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Hospital Public Interest Review: Proposal for a Specialty Psychiatric Hospital in Perham, Minnesota

Minnesota Department of Health
Report to the Minnesota Legislature 2014

April, 2014

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Protecting, maintaining and improving the health of all Minnesotans

April 8, 2014

The Honorable Tony Lourey
Chair, Health and Human Services Finance Division
Minnesota Senate
Room 120, State Capitol
75 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155-1606

The Honorable Tom Huntley
Chair, Health and Human Services Finance Committee
Minnesota House of Representatives
585 State Office Building
100 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, MN 55155-1606

The Honorable Kathy Sheran
Chair, Health, Human Services and Housing Committee
Minnesota Senate
Room 120, State Capitol
75 Rev. Dr. Martin Luther King Jr. Blvd.
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The Honorable Tina Liebling
Chair, Health and Human Services Policy Committee
Minnesota House of Representatives
367 State Office Building
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Saint Paul, MN 55155-1606

To the Honorable Chairs:

Minnesota Statutes, Section 144.552 requires that any hospital seeking to increase its number of licensed beds or an organization seeking to obtain a hospital license must submit a plan to the Commissioner of Health. The Commissioner is required to review each plan submitted under Minnesota Statutes, Section 144.552 and issue a finding on whether the plan is in the public interest.

In January 2013, the Minnesota Department of Health (MDH) began a public interest review of a plan submitted in 2012 by Perham Health to establish a 12 bed psychiatric hospital in Perham, Minnesota. Perham Health is seeking legislative approval to open and operate this facility. The enclosed report on the public interest review conducted by the MDH is a follow-up to the preliminary opinion issued by MDH on March 29, 2013, which was communicated to the applicant and to the Legislature at that time.

The enclosed report finds that **it is not in the public interest at this point that Perham Health creates a freestanding specialty psychiatric hospital for elderly patients in Perham, Minnesota**. Our findings are the result of analyzing current hospitalization patterns of elderly psychiatric patients in the Perham service area, projecting demographic trends, conducting a literature review, discussing relevant topics with clinical and policy experts in mental health treatment, and seeking formal public comments on the proposal.

If you have questions or concerns regarding this study, please contact Stefan Gildemeister, the State Health Economist, at 651-201-3554 or stefan.gildemeister@state.mn.us.

Sincerely,

Edward P. Ehlinger, M.D., M.S.P.H
Commissioner
P.O. Box 64975
St. Paul, MN 55164-0975

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Table of Contents

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Section 1: Overview of Hospital Public Interest Review Process

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.[1] As originally enacted, the law includes specific exceptions to the moratorium on new hospital capacity. Other exceptions have been added over time, and there are currently 24 exceptions listed in the statute. Many of these exceptions apply to specific facilities, but some apply more broadly; for example, exception 10 allows for the relocation of a hospital within five miles of its original site under some circumstances.

In 2004, the Minnesota State Legislature established a new policy for reviewing proposals for exceptions to the hospital moratorium statute.[2] Under this policy, hospitals that are seeking an exception to the moratorium must submit a plan to the Minnesota Department of Health (MDH) for the completion of a "public interest review." The law requires that MDH review each plan and issue a finding on whether or not the plan is in the public interest. MDH is required to review the proposal based on a minimum of five factors outlined in Minnesota Statute 144.552, including:

- 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 or services provided to these groups by existing hospitals in the region; and
- The views of affected parties.

The statute requires that MDH complete the public interest review within 90 days. MDH may use up to six months for a review if there are extenuating circumstances present; public interest reviews cannot start until applications are complete.

Authority to approve exceptions to the hospital moratorium rests with the Legislature.

[1] Minnesota Statutes, Section 144.551.

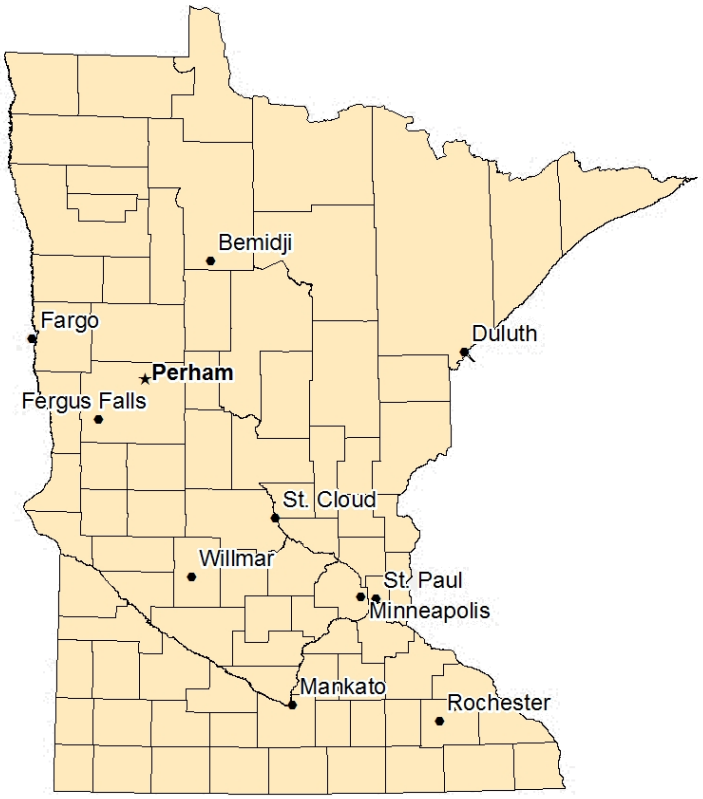
[2] Minnesota Statutes, Section 144.552.

Section 2: Description of Perham Health Proposed Psychiatric Hospital

In July 2012, Perham Health, a non-profit health care organization, submitted to the Commissioner of Health an application for exception to the moratorium in which it proposed to establish in Perham, Minnesota a 12-bed psychiatric hospital serving elderly patients.[3] After working with the applicant to obtain necessary substantiating information and additional detail needed to complete a public interest review, MDH informed Perham Health on January 22, 2013 it considered the application complete and would begin the required review.

Background and Project Description

Perham Health is part of the Perham Hospital District, which is owned by the Minnesota cities of Perham, Dent, and Richville, as well as the Minnesota townships of Pine Lake, Corliss, Gorman, Dead Lake, Perham, Dora, Otter Tail, Rush Lake, Star Lake, and Edna, located in west central Minnesota. The hospital district was established in 1975 under Minnesota Statutes, Sections 447.31 to 447.37, to provide inpatient hospital and nursing home care to local municipalities. Currently, the district is licensed by MDH to operate an acute-care hospital, a 96 bed skilled nursing facility, and a home health agency. It also owns and operates a senior housing facility (and manages a second) as well as a retail pharmacy. Prior to the 2009 merger of Perham Health and the MeritCare Health System into the integrated Sanford Health System (headquartered in in Fargo, ND), the hospital had been managed by MeritCare for over 20 years. The district employs about 375 people from the region, or about 245 full-time equivalent employees (FTEs).



