share of the Maple Grove market likely to experience the biggest impact. This is illustrated by the projections described earlier that compare projected occupancy rates at each of the eleven hospitals to the occupancy rates that would be projected in the absence of a new hospital.

When comparing the impact of Tri-Care's proposal in relation to the current patient volume and occupancy rates at existing hospitals, the results of our analysis found that growth in overall demand for services will offset the impact of increased competition for patients from the Maple Grove area. That is, assuming that a new hospital as described in Tri-Care's application were to be constructed in Maple Grove, we estimate that ten of the eleven existing hospitals that currently serve patients from the Maple Grove will experience increases in the total number of inpatient days in 2009 and 2015 compared to 2003; however, it is important to note that, in many cases, the increase in volume is much slower than it would have been in the absence of a new hospital. (The only hospital that is projected to experience a decline in inpatient days in 2015 compared to 2003 as a result of the Tri-Care proposal is a member of the Tri-Care partnership.)

The two facilities not affiliated with the Tri-Care proposal for which we estimate the largest volume impact compared to what would have occurred absent a new facility are North Memorial Health Care and Monticello-Big Lake Hospital. Both North Memorial and Monticello-Big Lake have a relatively high dependency on the Tri-Care proposed service area. In fact, these two facilities have the highest dependency on the proposed service for patients among the eleven existing hospitals that currently serve the Maple Grove area.

One other area of potential impact worth noting is in the area of trauma designation and emergency room services. North Memorial is one of two hospitals in Hennepin County providing American College of Surgeons (ACS) verified Level I trauma services. The Maple Grove hospital proposed by Tri-Care is planned to ultimately operate a Level II trauma service. As noted in ACS criteria, Level IIs typically provide comprehensive trauma care either as supplemental to a Level I center in a large urban area, or as the lead hospital in a less population-dense area. When it begins operating as a Level II trauma center, the proposed Maple Grove hospital may compete with North Memorial for emergency visits and, thus, potentially draw some number of emergency visits and admissions through the ER away from North Memorial, depending on the severity of conditions of the individuals receiving care at the proposed Tri-Care Maple Grove facility.

#### Additional Factors for Consideration

There are three additional factors that may be important in analyzing the potential financial impact of Tri-Care's proposal on existing hospitals that serve patients from the Maple Grove area.

- First, the impact is likely to vary by type of service. Because profitability varies by type of service, this is an important consideration. We did not attempt to specifically estimate the impact on existing hospitals by type of service.
- Second, there is a high degree of uncertainty about how physician referral patterns may change as a result of the new hospital and the multiple new ambulatory care centers that are currently being proposed. Even if the proposed Tri-Care hospital does not directly provide highly specialized services (such as open heart surgery), its association with the partners in the Tri-Care proposal could have an impact on referrals to non-system affiliated hospitals. Our analysis does not incorporate this possible change, but instead uses the information that we have on current travel patterns of patients from the Maple Grove area. However, it is important to note that the change is a possibility that could have an impact.
- The third area relates to patient preference. A common theme heard in our public meeting in Maple Grove was the desire of the community to nearby hospital services. An MDH literature review also showed that patients prefer hospitals closer to home when alternative choices are available. Consumer preferences for nearby hospital services may act as a mitigating factor to any potential shift of highly specialized services away from North Memorial toward system-affiliated hospitals that are more distant from Maple Grove than North Memorial.

In summary, for the 11 primary hospitals providing care to residents in the applicants proposed service area, our analysis finds that the inpatient volumes, even with the construction of a new facility as described in the Tri-Care application, would continue to increase above 2003 levels. However, the increases would generally be at levels that are below what otherwise would have occurred without the construction of a new facility in Maple Grove, with some facilities having larger affects than others. Other factors that are important to consider include the fact that the effect of a new hospital will likely vary by service type; that there is a possibility that physician referral patterns may be altered as a result of the new hospital construction; and the impact that patient preference will have on those referral patterns.

## Factor 3: How the new hospital or hospital beds will affect the ability of existing hospitals in the region to maintain existing staff

The Tri-Care partners estimate that 2,500 of their current employees reside in the Maple Grove area with an unknown number likely to transfer to the proposed facility in order to work closer to home. Tri-Care notes that regardless of the existence of a Maple Grove hospital, increasing demand for health services due to a growing and aging population in the local primary service area will challenge all hospitals to provide enough care capacity and to recruit an adequate workforce. Should a Maple Grove hospital be built, Tri-Care estimates that there will be a shift of workforce

from existing facilities, including their own, to the new facility. Their proposed 60 to 100 bed hospital will require an estimated 360 to 680 employees, depending upon the initial number of beds constructed. Citing the experience of the Woodwinds Hospital in Woodbury, the partners anticipate a need for 138 registered nurses, 9 pharmacists, and 23 radiology technicians within the first few years of operation.

While MDH is unable to predict the specific workforce shifts that may occur from surrounding facilities, there are several factors that may directly or indirectly influence potential job-seeking behavior by persons considering employment in any new facility in Maple Grove. First, for employees living in Maple Grove or the Northwest corridor, the opportunity to work closer to home to reduce commuting time and costs may prove to be an important consideration. Second, for employees working in unionized hospitals with significant earned seniority, potential loss of that seniority may mitigate their willingness to move to a different employer, although the exact effects are unknown.

In recent years, shortages of particular types of medical staff (especially nurses) have resulted in competition among hospitals to attract and retain staff, both in Minnesota and nationally. One reason why there is concern about the impact of a new hospital on the ability of existing hospitals in the region to maintain their staff is that if competition among hospitals for staff intensifies, this would drive up wages at all area hospitals (and therefore contribute to rising health care costs).