The Perham Health acute care hospital is a 25-bed facility that is licensed as a Medicare Critical Access Hospital (CAH). In 2012 Perham Health began hospital operations in a $38.7 million replacement facility near its original location. Similar to other rural Minnesota hospitals, the Perham Health hospital serves a relatively small population spread over a large geographic area.

Table 1 below shows the recent utilization and financial trends for Perham Health's acute care hospital. The hospital experienced relatively low growth in inpatient services and high growth in outpatient

[3] The application by Perham Health and all supporting documentation, including the views of affected parties, can be found online at: www.health.state.mn.us/divs/hpsc/hep/moratorium/index.html.

services from 2007 to 2011, mirroring trends seen elsewhere in the state.[4] During this time, the inpatient hospital bed occupancy rate was essentially flat. These trends likely have contributed to the downward trend in the operating margin of the hospital; it declined from 19.1 percent in 2007 to 12.1 percent in 2011.

Table 1: Utilization and Financial Statistics for Perham Health Hospital, 2007-2011

	2007	2008	2009	2010	2011
Acute Care Admissions	650	682	721	651	698
Acute Care Patient Days	2,065	1,970	2,042	1,759	2,018
Outpatient Visits	15,701	22,099	22,642	22,337	32,579
ER Visits	4,067	4,108	4,468	4,495	5,177
Operating Margin[5]	19.1%	17.5%	16.2%	17.5%	12.1%
Occupancy Rate[6]	22.6%	21.6%	22.4%	19.3%	22.1%

Source: MDH analysis of the Health Care Cost Information System.

Perham Health Proposed New Psychiatric Hospital

As indicated in the application and in supporting materials, Perham Health is proposing to establish a new 12 bed psychiatric hospital to treat geriatric patients. The proposed facility is to utilize the former site of Perham Hospital and Memorial Home, which is a vacant one-level hospital building with approximately 40,000 square feet. The building is owned by Perham Health and is located adjacent to Perham Nursing Home; it is approximately one mile from the newly constructed Perham hospital and clinic facility. The estimated cost of construction to convert the vacant facility is $1 million. It will be financed in its entirety by Perham Health. The application lists several security updates to the facility such as locked doors, high visibility and sight lines, video cameras at exits, and active therapy rooms, among others.

According to information submitted by Perham Health, the facility is intended for patients age 65 and older suffering from acute psychiatric and behavioral symptoms, and for patients 55 and older with early onset Alzheimer's disease or dementia with behavioral symptoms present. This facility is not intended for the chronically mentally ill population or for patients younger than 55 years of age.

The application indicates that the following services will be provided to patients at the facility:

- Assessment and diagnosis;
- Behavioral management;
- Medication adjustment and/or stabilization;
- 24-hour nursing care;
- Discharge planning and referral services; and
- Development of specialized education plans for patients and caregivers.

[4] Minnesota Department of Health. (2013). Trends at Minnesota's Community Hospitals, 2008 to 2011. http://www.health.state.mn.us/divs/hpsc/hep/publications/legislative/trendsmncommhosp.pdf.

[5] Hospital operating margin is operating income (operating revenue in excess of operating expenses) as a percent of operating revenue.

[6] Calculated based on the number of available beds or the number of beds under the hospital license that are immediately available for use or could be brought online within a short period of time.

Chemical dependency and detoxification services will not be provided by the facility under the current proposal.[7]

The proposal anticipates that the average length of stay at the facility will be 12 days and is expected to operate at a daily census of nine inpatient beds (out of a total of 12 beds). This utilization rate would result in an occupancy rate of 69 percent (3,240 patient days and 216 admissions per year). The proposed Primary Service Area (PSA) as defined by Perham Health in its application is described by a 50 mile radius surrounding the location of the facility.[8] This includes zip codes from portions of Otter Tail, Clay, Hubbard, Todd, Wadena, Becker, Wilkin, Douglas, and Grant counties. Appendix B shows the locations of other existing hospitals that serve psychiatric patients from this area.

The proposal identifies that staff for the psychiatric facility will include approximately four full-time equivalent Registered Nurses (RNs), four Certified Nursing Assistants (CNAs), and four Licensed Practical Nurses (LPNs) in addition to other non-medical staff. A part-time psychiatrist is expected to serve as Program Medical Director, and a local physician will serve as a consulting medical physician. The application indicates that the number of full-time equivalent (FTE) employees will increase as the daily census increases, with an expected total of 15 FTEs at full census.

Perham Health has indicated its intent to apply for exemption from the Medicare Prospective Payment System from the Centers for Medicare and Medicaid Services (CMS). This requires meeting CMS operational criteria, including: specification of admissions requirements for Medicare and non-Medicare patients, utilization review, and provision of inpatient beds that are separate from the other hospital beds. Inpatient psychiatric facilities must meet additional CMS criteria for diagnostics, evaluation and treatment, recordkeeping, discharge, staffing, psychological and social services, and therapeutic activities. The proposed hospital must qualify and meet all requirements to receive payments from CMS on a fee-for-service basis instead of a flat dollar amount per patient.

Perham Health's geriatric facility would not be considered an "Institution for Mental Disease" (IMD) according to federal law because the proposed facility has fewer than 17 inpatient psychiatric beds and is primarily intended to treat patients older than 65 years. This means federal and state Medicaid contributions *would* be made on behalf of eligible patients who are admitted to the proposed facility.

[7] In supplemental information, Perham Health indicates that inpatient services will include active psychotherapy, recreational therapy, activity therapy, occupational therapy, as well as individualized and family therapy.

[8] This public interest review is limited to the primary service area reported by Perham Health to MDH in January of 2013 when the official review was started.

Section 3: Evaluation of Perham Health's Proposal in Relation to Statutory Review Criteria

The purpose of this section of the public interest review is to evaluate Perham Health's application for legislative exception consistent with the five factors outlined in Minnesota Statutes 144.552, as well as other relevant criteria.

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

Perham Health's main rationale to substantiate the need for more inpatient psychiatric beds is that there is currently a lack of access to appropriate inpatient capacity for geriatric psychiatric patients in the area, and that this access problem will be exacerbated in the future. There are a variety of possibilities to make this case. Current access barriers might exist since capacity might not meet demand or because capacity is used by patients that could have been treated in outpatient settings but are not, for a variety of reasons. Alternatively, there could be sufficient capacity to meet *current* demand, but capacity could fall short of potential increases in future demand resulting both from the growth in the elderly population (aging, living longer) or increases in the need for mental health services. Finally, increased demand for services may result from health benefit expansions created by federal and state laws; however, increased access to insurance coverage and preventive services may also lessen the need for inpatient care. Ultimately, though, barriers to inpatient care could result in patients facing longer wait times or additional travel to obtain care.

To evaluate the extent to which there is a lack, or potential lack, of access to mental health services for this specific patient population and geographic region, MDH's analysis considered the following questions:

- **What is current inpatient capacity and utilization in the proposed hospital service area:** How many geriatric patients from the Perham primary service area required treatment? Where have these patients received treatment? How has capacity for needed care and utilization of services changed over the past several years? What evidence is there of a potential shortage of capacity and how does this shortage manifests in the region?
- **If new beds are needed, is the proposed facility the best way to meet this need:** How does the mix of services that is proposed for the new hospital compare to the services that are needed by geriatric psychiatric patients in this area of Minnesota? What are the community-based treatment options? Can this facility effectively treat geriatric patients with complex medical health care needs? Is adding more beds the solution, or would enhancing other types of services reduce the potential need for inpatient mental health services?

Current Inpatient Capacity and Utilization

As shown in Table 2, in the area of approximately 100 miles surrounding Perham, Minnesota, there are 90 inpatient beds in six specialty units dedicated to psychiatric care. Most of the capacity, 64 percent, is located at community hospitals, with the remainder located at state-operated Community Behavioral Health Hospitals (CBHH).[9] Perham area patients with psychiatric diagnoses were also served at other hospitals with psychiatric units, as well as at hospitals without psychiatric units. Generally, occupancy of psychiatric bed capacity was low at community hospitals (between 13 and 45 percent), while occupancy was 61 and 70 percent at the CBHHs.

Lakewood Health System, like Perham Health hospital, is a critical access hospital and operates a geriatric psychiatric program. Lakewood's psychiatric beds are located in a freestanding facility similar to the facility that Perham is proposing. Likewise, Sanford Bemidji also operates geriatric psychiatric beds in a freestanding facility. MDH analysis of hospital data found that a minority of geriatric psychiatric patients are admitted to hospitals that do not operate separate units for delivering inpatient psychiatric services. These patients usually resided in a zip code near those facilities and presented with a high number of medical comorbidities.

Table 2: Inpatient Psychiatric Hospital Bed Capacity in the Region as of 2011

Hospital Name	Hospital City	Distance in Miles from Perham	Available Psychiatric Beds	Psychiatric Inpatient Days	Occupancy Rate
Lake Region Healthcare Corporation	Fergus Falls	45	14	2,297	45.0%
Lakewood Health System	Staples	45	10	473	13.0%
State Operated CBHH* - Fergus Falls	Fergus Falls	46	16	3,558	60.9%
State Operated CBHH* - Alexandria	Alexandria	59	16	4,083	69.9%
St. Joseph's Medical Center	Brainerd	72	22	3,466	43.2%
Sanford Bemidji Medical Center	Bemidji	101	12	919	21.0%
All Hospitals			**90**	**14,796**	**45.0%**

Source: MDH analysis of the Health Care Cost Information System.
*CBHH are community behavioral health hospitals operated by the Minnesota Department of Human Services.

The primary service area (PSA), as defined by Perham Health, is more narrow than the area used in Table 2: it includes all or part of the following counties: Otter Tail, Clay, Hubbard, Todd, Wadena, Becker, Wilkin, Douglas, and Grant (see also Appendix B). In annual hospital reports, facilities in these counties reported 72 available psychiatric beds or 21.7 beds per 100,000 people in 2011. There were two significant changes in inpatient psychiatric bed capacity for the West Central Region of Minnesota in the last several years. In 2007, the state-operated CBHH in Wadena closed. A year later, Lakewood Health System converted 10 existing licensed inpatient beds to be used in a geriatric psychiatric unit of the

[9] CBHHs, which are operated by the Minnesota Department of Human Services, provide short-term, acute inpatient psychiatric services in 16-bed community based facilities throughout Minnesota. Underlying the concept of community-based facilities is the expectation that natural support structures can be better incorporated into treatments if patients are served in proximity to their community.

hospital, only somewhat offsetting the loss of inpatient capacity. With this change, inpatient psychiatric beds in the area declined from 24.7 beds per 100,000 in 2007 to 21.7 beds per 100,000 in 2011.

Utilization for Geriatric Psychiatric Inpatient Care from the Primary Service Area

To evaluate the need for a new geriatric psychiatric hospital, recent hospital claims data were analyzed by MDH to identify geriatric psychiatric patients from the Perham PSA. Psychiatric patients were identified as having a primary diagnosis of a mental health condition in the data using Clinical Classifications Software for Mental Health and Substance Abuse (CCS-MHSA)[10] from the US Agency for Healthcare Research & Quality. Substance abuse conditions were not included in the analysis, as the service mix for the proposed Perham Health facility does not extend to providing chemical dependency treatment. Similarly, the analysis did not include inpatient hospitalizations where the primary reason for hospitalization (principal diagnosis) was for a non-mental health condition but the patient presented with a co-morbid mental health condition. Underlying that decision was the designation of the facility by Perham Health as providing psychiatric services, not general medical care. Furthermore, it is possible that patients with mental health conditions, who are hospitalized for general medical care, may not require inpatient psychiatric care.[11]

MDH analysis of 2010 hospital discharge data (including data from the state operated Community Behavioral Health Hospitals) found that there were 180 inpatient psychiatric admissions for patients age 65 or older from the Perham PSA as shown in Table 3. These elderly patients comprised about 32 percent of the total 538 inpatient psychiatric admissions for patients from the Perham PSA that were admitted to hospitals in Minnesota and North Dakota. None of the Perham PSA admissions had a primary diagnosis of early-onset Alzheimer's disease. In fact, there were only 34 hospital admissions for early onset Alzheimer's disease out of the nearly 560,000 admissions from 309 hospitals in Minnesota and from other states with Minnesota resident admissions. Therefore, estimating future demand for the proposed hospital did not assume that this specific condition for individuals under the age of 65 would require additional inpatient hospital capacity. The analysis did find patients that were admitted for Alzheimer's disease in advanced age, as well as older adults suffering from behavioral problems related to dementia, yet the numbers were relatively limited (28 percent of all psychiatric admissions from the service area).

[10] The software defines variables that identify general and specific categories for mental health and substance abuse-related conditions. The CCS-MHSA uses the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) as its starting point, and, in general, follows the categorization of mental health and substance abuse conditions and code assignments outlined in the DSM-IV.

[11] MDH analysis of hospital discharge data for 2010 found that many elderly residents were hospitalized from the service area had been diagnosed in some form of mental health issue in the most expansive sense; however, only 10 percent of these patients were hospitalized where mental health was the principal reason for being admitted.

Table 3: Geriatric Psychiatric Admissions and Length of Stay for Proposed Perham Primary Service Area, 2010

Hospital Name	City	Distance in Miles from Perham, MN	Admissions	Psych Patient Days	Average Length of Stay
Lake Region Healthcare Corporation‡	Fergus Falls	45	49	449	9
Lakewood Health System‡#	Staples	45	48	507	11
Sanford Health Bemidji Medical Center‡	Bemidji	101	18	215	12
Sanford Health Fargo Hospital‡	Fargo	61	15	191	13
Tri-County Hospital#	Wadena	25	**	**	**
State Operated CBHH* - Fergus Falls‡	Fergus Falls	46	**	**	**
Perham Health Hospital#	Perham	0	**	**	**
Prairie St. John's Hospital‡	Fargo	67	**	**	**
St. Mary's Regional Health Center	Detroit Lakes	21	**	**	**
St. Joseph's Medical Center#	Brainerd	72	**	**	**
Essentia Health Fargo Medical Center	Fargo	72	**	**	**
Douglas County Hospital‡	Alexandria	60	**	**	**
St. Cloud Hospital‡	St. Cloud	114	**	**	**
United Hospital‡	St. Paul	190	**	**	**
State Operated CBHH* - Alexandria‡	Alexandria	59	**	**	**
St. Joseph's Area Health Services#	Park Rapids	46	**	**	**
Mayo Clinic Methodist Hospital‡	Rochester	265	**	**	**
Total			180	1,657	9

Source: MDH analysis of hospital discharge data for 2010.