According to the Minnesota Department of Employment and Economic Development, the job vacancy rate for nurses in the seven-county Twin Cities metropolitan area was 3 percent in the fourth quarter of 2004. Although the job vacancy rate for nurses in the Twin Cities has declined over the past four years (in the fourth quarter of 2000, the job vacancy rate for nurses was 8 percent), it is still higher than the overall job vacancy rate in the Twin Cities (2 percent in the fourth quarter of 2004). Although the nursing shortage in the Twin Cities appears to have eased somewhat compared to 2000, many factors will likely contribute to continuing shortages into the future. These factors include rising demand for health care services due to population growth, the aging of the population, and technological advance; in addition, Minnesota's nursing workforce is older than average – as these workers begin to retire, shortages will occur if they are not replaced by newly trained professionals. 14

In comparison to the existing 11 hospitals serving residents of the Maple Grove area, the size of Tri-Care's proposed facility is not large. In 2003, the existing hospitals as a group had 3,249 available beds; Tri-Care's proposal would add 60 to 100 beds initially, with the possibility of up to 250 beds by 2020. In other words, while Tri-Care's proposal would add to the local demand for hospital

<sup>&</sup>lt;sup>13</sup> Minnesota Department of Employment and Economic Development, Job Vacancy Surveys for fourth quarter 2000 and fourth quarter 2004.

<sup>&</sup>lt;sup>14</sup> Minnesota Department of Health, Health Economics Program, "Labor Availability and Health Care Costs: Report to the Minnesota Legislature," October 2002.

staff, it is unlikely to have a large impact on the labor market because the proposal is small relative to the existing market; the other factors contributing to labor shortages that are described above may well have a larger impact on staffing shortages than the new hospital capacity proposed by Tri-Care.

## Factor 4: The extent to which the new hospital or hospital beds will provide services to nonpaying or low-income patients relative to the level of services provided to these groups by existing hospitals in the region

In their application, the Tri-Care partners estimate that on an annualized basis, Park Nicollet and Allina provided a total of \$5.4 million in hospital uncompensated care (UC) during 2004 to the Maple Grove service area as defined in their proposal. Overall, the partners in Tri-Care provided \$25.8 million in uncompensated care statewide. This amounted to 1.2% of their operating expenses.

In addition to the hospital uncompensated care, the Tri-Care proposal describes the Healthy Communities Initiative facilitated by the Park Nicollet Foundation. According to the Tri-Care proposal, this initiative is intended to respond to the health care needs of children and families who are underserved or underinsured.

In addition to concerns about the level of UC that will likely be provided by the new hospital, a related concern is whether the new hospital will change the payer mix of existing hospitals in the region that provide relatively large amounts of UC. For example, if a large number of privately insured patients are attracted to the new hospital, this could adversely affect the ability of existing facilities that provide large amounts of UC to continue to serve nonpaying patients. Compared with the state as a whole, the service area proposed by Tri-Care for the Maple Grove hospital has a higher share of residents with private group insurance and a lower share of residents with public coverage, as shown in Table 6. The uninsurance rate for Tri-Care's proposed Maple Grove service area is not statistically different from the state average, although it is directionally lower than the statewide average (the difference is within the margin for error). In spite of what may be a somewhat lower level of uninsured in the community compared to statewide, based on comments from people who attended the January 11, 2005 public meeting, there may also be significant pockets of unmet need in the area.

Table 6
Sources of Health Insurance Coverage, 2001

	Tri-Care's proposed  Maple Grove	
	service area*	Minnesota
Private	83.8%	74.6%
Group	80.5%	69.6%
Individual	3.3%	4.9%
Public	11.4%	20.1%
Uninsured	4.7%	5.4%

<sup>\*</sup>As defined by Tri-Care, includes 22 zip codes.

Source: MDH Health Economics Program analysis of 2001Minnesota Health Access Survey Numbers in bold indicate a statistically significant difference (95% level) from statewide rate.

In order to analyze the potential impact of the proposed Tri-Care Maple Grove hospital on the payer mix of other existing hospitals, we used data from the Minnesota Health Access Survey<sup>15</sup> to estimate sources of health insurance coverage in Tri-Care's proposed Maple Grove service area. We combined these estimates with information on hospital discharges and travel patterns to estimate 1) the insurance coverage distribution for populations served by hospitals that currently provide significant amounts of UC to patients living in this area, and 2) how this distribution would change if Tri-Care's proposed Maple Grove hospital were built. The distribution of coverage in the area served by an existing hospital could change, for example, if the proposed Maple Grove hospital were to draw patients from zip codes with higher than average rates of private insurance coverage. According to our analysis, the payer mix of existing hospitals that provide large amounts of UC would not be changed significantly by Tri-Care's proposed Maple Grove hospital. For example, we estimate that the share of the population in North Memorial's service area that is enrolled in public programs would increase by less than one percentage point by 2015 and the proportion enrolled in private insurance would decrease by a little over one percentage point. Findings for other hospitals providing high levels of uncompensated care were similar.

In summary, while our analysis did show a very small shift away from private coverage and a minor shift toward public coverage, the impacts are very small and likely to be very limited.

#### Factor 5: The views of affected parties

As described above, the process that we used to solicit the views of affected parties included a letter to all hospital administrators in Minnesota, a notice in the State Register, and a public meeting held in Maple Grove. The views of citizens of the Maple Grove area, as expressed at the public meeting on January 11, 2005, pertain mainly to the need for a hospital and for specific services and are reflected above in the discussion of Tri-Care's proposal with regard to the first four statutory review criteria.

<sup>&</sup>lt;sup>15</sup> Although this survey was updated in 2004, we used 2001 data because it has a much larger sample size and produces better estimates of health insurance coverage for small geographic areas.

North Memorial Health Care (NMHC) is the only entity that has expressed concerns about Tri-Care's proposal to build a hospital in Maple Grove. Depending on which geographic area is chosen for analysis, NMHC has either the highest or second-highest market share of any hospital serving the Maple Grove area. According to NMHC, about 30 percent of its admissions are from this area, and so there is significant potential for NMHC to be affected by Tri-Care's proposal to build a hospital in Maple Grove. NMHC has expressed several specific concerns about the Tri-Care proposal:

- NMHC believes that "current occupancy rates are appropriate and that there is no current need to increase hospital bed capacity." (NMHC's proposal for a Maple Grove hospital would transfer currently staffed beds from NMHC's Robbinsdale campus.)
- NMHC states that approval of Tri-Care's proposal could result in "destructive competition that could so financially damage a hospital that, in the end, it would result in a profound anticompetitive effect that would leave health care consumers and purchasers with fewer options," and cites the state's ambulance law as an example of a statutory framework which is similar in construction to the public interest review law.
- NMHC argues that approval of Tri-Care's proposal would create "an anti-competitive
  hospital environment that could make it virtually impossible for any independent provider
  not aligned with a large system to successfully compete in this market." Further, NMHC
  argues that Tri-Care's proposal would result in an undesirable increase in hospital market
  concentration in the Twin Cities area.
- NMHC states that the service area chosen by Tri-Care was "chosen in a calculated effort to diminish the apparent impact on North Memorial" and that the actual impact of the proposal on NMHC would be large.
- NMHC states that it will not experience admissions growth at its Robbinsdale facility that will help to offset the impact of the proposed Tri-Care Maple Grove hospital. According to NMHC, "North Memorial is located in an urban area that is not predicted to grow, except in the Maple Grove area and beyond....Each of [the] population areas around the current North Memorial Robbinsdale urban location is projected to decline in population, unlike the Maple Grove area, which is predicted to grow 9% over the next five years." Population projections from the Metropolitan Council indicate that most of the communities surrounding NMHC are in fact expected to grow, although at a slower rate than many more suburban communities; between 2000 and 2010, Brooklyn Park is expected to grow by 10.6 percent, Columbia Heights by 8.0 percent, and Robbinsdale by 6.2 percent.
- NMHC expresses concerns that a system-affiliated hospital built in Maple Grove, such as that proposed by Tri-Care, would act as a "feeder" of more complex cases to other hospitals in the system.
- NMHC argues that independent, non-system hospitals have administrative and other advantages over larger systems.

- NMHC states that none of the stated reasons for the Tri-Care partnership actually provide any evidence that the collaboration is useful to patients.
- NMHC is also concerned about the potential impact of Tri-Care's proposed Maple Grove hospital on NMHC's ability to retain its existing staff, since a large percentage of NMHC staff live in the Maple Grove area.
- Finally, NMHC argues that Tri-Care's proposed Maple Grove hospital would disproportionately attract privately insured patients away from NMHC in Robbinsdale, resulting in a higher percentage of NMHC patients being low-income or uninsured, and less resources (profits from privately insured patients) to subsidize their care.

Tri-Care has responded to these stated concerns as follows:

- With regard to collaboration, Tri-Care stated:
  - O That the St. Francis Regional Medical Center in Shakopee is an example of how collaboration benefits patients and community.
  - That the collaboration has led to competition in Shakopee.
  - That partnering allows the parties to draw on the relative strengths of each organization.
  - That Northwest Metro area residents endorse the idea of partnership.
- With regard to administrative and other system costs, Tri-Care responded that system
  ownership doesn't automatically increase hospital costs, and that fixed infrastructure costs
  are spread across more than one hospital.
- With regard to NMHC's contention that "current occupancy rates are appropriate and that there is no current need to increase hospital bed capacity," Tri-Care responds that a "nontertiary community hospital in Maple Grove will decompress existing bed capacity by allowing less complex patients to be admitted in Maple Grove, freeing up beds at the soonto-be overstressed west metro tertiary facilities to care for sicker patients." Tri-Care argues that NMHC's proposal to transfer 80 active beds to Maple Grove will result in "strain" on "existing facilities at North Memorial's Robbinsdale hospital and the other West metro tertiary facilities."
- Tri-Care states that the impact of a new Maple Grove hospital will be minimal for three reasons:
  - O Physicians and physician referral patterns are a key determinant of patient admissions, and it is difficult to shift physician loyalty and referral patterns;
  - O Northwest suburban population growth and aging will increase volumes at all hospitals;
  - O The experience of the construction and operation of Woodwinds Hospital and St. Francis Regional Medical Center showed minimal impact on existing facilities in the service areas for those hospitals, and that the experience in Maple Grove will prove similar.

- Tri-Care states that "using a statutory scheme such as the Ambulance Law to make a decision on who should be awarded the license in Maple Grove" is flawed. Tri-Care states that the hospital services are not equivalent to ambulance services, and that "using the Ambulance law to make the Maple Grove hospital is tantamount to creating service areas across the state where only one hospital is allowed to provide inpatient services all in the name of eliminating 'the deleterious effect' of competition. Such a strategy would only lead to the creation of monopolies."
- Tri-Care states that they determined their 22 ZIP code service area based on the combined actual patient origin for the two clinics operated by Park Nicollet and Allina in the Maple Grove area, and that the projected inpatient volumes incorporate similar patterns.
- Tri-Care states that they continue to believe the "development of a Maple Grove hospitals and health campus will not exacerbate the staffing issues in Minnesota."
- Tri-Care argues that in most cities between 2 and 4 million, concentration of hospital ownership appears to similar to that in the Twin Cities, and that one new hospital would not change the Twin Cities mix appreciably.

#### 6. Discussion and Recommendations

The 2004 Legislature established a new step in the process for seeking an exception to Minnesota's hospital moratorium, putting in place a Public Interest review by the Minnesota Department of Health. The proposals to build new inpatient capacity in the Maple Grove area present the first opportunity to apply the new law.

The public interest review law requires a hospital seeking to increase its number of licensed beds or an organization seeking to obtain a hospital license to submit a plan to the MDH. The commissioner is required to review the plan and issue a finding on whether the plan is in the public interest. As mentioned earlier in this report, there are a number of statutory factors the MDH must consider during its review, in addition to other factors the MDH believes are relevant to the review.

The public interest review statute does not define "public interest" nor does it define for which "public" the analysis should be conducted. There could be a variety of different "publics": the citizens of the proposed service area, the citizens of communities not in the proposed service area that could be affected by the proposal, or the citizens of Minnesota. In addition, the statute does not provide direction to MDH on the analysis of situations where more than one hospital is intending to seek an exception to the hospital moratorium for the same or similar geographic area. We received three separate requests for reviews at approximately the same time in November 2004: Fairview Health Services, North Memorial Health Care, and the Maple Grove Tri-Care Partnership. The MDH reviewed all three proposals simultaneously under the public interest review law relative to the statutory factors in Minn. Stat. 144.552, and is issuing separate findings on each plan. The finding in this report is specific to the Tri-Care proposal.

The previous section of the report examined the proposal of Tri-Care in light of the five specific factors MDH must consider as part of the public interest review process. This final section of the report highlights several issues that the Legislature may wish to consider in its deliberations on proposals brought before it for new inpatient capacity in the Maple Grove area. These issues are outlined below.

#### Ability to Support versus Need for a Hospital

During the review process for the Maple Grove hospital proposals, MDH has heard from the community, as well as from those who are interested in seeking an exception to the hospital moratorium to build new inpatient capacity in Maple Grove, that the community can support a new hospital. Based on analysis of population growth in the service areas defined by the three applicants, the likely use of services in the community, and the clearly-stated community desire for inpatient hospital capacity in the community, the Department concurs that the community could support a hospital of the size and scope in the proposals. That is, if a new inpatient facility as described in any of the three applications were constructed, it is unlikely that the hospital would fail due to insufficient usage.

However, it is also important to distinguish between support and need. Specifically, while the ability of a community to support a hospital is an important consideration, the hospital public interest review law requires the MDH to conduct an examination of need. That is, whether a given community can support a hospital is a separate question than whether a new hospital in a given community is necessary to ensure the health outcomes of the residents of the community. Analysis of need must also take into account the capacity of existing facilities that currently serve residents of the community, the likely health care needs of the residents of the community, and any other factors that might influence the availability of services for members of a given community.

In our projections of hospital occupancy, we estimate that, absent any new facility being constructed, the overall occupancy rate of hospitals currently serving the Maple Grove area will grow from 74.0% in 2003 to approximately 79.4% by 2009 and 85.5% by 2015. As mentioned earlier in this report, these estimates of occupancy rates will also vary by facility, depending on patient flows and the expected growth in areas served by these various hospitals. There is no single "right" rate of occupancy. To some degree, the rate of occupancy at which facilities can and should operate depends on the mix of services being provided at that facility. However, based on the projected occupancy figures, it is reasonable to conclude that hospitals serving the Maple Grove market will face increasing capacity strains within the next several years. It is also important to note that the 11 facilities that currently serve Maple Grove also account for approximately one-third of statewide admissions, so the likely increased strain on capacity has an impact on geographic areas beyond Maple Grove as well.

As the Legislature considers proposals to build a new inpatient facility in Maple Grove, it may wish to consider whether the estimated growth in occupancy rates at existing facilities is sufficient to merit the construction of a new facility. Should the legislature determine that some new inpatient capacity is needed to address rising occupancy rates at area hospitals, then the question for policymakers to consider is not whether new capacity should be added, but rather how and where this new capacity should be added: by expansion of existing facilities to the extent that is feasible, or through the construction of a new facility.

#### Hospital Competition and Consolidation

Another issue for consideration is the degree to which the addition of a new hospital in Maple Grove will add to or decrease hospital competition. This is an important issue because, on balance, peer-reviewed studies show that increases in hospital concentration lead to higher hospital prices. The Twin Cities hospital market already operates with a certain degree of "systemness." That is, several hospital systems have a relatively large share of the inpatient market in the metro area: Allina-affiliated hospitals have approximately 30% of the market, Fairview hospitals approximately 20%, and HealthEast hospitals around 10%.

<sup>&</sup>lt;sup>16</sup> See, for example, David Dranove and Richard Lindrooth, "Hospital Consolidation and Costs: Another Look at the Evidence," Journal of Health Economics, Volume 22, Issue 6, November 2003.

There are two ways to think about the issue of hospital competition and concentration for the Twin Cities market: metro-wide and local. A hospital constructed in Maple Grove by an existing hospital system, such as Fairview, Allina, or Children's, would likely increase the level of Twin Cities-wide concentration. However, it's important to note that all of the proposed hospitals for Maple Grove are relatively modest in size and may be unlikely to substantially increase the level of Twin Cities-wide hospital market concentration. In addition, it's difficult in advance to know the exact impact that a new facility in Maple Grove owned by an existing system will have on market concentration overall, since the exact effect depends on patient flow patterns that can only be observed after the fact.

On the other hand, a new hospital constructed in Maple Grove by an existing facility with substantial existing market share in the immediate local area, such as North Memorial Health Care, may increase local concentration levels. This increase in local concentration may be mitigated, at least to some degree, by the fact that North Memorial's proposal does not result in an increase in overall bed capacity. The degree to which prices are increased due to increases in either local or Twin Cities-wide concentration depends on whether prices are set at a local level for services or whether they are set system- and Twin Cities-wide.

#### **Bed Types and Services Provided**

Another consideration for the Legislature in considering granting an exception is the mix of bed types and services provided in any new hospital constructed in Maple Grove. For example, the expected rapid increase in the population of childbearing age in the Maple Grove area is likely to increase the need for obstetric services.<sup>17</sup> In addition, because differentials exist in payment rates by type of service, hospital beds used for different services generate different levels of profitability. For instance, beds for cardiac care are generally profitable, while those used for behavioral health are generally less profitable. Over time this can lead to a situation where Minnesota may have sufficient capacity or over-capacity for profitable services, and an undersupply of beds for services that are less profitable. Evidence suggests that Minnesota may have sufficient supply of certain types of beds and services, but may lack adequate inpatient behavioral health capacity.<sup>18</sup>

In general, all three proposals respond to the likely need into the near future for obstetric services in the Maple Grove area. Two of the three proposals (Fairview and North Memorial) propose to include some level of additional inpatient behavioral health capacity in their initial inpatient construction (12 and 4 beds, respectively), while the third (Tri-Care) does not specifically plan the construction of new inpatient capacity, although it states its intent to "construct a viable model for inpatient services."

<sup>&</sup>lt;sup>17</sup> The population aged 18 to 44 is in the Maple Grove area is projected to grow between 18.3% and 33.9%, depending on the service area defined, compared to 1.7% statewide.

<sup>&</sup>lt;sup>18</sup> See "The Shortage of Psychiatrists and of Inpatient Psychiatric Bed Capacity," Minnesota Psychiatric Society Task Force Report, September 2002 and "Minnesota Mental Health and Chemical Dependency Treatment Trends: 1998-2002," Minnesota Department of Health, Health Economics Program, Issue Brief 2004-07, November 2004.

In considering the proposals to build new inpatient capacity in Maple Grove, the legislature may wish to give strong consideration to whether certain services, such as behavioral health inpatient capacity, should specifically be included as a requirement under any moratorium exception granted. For instance, the legislature could require that a certain percentage of beds of any exception granted be used for behavioral health services.