** Data is suppressed because of small cell size

*Community Behavioral Health Hospital

‡ Hospitals with dedicated psychiatric programs

Critical Access Hospital

As indicated on Table 3 for the Perham PSA in 2010, more than half (56 percent) of admissions and 60 percent of patient days for geriatric psychiatric inpatient care occurred at the Bridgeway Care Unit at Lake Region Healthcare in Fergus Falls and the geriatric psychiatric program at Lakewood Health System in Staples. Table 3 also indicates that elderly patients from the Perham PSA travel to a variety of hospitals to receive inpatient psychiatric care. Sometimes patients are admitted to general acute care hospitals without psychiatric inpatient services (14 percent of the Perham PSA in 2010), possibly due to close proximity to stabilize their psychiatric condition. Alternatively, a very small number of patients appear to travel long distances to the Twin Cities or Rochester, presumably to receive specialized care or to be near family in those areas, instead of being admitted to a hospital closer to the patient's residence.

MDH analysis of available hospital data demonstrates that if the proposed hospital was open in 2010 with 12 available beds and all patients from the indicated PSA were admitted to the Perham Psychiatric Hospital – likely not a realistic assumption – it would have an occupancy rate of 38 percent rather than 69 percent estimated by Perham. Not all patients from the PSA are likely to be admitted to the proposed psychiatric facility for two primary reasons: (1) the geographic proximity or existing preferred travel

patterns among patients in the proposed PSA, and (2) service need for concurrently existing medical conditions.

Distance to Existing Hospital Services

In support of its proposal, Perham Health reasoned that additional psychiatric bed capacity would reduce the travel burden that many geriatric patients face when they seek psychiatric care. Perham Health points out that the travel burden is particularly difficult for patients and family members during inclement weather. In general, travel distance to obtain care is perceived as burdensome, and may create an even greater barrier when seeking inpatient care for mental illness.

To understand the volume of geriatric patients who could potentially benefit from the availability of new inpatient psychiatric care nearer to their residence, MDH analyzed travel patterns within the proposed PSA based on hospital admissions for psychiatric care for elderly patients in 2010.[12] Although there is no standard that establishes what distances between a patient's home and a provider should be considered "too far," two commonly used benchmarks for appropriate travel burden are: (1) a distance of 30 miles or more, and (2) travel time of 30 minutes or more.[13]

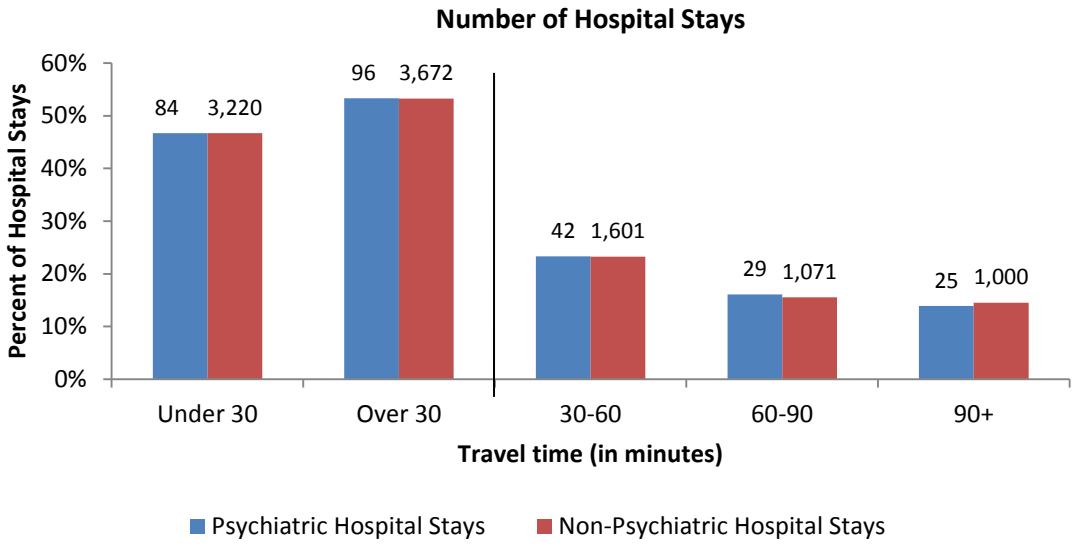
As shown in Figure 1, the majority of elderly patients (53 percent or 90 patients) from the 50-mile PSA proposed by Perham, travel more than 30 minutes for psychiatric care. Among patients who traveled more than 30 minutes, 29 patients traveled more than 60 minutes to obtain care, and 25 more than 90 minutes. Generally speaking, these patients were admitted to facilities outside of the current service area and had higher concurrent medical conditions than those traveling less than 60 minutes. Patients traveling longer distances were also evenly split between freestanding facilities and hospital psychiatric units.

Perhaps more surprisingly, even though *acute* inpatient services are more readily available in the service area, elderly patients who are admitted for non-psychiatric conditions exhibit travel patterns that are identical to those among elderly psychiatric patients. This indicates that the burden of travel for care appears to be independent of the type of services needed.

[12] MDH estimated travel distance by mapping the distance between the centroid of a patient's home zip code and the facility that the patient was admitted to with the help of Google Maps ©.

[13] For instance, current Minnesota law requires that health maintenance organization (HMO) maintain a provider network that guarantees access to primary care, mental health and hospital services within a 30 minutes or 30 miles radius (MN Stat, Sect. 62D.124).[13] A standard of 30 minutes' travel time is also used in the designation of Health Professional Shortage Areas by the US Department of Health and Human Services.

Figure 1: Geriatric Patients' Travel Time for Psychiatric and Non-Psychiatric Inpatient Care for the Perham Health PSA, 2010



Source: MDH analysis of hospital discharge data.

As shown in Figure 2 the primary service area surrounding the proposed hospital site is characterized by lower density of available inpatient services for psychiatric patients. Although, as shown on the map and discussed earlier, six facilities with a dedicated psychiatric unit already serve this area, with their 30-mile radius PSA overlapping with much of the proposed service area of the new facility; a 50-mile radius PSA radius, as proposed for the Perham facility, would nearly cover all of the service area for the proposed facility.

Assuming travel time between home and inpatient psychiatric care is the most important factor in predicting the place of admission, about 41 percent, or 74, geriatric patients who sought psychiatric care in 2010 would have benefited from an closer proximity to care provided by the proposed hospital. Most of these patients were traveling more than 30 miles to receive care as shown in Table 4. Because of limited available data, this number cannot take into consideration the patients that would be seeking care in the proposed facility at times when beds or staffed beds at alternative facilities were not available for a variety of reasons.

Table 4: Travel Patterns of Elderly Psychiatric Patients, 2010

	Less than 30 miles from Perham	More than 30 miles from Perham	Total
Closer to Perham	44	30	74
Closer to Another Facility	21	85	106

Source: MDH analysis of 2010 hospital discharge data.

However, the analysis also found that many elderly residents from the service area received inpatient care at a location closer than the proposed facility in Perham. Nearly 60 percent, or 106 patients, would have been in closer proximity to another facility, also shown in Table 4. We would assume that people

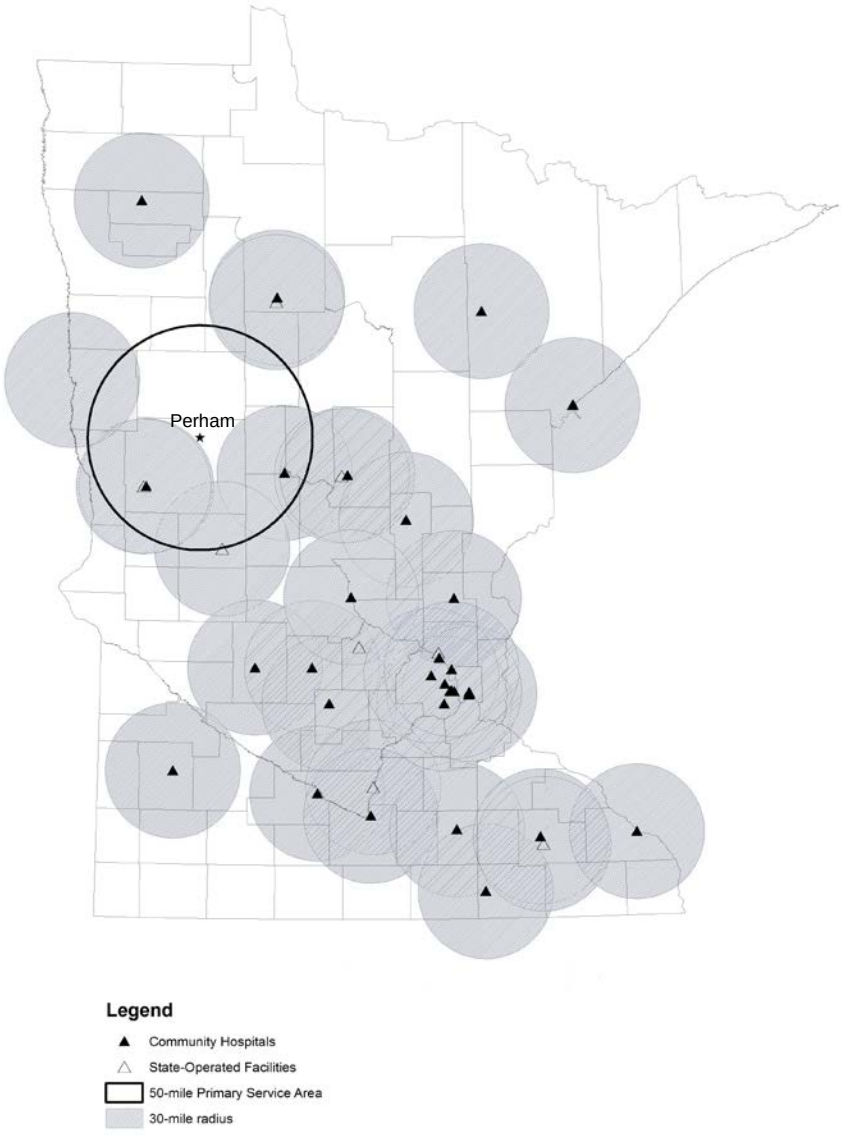
from these areas would continue to travel to the nearest source to receive care and not the proposed new facility. Even so, many of the patients closer to Perham facility would still have to travel more than 30 miles. On average, patients closer to Perham would have to travel 44 miles to receive care at the proposed new facility.

Furthermore, the distance between a patient's home and a hospital is often not the only or even a primary factor in determining where patients are admitted. Other factors play important roles such as the following: availability of beds and staff; the distance between a facility and where the patient's family lives; the distance to places of work; existing referral relationships between hospital staff, physicians, ambulance providers, and community services; the existing network of coverage; and, the level and complexity of service required for patients. For instance, MDH analysis of geriatric psychiatric hospital claims found that nearly half of the patient admissions (47.2 percent or 85) originating from the Perham PSA were to hospitals further away than the patient's nearest hospital with psychiatric beds. More than half (58.8 percent or 50 admissions) were admitted at large hospitals that were not designated as Critical Access Hospitals (CAHs), and only 38.8 percent of geriatric psychiatry patients (33 admissions) were admitted at stand-alone inpatient psychiatric facilities.[14]

One of the main characteristic of patients traveling longer distances to larger hospitals, and a contributing factor to understanding referral choices, is that this group of patients presented with higher comorbidities on average than patients at stand-alone psychiatric facilities. The most complex patients served by freestanding facilities (75th percentile) had two or more co-occurring medical conditions, while the most complex patients (75th percentile) at connected units of the hospital had three or more co-occurring medical conditions. Put differently, about 1 in 4 patients (26 percent) who were admitted to freestanding facilities did not have medical comorbidities, compared to about 1 in 5 (21 percent) of patients admitted at hospitals with connected psychiatric units.

[14] Stand-alone inpatient psychiatric facilities included the following: Community Behavioral Health Hospital – Fergus Falls, Lakewood Health System, Prairie St. John's Hospital, and Sanford Bemidji Medical Center.

Figure 2: Hospitals with a Dedicated Psychiatric Unit and a 30 Mile Distance Radius



Finally, as part of the review of this proposal, MDH conducted a review of published research on the impact of distance and/or travel time to inpatient psychiatric care on health outcomes. Although it is well documented that residents of rural areas travel farther to receive care than their urban counter-parts and have lower use rates for some general acute care services,[15] we found no published research to shed light on the possible effect that travel distance to access hospital services may have on psychiatric health outcomes. Nonetheless, it is clear that travel distance for any health care service

[15] See, for example, Chan L, Hart LG, and DC Goodman. (2006). Geographic access to health care for rural Medicare beneficiaries. *The Journal of Rural Health*; 22(2):140-146.

presents an emotional burden for patients and their families, in addition to the costs that are associated with transport.[16]

Demographic Projections

The Perham PSA recently had an estimated population 132,022 residents, out of which 25,601 were over the age of 65. [17] Using county demographic projections from the Minnesota State Demographic Center for the Minnesota counties that are included in the Perham PSA allows an approximation of what the elderly population may be in the next two decades, which will inform future service need.