#### Potential Health Care System Costs

Although not included as a specific statutory criterion under the public interest review law, health care cost is also a policy issue important to the consideration of inpatient hospital construction and expansion. As a matter of policy, states have generally taken some interest in monitoring or in some way constraining the expansion of inpatient hospital facilities. For instance, hospital CON laws still operate, in some form, in 37 states. States have generally shown an interest in inpatient hospital capacity, as it relates to health care cost, for two reasons. First, hospitals are expensive to construct and operate, and those costs are built into the health care system and subsequently into health insurance premiums. Second, some argue that duplication of services increases health care costs under the argument that, in health care, supply of services is likely to induce demand for those services. Laws, such as Minnesota's construction moratorium law, that restrict the construction of new inpatient facilities unless approved in advance, can have the effect of reducing potential duplication of services.

While we did not attempt to estimate the specific impact that the addition of a new inpatient facility in Maple Grove would have on health care costs, it is likely that the construction of any new facility will add at least some additional cost to Minnesota's health care system, although the proposed construction costs of all three proposed projects are relatively modest in comparison to overall state hospital spending. The extent to which the construction of a new hospital is duplicative of existing services and is therefore likely to induce excess demand depends in large part upon whether the existing facilities serving the Maple Grove area have sufficient capacity to serve the population into the future or whether those facilities are sufficiently strained to merit additional capacity. That is, if existing capacity is insufficient to provide services to the Maple Grove community into the future, then policy issues related to construction cost and the potential of induced demand may be less of a concern.

#### **Summary and Recommendations**

Reviews related to the construction of a new inpatient facility in the Maple Grove area are the first under the new public interest review process passed by the 2004 Legislature. The law requires that the MDH issue a finding as to whether the proposal is in the public interest.

As mentioned earlier in this section, the legislation does not define "public" for the purposes of "public interest" and therefore the "public" can be defined in a variety of ways. One potential "public" could be the persons living in the Maple Grove area. With regard to the ability of the community to support a hospital, MDH believes that the community can support a hospital and should one be constructed in the Maple Grove area, it is unlikely that the hospital would fail due to

lack of use. In addition, the construction of a new facility as proposed would provide more convenient access to services for residents in the community. Therefore, we believe it would likely be in the public interest of members of the Maple Grove community if a new hospital were to be constructed.

In examining whether Tri-Care's proposal is in the public interest for Minnesota as a whole, the analysis is more complicated because it must also take into consideration issues such as system capacity, potential cost impact, and the statutory factors, such as the effect of the new inpatient construction on existing facilities, examined in section 5 of this report.

As shown earlier, we project that occupancy rates for hospitals serving the Maple Grove community will increase over the course of the next ten years, and will be at levels that are relatively high by 2015. Based on this analysis, we conclude that hospitals serving the Maple Grove market will face increasing capacity constraints in the next 10 years. In addition, because the hospitals that serve Maple Grove also account for approximately one-third of the state's overall admissions, the strain on these facilities also has an impact on geographic areas beyond the Maple Grove area. MDH concludes that allowing construction of new inpatient capacity of the size and scope proposed by Tri-Care would relieve, at least to some degree, these expected capacity strains.

In conclusion, after examining the proposal submitted by Tri-Care in relation to the factors specifically required by Minn. Stat. 144. 552 and other relevant factors, the Minnesota Department of Health has the following findings and recommendations:

- Tri-Care's proposal to build a new inpatient facility in Maple Grove, Minnesota is in the public interest; and
- The legislature should consider requiring that a certain percentage of hospital beds of any exception granted for the Maple Grove area be dedicated for behavioral health services.

## **Appendix 1**

### **Copies of Comments on the Proposal**



Working together. Supporting family success.

Northwest Mennepin Family Services Collaborative 11200 93rd Avenue North, Maple Grove, Minnesota 55369 / 763-391-7253

October 13, 2004

Mr. Michael Johnson Senior Vice President Park Nicollet Health Services 6500 Excelsior Boulevard St. Louis Park, Minnesota 55426

Dear Mr. Johnson:

Thank you for the energy and commitment that Park Nicollet is contributing to exploring the possibility of a medical campus in the northwestern suburbs of Hennepin County. The Northwest Hennepin Family Services Collaborative especially appreciates the Park Nicollet Foundation's efforts to engage the community in meaningful dialogue about gaps and barriers in services through the Convening On Needs meetings that have been taking place in Maple Grove for over one year.

As you are aware, there is a large gap in medical services in the following areas:

- primary care
- mental health
- emergency health services
- inpatient services
- dental
- eye screening and correction

Access to medical services is a critical issue for families, especially families with children. While transportation continues to be an issue in the northwestern corridor, Park Nicollet's efforts to bring medical partners together to address the gap in medical services will go a long way to begin to ameliorate the lack of services.

I look forward to continuing to work with you and others at Park Nicollet as you move your work forward.

Sincerely,

Gonette M. Zuercher, MMA

Project Coordinator

Serving the Communities of - Brooklyn Center, Brooklyn Park, Champlin, Dayton, Maple Grove, Osseo, Plymouth, Corcoran



January 5, 2004

Scott Leitz, Director Health Economics Program Minnesota Department of Health 85 E. 7<sup>th</sup> Place, Suite 300 St. Paul, MN 55101

Dear Mr. Leitz,

I'm pleased to respond to the Department of Health's letter requesting comments to applications proposing to build a new hospital in the Maple Grove area. As the President of Buffalo Hospital, and interim President Owatonna Hospital, I appreciate the opportunity to provide my thoughts on this matter.

I realize the scope of the law, *Minnesota Statutes 144.552*, limits the focus of the Department's efforts to determining whether or not the area can support the construction of a new facility. However, since three separate proposals have been submitted, there seems to be ample evidence that the population and demographic changes in the area can support new inpatient capacity.

Therefore, the primary purpose of this letter is to explain why I believe the partnership proposal submitted by Allina Hospitals & Clinics, Park Nicollet Health System and Children's Hospitals & Clinics is the preferred option. Collaboration is the most cost-effective way to provide the services that Maple Grove residents want, and a new hospital in Minnesota should reflect this new way of thinking.

Without a collaborative hospital being built, the possibility exists for each health system to build its own expensive technology-driven facilities. Strategic partnerships prevent duplication. For example, instead of Buffalo Hospital building its own heart hospital, we have an extremely well coordinated program to rapidly transfer heart attack patients from Buffalo to Mercy Hospital in Coon Rapids.

Another reason I support the collaborative approach is that Allina has a stake in the success of Buffalo Hospital. Given the proximity of Buffalo to Maple Grove, whoever builds new inpatient capacity in the area could make or break the bottom line of this community hospital. Allina has invested millions of dollars in Buffalo Hospital, including a recent addition to our campus. Most recently, we were the beta site for a new electronic medical record system. Allina has a longstanding tradition of supporting the Buffalo community, and I believe this commitment will continue. Indeed, there will be opportunities to enhance that support and commitment with a greater presence in the area.

As the number of health care facilities increase to meet the demands of a growing and aging population, let us be smarter about creating a truly improved health care system.

Sincerely,

Mary Ellen Wells

President Buffalo Hosnital

Mary Elle Tiller



January 5, 2005

Scott Leitz, Director Health Economics Program Minnesota Department of Health 85 E. 7<sup>th</sup> Place, Suite 300 St. Paul, MN 55101

Dear Mr. Leitz,

As President of New Ulm Medical Center, I would like to respond to your letter regarding the possibility of a new hospital in the Maple Grove area. I am glad that Minnesota is entertaining the idea of a new hospital in a community that appears to have a demonstrated need for one.

However, emotions are charged about health care costs these days, and I think Minnesota must choose a path that truly improves the health care system overall. I believe the partnership of Allina Hospitals and Clinics, Park Nicollet Health Services and Children's Hospitals and Clinics offers the best chance for an innovative model of community health care.

Because health care professionals continually learn from each other, I hope Minnesota supports this new way of thinking about health care. The decision should be based on what is the best for patients.

Sincerely,

Lori Wightman President New Ulm Medical Center Mercy Hospital 4050 Coon Rapids Boulevard N.W. Coon Rapids, MN 55433-2586 763-236-6000 **Unity Hospital**550 Osborne Road N.E.
Fridley, MN 55432-2799
763-236-5000

www.allina.com



January 5, 2005

Scott Leitz, Director Health Economics Program Minnesota Department of Health 85 E. 7<sup>th</sup> Place, Suite 300 St. Paul, MN 55101

Dear Mr. Leitz,

As President of two hospitals that are already serving the citizens of Maple Grove, I have great interest in the ongoing process to assess the need to expand healthcare services in that community to include an inpatient hospital. For almost 40 years, Mercy and Unity Hospitals have been providing nationally recognized healthcare in the northwestern suburbs of the Twin Cities.

As the population of the Maple Grove area continues to grow, it is understandable that the city and its citizens are asking for expanded access to healthcare services. The cross-system collaborative proposal from Allina and its partners expand through partnership, the existing presence in Maple Grove of Allina Hospitals & Clinics, Park Nicollet Health Services and Children's Hospital & Clinics and will provide the most comprehensive medical capabilities available.

I have participated in the success of a similar partnership in Shakopee where I was President of St. Francis Regional Medical Center. St. Francis, a strategic partnership between Allina, Park Nicollet and the Benedictine Health System, demonstrates how interhealth system collaboration can be the most creative, financially prudent and effective way to meet the health care needs of a community.

Sincerely,

Venetia H. M. Kudrle

President

Mercy & Unity Hospitals

enetri H.M. Kudule

701 South Dellwood Cambridge, MN 55008 763-689-7700 Greater MN 1-800-252-4133 www.allina.com

January 5, 2004



Scott Leitz, Director Health Economics Program Minnesota Department of Health 85 E. 7<sup>th</sup> Place, Suite 300 St. Paul, MN 55101

**RE:** Maple Grove Hospital

Dear Mr. Leitz,

Thank you for your interest in my comments regarding the construction of a new hospital in Maple Grove. I serve as the President of Cambridge Medical Center in Cambridge, Minnesota.

I feel my facility will not be directly affected by the construction of a new hospital in Maple Grove, either in patient volumes or staffing. However, I want to express my support for the collaborative proposal submitted by Allina Hospitals & Clinics, Park Nicollet Health Services and Children's Hospital and Clinics. There are many reasons to support this partnership model, but I believe the most important reason is such a facility will provide care in the community where people live, work and attend school. I know how important the Cambridge Medical Center is to the Isanti County community and the work here demonstrates Allina's commitment to providing services where they are needed.

I know firsthand that Allina has a proven track record of focusing on care delivery in communities. In 1995, Memorial Hospital and PMA collectively joined Allina Health System, allowing the clinic and hospital to pursue a \$12 million dollar remodeling and expansion project. This was funded by Allina. The merger of the hospital and clinic combined to form the Cambridge Medical Center. The infusion of capital from Allina Hospitals & Clinics is responsible for helping to make Cambridge Medical Center an important and vibrant health care provider for this region.

With ever-increasing pressure on health care dollars it seems that a strategic partnership to build facilities makes sense. It is provides the best way to share expertise, experience and expense.

Sincerely,

Dennis J. Doran

President, Cambridge Medical Center



952-403-3000

January 6, 2004

Scott Leitz, Director Health Economics Program Minnesota Department of Health 85 E. 7<sup>th</sup> Place, Suite 300 St. Paul, MN 55101

Dear Mr. Leitz,

This letter is in response to your request for comments regarding the construction of a new hospital in the Maple Grove area. I serve as the President of St. Francis Regional Medical Center, which is located in Shakopee, Minnesota. St. Francis is a collaboration of Allina Hospitals & Clinics, Park Nicollet Health Services and the Benedictine Health System. I have been the President of St. Francis for the past three years.

I understand the law requires your Department to assess the need and impact of a new hospital in the Maple Grove area. Because I run the St. Francis Regional Medical Center, I feel I am in a good position to comment on the success of a collaborative model. Additionally, since Shakopee is a rapidly growing suburb, like Maple Grove, I believe the demographics are quite similar to the St. Francis service area enabling viable comparisons.

In 1996, St. Francis opened the doors of a new campus. Since that time, patient volumes have grown dramatically, new services have been added, and the overall quality of health services available to the local residents has improved. We recently had the ground breaking for the 3<sup>rd</sup> expansion of St. Francis since 1996. The success of St. Francis signals that Allina and Park Nicollet have a track record of successfully partnering to deliver community health care services.

St. Francis has also enjoyed an excellent relationship with Children's Hospital. In the late 1990's, St. Francis brought Children Hospital in as a partner to help us improve the overall quality of care that we provide to pediatric patients. Children's Hospital actually provided management and nursing staff for our pediatric inpatient unit for more than three years until we had developed the ability to manage the service internally. Children's continues to work with us on a routine basis to improve the care we offer to our smallest patients.