The projected growth rates for the service area indicate that the population 65 years of age and older is estimated to grow by 10 percent from 2010 to 2015. Compared to 2010, the elderly population is projected to grow 34 percent by 2020, 50 percent by 2025 and 65 percent by 2030. Similarly, the estimated growth of the population over age 85, the group that has been shown to account for a large share of the psychiatric population in this area, is projected to increase compared to 2010 by 6 percent in 2015, 17 percent by 2020, 36 percent by 2025, and 62 percent by 2030.[18]

According to most recent available data, the rate of hospitalization for elderly residents with psychiatric diagnoses in the proposed PSA was 7 per 1,000 elderly residents in 2010. Table 4 simulates the likely effect of population change (and aging) for elderly residents in the Perham PSA on needed inpatient psychiatric care, assuming a stable rate of hospitalizations. Since the analysis of travel for patients from the Perham PSA indicated that 62 percent of inpatient psychiatric admissions occurred at an existing hospital with psychiatric services available that was closer than the proposed Perham Psychiatric hospital—this simulation assumes, absent other information, that a similar proportion of patients will be admitted to those hospitals in the future.

Using 2010 data, about 67 elderly psychiatric patients per year from the service area would have been most likely to have received care at a facility in Perham consistent with the proposal. This would have translated in an estimated occupancy rate for 2010 of 10.9 percent. This level of occupancy is similar to other critical access hospitals with psychiatric inpatient services in 2010 such as Lakewood Health System (14.5 percent), Mille Lacs Health System (13.1 percent), and Meeker Memorial Hospital (13.1 percent). However, the proposed hospital would also have been the lowest overall occupancy for

[16] Because of unavailability of ambulance data for this research, MDH was not able to estimate the potential reduction of ambulance runs due to the potential availability of the proposed hospital. It is feasible that some of the patients who are currently seen in an emergency department at an acute care facility until they are stabilized and then transported to a hospital with a designated psychiatric unit. The cost of this travel, as well as that incurred by patients themselves and their family members was not considered in this analysis.

[17] Perham Health's PSA is based on zip codes. The US Census Bureau only reports zip code level population estimates for 5 year periods (in this case, 2007-2011).

[18] MDH analysis of Minnesota County population projection data from the Minnesota State Demographic Center. The Minnesota counties included the following: Becker, Cass, Clay, Douglas, Grant, Hubbard, Mahnomen, Otter Tail, Todd, Wadena, and Wilkin Counties.

inpatient psychiatric hospital beds in Minnesota in 2010 if the facility was open that year.[19] Three other critical access hospitals with inpatient psychiatric services (that were not in freestanding facilities) had significantly higher occupancy rates in 2010 including Avera Marshall Regional Medical Center (44.8 percent), New Ulm Medical Center (47.9 percent), and Sanford Medical Center Thief River Falls (79 percent).

Table 5: Projected Occupancy at Proposed Perham Health Psychiatric Hospital Serving Patients from Perham PSA, 2010-2030

	2010	2015	2020	2025	2030
PSA* population over the age of 65	25,601	28,287	34,309	38,320	42,261
Cumulative population growth rate		10%	34%	50%	65%
Expected annual psychiatric hospitalizations	74	82	99	111	122
Expected patient days	527	753	913	1,019	1,124
Expected occupancy	12.0%	17.2%	20.8%	23.3%	25.7%

Source: MDH analysis of hospital discharge data and demographic projections from the Minnesota State Demographic Center.

Although the primary service area for the proposed facility has a higher rate of elderly residents than the state overall and is projected to see significant increases over the next 15 years, the overall demand for geriatric psychiatric admissions appears likely to remain low relative to the projected capacity. Assuming that the rate of inpatient psychiatric utilization and patient origin remains constant over time, the number of hospitalizations at this new hospital is expected to increase to 82 hospitalizations in 2015 and 99 in 2020 (see Table 5). Occupancy at the proposed facility is projected to be 17.2 percent in 2015 and reach 20.8 percent in 2020. Projecting the need for geriatric patients who require psychiatric care beyond this window is associated with significant uncertainties because numerous factors affecting health care need are likely to change, including the development of diagnosis and treatment options for Alzheimer's disease and dementia, the emergence and evolution of best practices in prevention of inpatient care, and the advancements of pharmacological and therapeutic tools to treat elderly psychiatric patients in particular.

According to MDH analysis, the volume of inpatient psychiatric beds necessary to achieve the 69 percent occupancy level assumed by Perham, would gradually increase from about 3 available beds in 2015 to 4.5 in 2030. In their analysis, Perham Health anticipates higher rates of hospitalizations per 1,000 people (8.4 instead of 7.0 derived from MDH based on available data). These assumptions would indeed produce higher expected demand for services; however, those assumptions appear significantly inconsistent with Minnesota data, as well as national research that indicate rates of psychiatric hospital use for elderly patients of 6.4 admissions for 1,000 people.[20]

[19] The lowest occupancy rate for inpatient psychiatric services in 2010 was 11.7 percent at the now closed State Operated Community Behavioral Health Hospital in Cold Spring, MN.

[20] Saba DK, Levit KR, and A Elixhauser. (2008). Hospital Stays Related to Mental Health, 2006. HCUP Statistical Brief #62. *Agency for Healthcare Research and Quality*, Rockville, MD.

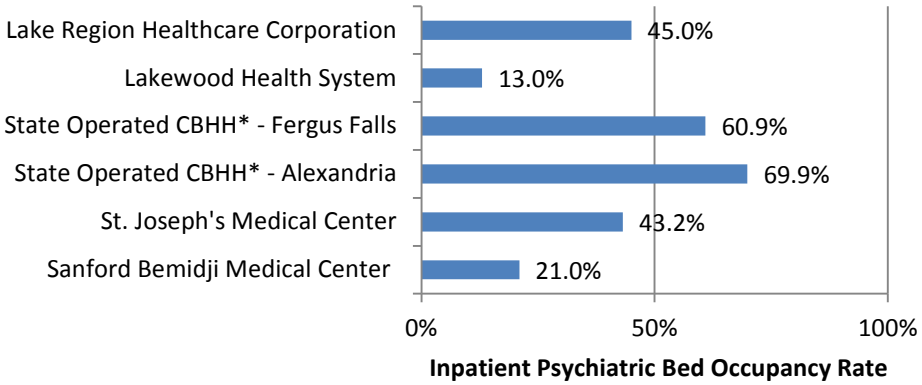
Ability of Current System Capacity to Meet Demand

To place estimated occupancy rates into the context of the public interest review, it is also important to examine how patients are currently served by hospitals in the region. 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.

Hospital occupancy rates for inpatient psychiatric beds are shown in Appendix C. When calculated on the basis of "available beds,"[21] the statewide hospital occupancy rate for psychiatric inpatient units was 65.2 percent in 2011, with four hospitals exceeding an annual rate of 80 percent in the Twin Cities as well as rural areas such as Hutchinson and Willmar.

Figure 4 below illustrates that while there may be certain points of the year where regional hospitals providing inpatient psychiatric care may be at capacity, nearby inpatient psychiatric services such as Lakewood Health System have been operating with excess capacity on an annual basis. In fact, Lakewood's occupancy was the lowest in the state in 2011 as shown in Appendix C.