The ability to draw upon the resources of Park Nicollet, Allina, and Children's would provide the Maple Grove area the highest quality patient care and administrative services they want and need. Maple Grove, like Scott County, is among the fastest growing regions in the state. Given the experience in the Scott County area, I know patients want services close to home, with the ability to access more advanced tertiary care at affiliated facilities when necessary.

Another important consideration is that the growth of St. Francis has not come at the detriment of other local hospitals. The rapid population growth in a burgeoning suburb allows for the development of a new facility without negatively impacting others. My understanding of Maple Grove is that it is far enough away from other facilities that the development of a new campus would not significantly risk the viability of any other hospitals.

In 2005, health care providers are facing tough decisions about resource allocation. Demand continues to grow; however, the capital available to meet these needs is in short supply. The future of quality affordable health care delivery will depend on creative and innovative ways of providing care. That is why collaborations for major capital projects, like a new inpatient facility, must be a key part of the state's future health care infrastructure. The commitment of Park Nicollet, Allina, and the Benedictine Health System leadership as well as support from Children's Hospital has certainly made St. Francis a success story. If you have any questions, please feel free to contact me at 952-403-2400. Thank you for taking the time to consider my comments.

Sincerely,

Tom O'Connor

President St. Francis Medical Center

333 North Smith Avenue St. Paul, MN 55102-2389 651-241-8816 mark.mishek@allina.com

Mark G. Mishek, President

January 10, 2005



Scott Leitz, Director Health Economics Program Minnesota Department of Health 85 E. 7<sup>th</sup> Place, Suite 300 St. Paul, MN 55101

Dear Mr. Leitz,

I am writing in response to your letter requesting comments concerning the effect a new hospital in Maple Grove might have on other hospitals. This situation reminds me of the establishment of Woodwinds Hospital in Maplewood several years ago, and the controversy surrounding the planned closing of St. Joseph's Hospital in St. Paul.

What has happened since then demonstrates that even the smartest forecasters cannot always predict the future accurately. Woodwinds appears to be a healthy suburban hospital, and St. Joseph's is on a course of growth and renewal. Other hospitals, including United Hospital in St. Paul, of which I am President, were not adversely affected by Woodwinds. In fact, United is experiencing healthy growth at this time

A similar situation exists in Maple Grove, but times have changed. The difference today is the real concern over health care costs and a heightened responsibility to be good stewards of resources.

That is why I am a believer of collaboration and strongly support the proposal by Allina Hospitals and Clinics, Park Nicollet Health Services and Children's Hospitals and Clinics. The new hospital would have the advantage of working with institutions that provide world-class medical care with the financial ability to quickly provide the services that people in Maple Grove want.

These health care providers also have a tradition of community involvement, and their experience will help the new hospital mature with the community. Whether the need is prevention, primary, emergency, critical or charity care, this partnership represents the best in all specialties and for all ages.

Sincerely,

Mark Mishek, President

Mas & Mislek

United Hospital

Allina Hospitals & Clinics

# Appendix 2 Methodology

This appendix provides additional details on MDH's analysis of the application for public interest review. It describes the methods and data that we used to:

- Project future utilization and occupancy rates at hospitals currently serving residents of the Maple Grove area in the absence of a new hospital being built in Maple Grove;
- Estimate the impact of the proposed Maple Grove hospital on existing hospitals that serve residents of the Maple Grove area; and
- Analyze the potential shift in payer mix at existing hospitals as a result of the proposed Maple Grove hospital.

#### Projecting Hospital Use and Occupancy in the Absence of a New Hospital

This analysis focused on eleven hospitals that were identified as (a) holding a significant market share of the discharges from the Maple Grove area (as defined by the applicant); (b) having a high dependency on patients from the Maple Grove area (even if the hospital does not have a large share of the total market, it may be very dependent on the Maple Grove area as a source of admissions), or (c) being a major safety-net hospital provider in the region. The hospitals included in this analysis were Abbott Northwestern Hospital, Buffalo Hospital, Children's Hospital in Minneapolis, Fairview Northland Regional Hospital, Fairview-University Medical Center, Hennepin County Medical Center, Mercy Hospital, Methodist Hospital Park Nicollet Health Services, Monticello-Big Lake Hospital, North Memorial Medical Center, and Unity Hospital.

We used Minnesota hospital inpatient discharge data from calendar year 2003, excluding discharges of normal newborns. This data includes information on the patient's zip code and age. First, we calculated occupancy rates for each of the eleven hospitals and for the eleven hospitals as a group in 2003.

Next, we projected inpatient volumes and occupancy rates to 2009 and 2015. In order to take account of population growth and demographic change that may be occurring in a particular hospital's service area, we looked specifically at the zip codes from which most of the hospital's patients originate. We chose to define this area as the geographic area (group of zip codes) from which the top 75 percent of the hospital's discharges of Minnesota residents originated in 2003. For each of the eleven hospitals, we calculated hospital-specific and age-specific hospitalization rates for the population living in the geographic area as defined above. We used projections of future

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<sup>&</sup>lt;sup>19</sup> Population estimates by zip code and age were obtained from Claritas, Inc. for 2000, 2004 and 2009. We estimated 2003 population by assuming a constant average annual growth rate from 2000 to 2004. We projected forward to 2015 by applying the same average annual growth rate estimated by Claritas from 2004 to 2009.

population (by age group) in the same geographic area to project future hospital volumes.<sup>19</sup> The geographic areas that comprised the remaining 25 percent of the hospital's discharges of Minnesota residents were treated as a group for the purpose of projecting future use of hospital services, and we assumed that the number of discharges of non-Minnesota residents would grow at the same rate as discharges of residents of the state.