Figure 4: Occupancy Rates for Select Minnesota Hospitals, 2011



Source: MDH analysis of Health Care Cost Information System data from 2011. "CBHH" is a community behavioral health hospital operated by the Minnesota Department of Human Services.

If new beds are needed, is the proposed facility the best way to meet this need?

One consideration in determining whether there is a need for a new psychiatric hospital capacity in the area is whether the proposed hospital best meets a particular demand. The particular model proposed by Perham would utilize an existing facility as a freestanding psychiatric unit. Perham sees economic benefits in this proposal, but also believes it would allow isolating vulnerable elderly patients from activity in other settings in a single hospital, and from patients of different age groups and levels of acuity, such as present in CBHHs.

On the other hand, the model of a freestanding facility would effectively remove the connection between delivering psychiatric and medical care in the same institution for patients with complex needs.

[21] 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.

While the proposed facility does not aim to treat the most complex psychiatric cases, more than half of psychiatric patients in general, and nearly 90 percent of elderly psychiatric patients in particular, have psychiatric and medical conditions that co-occur, raising the risk of suboptimal outcomes.[22] Patients with both psychiatric disorders and medical illness may have problems maintaining a treatment regimen, are less inclined to pursue psychiatric treatment, have problems accessing care, and often disregard maintenance of well-being and personal health.[23]

Medical complexity, as measured by medical comorbidity,[24] is a critical concern in the effective treatment of geriatric acute psychiatric conditions because medical and psychiatric care is not always integrated for these patients. While it is likely that a freestanding facility may not be particularly helpful with integrating needed treatments, Perham Health has indicated in their response to follow-up MDH questions that it will employ an internist or geriatrician (geriatric specialist physician) as a co-medical director as well as a consulting physician in addition to the psychiatric medical director for the new psychiatric hospital to meet the medical needs of prospective patients. Some evidence suggests that this type of medical consultation model under the right circumstances is associated with improved medical care quality in inpatient psychiatric settings.[25]

However, as indicated above, MDH analysis of patient flow from the Perham PSA shows that a large share of patients travel beyond the nearest hospital with available psychiatric services to go to larger medical facilities, likely due to the availability of a broader set of services for patients with greater complexity. This is consistent with evidence that suggests psychiatric patients with medical complications are most often seen in the general-medical setting.[26] Many of the patients treated at psychiatric units of a hospital in the MDH analysis were served where a transfer from a general-medical setting to psychiatric unit takes place within a hospital, rather than between hospitals as would be necessary for the proposed facility, continuity of care can be more easily maintained.

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[22] MDH analysis of hospital discharge data from 2010. Bartels SJ. (2004). Caring for the Whole Person: Integrated Health Care for Older Adults with Severe Mental Illness and Medical Comorbidity. *Journal of the American Geriatrics Society*; 52(12);S249-S257. Druss BG and Walker ER. (2011). Mental Disorders and Medical Comorbidity. Robert Wood Johnson Foundation: Research Synthesis Report No. 21.

[23] Lyketsos CG, Dunn G, Kaminsky MJ, Breakey WR. (2002). Medical Comorbidity in Psychiatric Inpatients. Relation to Clinical Outcomes and Hospital Length of Stay. *Psychosomatics*; 43(1):24-30. Carney R, Freedland KE, Eisen SA, et al. (1995). Major Depression and Medication Adherence in Elderly Patients with Coronary Heart Disease. *Health Psychology*; 14(1):88-90. Goldman L. (2000). Comorbid Medical Illness in Psychiatric Patients. Current Psychiatric Reports 2000, 2:256-263.

[24] Medical comorbidities are conditions that require medical attention beyond the principal diagnosis or reason for hospitalization. For more information see Elixhauser A, Steiner C, Harris DR, and RM Coffey. (1998). Comorbidity measures for use with administrative data. *Medical Care; 36*:8–27.

[25] Druss BG. (2007). Improving Medical Care for Persons with Severe Mental Illness: Challenges and Solutions. *Journal of Clinical Psychiatry*; *68*(4):40-44.

[26] Kathol, R. G., E. J. S. Kunkel, et al. (2009). "Psychiatrists for Medically Complex Patients: Bringing Value at the Physical Health and Mental Health/Substance-Use Disorder Interface." *Psychosomatics*; 50(2): 93-107.

In addition, there are potential economic and logistic disadvantages associated with a freestanding psychiatric facility. In a hospital where both, psychiatric and medical services are provided, staff from the medical unit can act as floating staff to support short-term staffing fluctuations in a psychiatric unit to help assure safety and responsiveness to the demand for services. Although the CAH acute care facility is in some proximity to the proposed site, the same flexibility would likely not exist, potentially resulting in higher fixed (staffing) costs.

Are there alternatives to adding new inpatient hospital beds to the system that would serve patients better?

In the process of reviewing this application, MDH examined whether the addition of new hospital capacity for psychiatric care appears to be the right solution to the perceived problem with patients' access to timely and appropriate care. The question in this section of the analysis is not whether beds are needed, but instead whether in the spectrum of needed care, investment in beds capacity represents the most appropriate solution.

A review of the literature, including research in Minnesota, suggest that some challenges experienced in accessing inpatient psychiatric care are associated with a lack of appropriate medical staffing. This diminishes available bed capacity that can be brought "online," requiring diversion of patients to facilities that are appropriately staffed.

Other research suggests that in certain circumstances a need for inpatient psychiatric care represents a failure of the continuum of care or is not consistent with best practices:

1) A portion of inpatient days for psychiatric patients has been identified as "non-acute" – patients could have been treated in step-down settings;
2) Relocation to an inpatient setting is not always ideal for elderly patients suffering from mental illness; and
3) Strengthening psychiatric care in alternative care settings, such as primary care, has been effective in improving health outcomes of older psychiatric patients.

A 2007 study[27] involving 12 Minnesota hospitals with inpatient psychiatric units found that 40 to 50 patients per month are admitted to the hospital due to a lack of access to less intensive resources, while 240 to 250 patients per month have ''non-acute'' days in the hospital for other reasons such as a lack of intensive residential treatment beds. The total number of non-acute days at the studied institutions was estimated at 2,000 to 2,100 days per month. In total, the study found that with adequate ''intermediate resources'' approximately 45,000 inpatient bed days could be freed up for other uses, serving up to 2,733 additional patients per year. Although this study focused on inpatient psychiatric care in the urban Twin Cities Metro Area, many of the "symptoms" underlying the potential overreliance on inpatient care are also present in more rural settings, like Perham. For instance, a recent gap analysis for Ottertail County found that while services for older adults like adult rehabilitative mental health services, illness

[27] HealthPartners, Allina Hospitals and Clinics, and HealthEast Care System, "Psychiatric Patient Flow Study," March 2007.

management and recovery services, and to a limited extent integrated dual diagnosis treatment meet demand, there is a lack of capacity for many important non-acute services including: intensive residential treatment services, assertive community treatment, and intensive community recovery services.[28]