The major assumptions that we made in this analysis are as follows:

- We assumed that hospitalization rates by age group would be the same as they were in 2003. To take account of potential future changes in hospitalization rates, we also created projections assuming a range of future use rates either a 10% increase or 10% decrease in hospitalization rates for each age group. Factors that could cause future hospitalization rates to increase include rising levels of disease (for example, conditions associated with obesity) or technological change; on the other hand, technological change can also be a major driver of reductions in hospitalization rates. (Changes in overall hospital utilization due to the projected aging of the population are accounted for already by the fact that the analysis is done separately for each age group.)
- We assumed that the average length of stay would also be unchanged compared to 2003. Although the average length of a hospital stay declined in Minnesota from 5.1 days in 1993 to 4.3 days in 2003, the average length of stay has been stable over the past five years.
- We assumed that average annual population growth for the geographic areas defined for each hospital would be the same for 2009 to 2015 as projected by Claritas, Inc. for 2004 to 2009. To the degree that this method might overstate or understate actual population growth during this period, our estimates of future hospital use would also be overstated or understated.
- Finally, we assumed that the group of zip codes from which each hospital receives its core business (the geographic area accounting for 75% of discharges) would remain the same over time.

Finally, because calculating occupancy rates over an entire year does not adequately capture variations in occupancy rates that occur at different times of the year, we projected seasonal occupancy rates for 2009 and 2015 by assuming that the distribution of inpatient days across the year would be the same as it was for 2003. In order to account for hospital days that occurred in 2003 but are missing from our data set because the patient was not discharged until 2004, we used hospital days from patients who were admitted in 2002 but not discharged until 2003 as a proxy.

## Estimating the Impact of the Proposed Hospital on Existing Hospitals That Serve Residents of the Maple Grove Area

In order to calculate the impact of the proposed hospital on existing hospitals that serve residents of the Maple Grove area, we estimated the potential impact on discharges, inpatient days, and occupancy rates at each of the eleven hospitals. First, based on the applicants' submissions, <sup>20</sup> we calculated the total number of bed days that the new Maple Grove facility is designed to accommodate, incorporating information from the applicants on both the size of the facility and the expected occupancy rate. We calculated the impact on existing hospitals by assuming that the new facility would in fact provide the volume of inpatient services consistent with the proposed size and occupancy rate anticipated by the proposal. We also assumed that all of the patients served by the Maple Grove Hospital would come from within the applicant's defined service area. Our estimate of the impact of the facility is therefore a conservative estimate, representing an upper bound on the volume of inpatient services that would be shifted away from existing hospitals.

To estimate the impact on individual hospitals, we assumed that the hospital's market share of the services provided to Maple Grove area residents at hospitals other than the proposed new facility would be the same as its current market share among the group of eleven existing hospitals. Essentially, this assumes that people who do not receive services at the proposed Maple Grove hospital will maintain the same travel patterns that currently exist. As noted in the main text of the report, however, there is a high level of uncertainty about how travel patterns may change. There are two main factors contributing to this uncertainty: first, the possibility of as many as three large new ambulatory care centers in the community, which would likely have an impact on physician referral patterns; and second, the possibility that a system-affiliated hospital in Maple Grove could affect the pattern of referrals to other hospitals for services not provided directly at the proposed Maple Grove hospital. For each hospital, we estimated the impact of the proposed Maple Grove hospital on existing hospitals as the difference between a) projected volumes in the absence of a new hospital and b) projected volumes incorporating the loss of volume from the addition of a new facility in Maple Grove.

#### Analyzing Potential Payer Mix Shift

To estimate the potential effect of the proposed Maple Grove hospital on payer mix for existing hospitals, we calculated the distribution of insurance coverage at the zip-code or zip-code-group level for the core service areas of several hospitals. For this analysis, we limited the list of hospitals to those that are either 1) most likely to be affected by the proposed Maple Grove hospital, or 2) major providers of uncompensated care in the region. We used data from the 2001 Minnesota Health Access Survey, which was a health insurance survey of over 27,000 Minnesota households,

<sup>&</sup>lt;sup>20</sup> For the Tri-Care proposal, we assume an 80-bed hospital for 2009 that will increase to 120 beds in 2015. Fairview Health Services' design anticipates also an 80-bed hospital in 2009, which it projects to expand to 240 beds in 2015. Because NMHC has indicated that they are only seeking legislative approval for the transfer of 80 beds at this time, this analysis assumes 80 beds in both 2009 and 2015. (NMHC has indicated that it may request another exception from the hospital moratorium in order to expand its proposed Maple Grove hospital in the future.)

to estimate insurance coverage for zip codes, or for groups of zip codes where there was insufficient data to estimate it at the zip code level. We aggregated these estimates of insurance status by zip code to the geographic area from which the top 75 percent of a hospital's discharges originated in 2003, as defined above in the projection of future demand for hospital services.

Next, we weighted our estimates of the sources of insurance coverage in the geographic area according to the proportion of the hospital's discharges from each zip code or group of zip codes.. This provided an approximation of the distribution of insurance coverage in the geographic area from which the hospital draws most of its patients. We repeated this analysis for 2009 and 2015 for 1) the projections of inpatient volumes in the absence of a new hospital and 2) the projections with the proposed new hospital.

# Appendix 3 American College of Surgeons Classification of Trauma Centers

American College of Surgeons Committee on Trauma Classification System of Trauma Center Level

#### **ACS Levels and Descriptions**

#### Level I

Provides comprehensive trauma care, serves as a regional resource, and provides leadership in education, research, and system planning.

A level I center is required to have immediate availability of trauma surgeons, anesthesiologists, physician specialists, nurses, and resuscitation equipment. American College of Surgeons' volume performance criteria further stipulate that level I centers treat 1200 admissions a year or 240 major trauma patients per year or an average of 35 major trauma patients per surgeon

#### Level II

Provides comprehensive trauma care either as a supplement to a level I trauma center in a large urban area or as the lead hospital in a less population-dense area.

Level II centers must meet essentially the same criteria as level I but volume performance standards are not required and may depend on the geographic area served. Centers are not expected to provide leadership in teaching and research.

#### Level III

Provides prompt assessment, resuscitation, emergency surgery, and stabilization with transfer to a level I or II as indicated.

Level III facilities typically serve communities that do not have immediate access to a level I or II trauma center.

#### Level IV & V

Provides advanced trauma life support prior to patient transfer in remote areas in which no higher level of care is available.

The key role of the level IV center is to resuscitate and stabilize patients and arrange for their transfer to the closest, most appropriate trauma center level facility.

Level V trauma centers are not formally recognized by the American College of Surgeons, but they are used by some states to further categorize hospitals providing life support prior to transfer.

Source: MacKenzie EJ et. al. National Inventory of Hospital Trauma Centers. JAMA 2003 Mar 26; 289(12):1516. ©2003 American Medical Association

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