Hospitalization for geriatric patients with mental illness often represents a relocation that is not always ideal for several reasons. For example, the disruption associated with the transfer can result in relocation stress.[29] Relocation might be problematic for elderly patients already experiencing a heightened state of anxiety due to their mental illness. Research on elderly patients suffering from dementia indicates that being close to familiar care givers can delay institutionalization.[30] Hospitalizations are also associated with increased risk of adverse health outcomes for certain geriatric psychiatric patients.[31]

While acute psychiatric services are needed for many elderly patients and will continue to play a critical role in patient care, including to ensure the safety of nursing home patients and staff—the focus on acute services for this patient population overlooks the importance, and possible underutilization of cost-effective outpatient psychiatric care. A recent report by the Institute of Medicine (IOM) concluded that a chronic care model is the best model to strengthen service delivery for older adults with serious mental illness.[32] This model emphasizes the integration of mental health and primary care services, and the use of care coordination to facilitate the appropriate delivery of health care services. Other research has demonstrated that the integration of mental health services into primary care has led to improved outcomes for older adults with depression and serious mental illness.[33]

Similarly, research has also demonstrated effectiveness of non-acute treatment options for many patients suffering from dementia and Alzheimer's disease. For example, case management and multidisciplinary care during primary care has been shown to improve neuropsychiatric scores among

[28]Minnesota Department of Human Services. (August 2013). Retrieved March 3, 2014, from: www.dhs.state.mn.us/gapsanalysis/dsd.

[29] McKinney AA and V Melby. (2002). Relocation stress in critical care: a review of the literature. *Journal of Clinical Nursing*; 22:149-157.

[30] Norton MC et al. (2009). Caregiver-recipient closeness and symptom progression in Alzheimer disease: the Cache County Dementia Progression Study. *Journal of Gerontology B: Psychological Sciences and Social Sciences*;64(5):560-568.

[31] Fong TG et al. (2012). Adverse Outcomes after Hospitalization and Delirium in Persons with Alzheimer Disease. *Annals of Internal Medicine*; 156:848-856.

[32] Institute of Medicine. (2012). The Mental Health and Substance Abuse Workforce for Older Adults: In Whose Hands?

[33] Druss BG, Rohrbaugh RM, Levinson CM, and RA Rosenheck. (2001). Integrated medical care for patients with serious psychiatric illness: A randomized trial. *Archives of General Psychiatry*; 58(9):861-868; Frederick J T et al. (2007). Community-based treatment of late life depression: An expert panel-informed literature review. *American Journal of Preventive Medicine*; 33(3):222-249.

Alzheimer's disease patients.[34] Providing caregiver support may also prevent nursing home placement among Alzheimer's disease patients.[35] Other research into potentially avoidable hospitalizations among dementia patients has emphasized that some hospitalizations for this population may be prevented by more proactive measures in primary care.[36]

National research estimates that approximately one in every four nursing home residents is hospitalized for psychiatric and/or physical health reasons every six months.[37] Long-term care facilities, including nursing homes, account for 89 percent of the elderly with severe mental illness within health care institutions, compared to 11 percent receiving services in hospitals.[38] However, there are several barriers to nursing home residents receiving psychiatric care and there has been research showing the underutilization of psychiatric care in this setting.[39] A report from the Substance Abuse and Mental Health Services Agency (SAMHSA) identified problems such as a shortage of mental health professionals, low Medicaid and Medicare reimbursement of mental health services, and lack of training for nursing home staff.[40]

Nonetheless, there are ways to strengthen mental health care by a long-term care facility such as training of nursing home staff in the management of behavioral disorders. The IOM recommends the need to expand the training of non-traditional psychiatric health care providers that can perform evidence-based practices consisting of screening and brief interventions for geriatric mental health problems.[41] Together, these strategies aim at identifying long-term solutions to providing appropriate health care services for geriatric patients with psychiatric health care needs. Hospital care, in contrast, generally represents more short-term solutions.

Factor 2: The financial impact of the new hospital or hospital beds on existing acute-care hospitals in the region

[34] Callahan CM et al.(2006). Effectiveness of Collaborative Care for Older Adults with Alzheimer Disease in Primary Care. *The Journal of the American Medical Association*; 296(18):2148-2157.

[35] Mittelman MS Haley WE, Clay OJ and DL Roth. (2006). Improving caregiver well-being delays nursing home placement of patients with Alzheimer disease. *Neurology*; 67(9):1592-1599.

[36] Phelan EA et al. (2012). Association of incident dementia with hospitalizations. *JAMA; 307(*2):165-172.

[37] Grabowski DC, Aschbrenner KA, Rome VF and S Bartels. (2010). Quality of Mental Health Care for Nursing Home Residents: A Literature Review. *Medical Care Research Review;* 67(6):627-56.

[38] Burns BJ. Mental Health Services Research on the Hospitalized and Institutionalized CMI Elderly. In: Lebowitz BD, Light E ed. The Elderly with Chronic Mental Illness. New York: Springer, 1991, pp. 207-215.

[39] Reichman WE et al. (1998). Psychiatric Consultation in the Nursing Home: A Survey of Six States. *American Journal of Geriatric Psychiatry;* 6:320–327.

[40] Substance Abuse and Mental Helath Services Agency (2007). Older Adults + Mental Health: A Time for Reform, A Guide for Mental Health Planning + Advisory Councils.

[41] Op cit. Institute of Medicine. (2012).

Given that Perham Health's proposed facility is modest in size and designed to offer specialized services targeted to a subset of patients (geriatric psychiatric patients), it is likely that any financial impact, if it exists, would be marginal and limited to facilities with a designated psychiatric unit. Among regional hospitals identified earlier in Table 3, Lakewood Hospital in Staples, which operates a 10-bed geriatric psychiatric unit, and Lake Region Healthcare Corporation in Fergus Falls, which has a 14-bed psychiatric unit, are the most likely to experience potential financial impacts. The overlap in offered services and the geographically proximity to the proposed facilities makes these facilities the most likely affected.

To determine the financial impact of the proposed new facility, MDH analyzed hospital discharge data from 2010 and previously described demographic changes, and estimated how patient volume and revenue might be affected by the introduction of a new psychiatric facility for geriatric patients in Perham. As demonstrated in Table 6, one major reason why the projected impact is small relates to the fact that the share of revenue derived by most hospitals from elderly psychiatric admissions patients is small. Therefore, the loss in patient volume and revenue for these patients who are nearer to the proposed Perham Health hospital is largely negligible. Furthermore, hospitals that do have a higher level of geriatric psychiatric care such as Lakewood Hospital may not face a large financial impact from the proposed hospital due to having a patient base that will remain close to their existing facilities. For example, the loss of patients and revenue by Lakewood Hospital to Perham Health is estimated to be 13 admissions and $228,619 in patient charges. This reflects reduction of less than 1.1 percent of total patient charges.

There is the potential for secondary effects from the introduction of the proposed facility on the market, resulting from changes to referral patterns or patient preferences. Some acute care patients and their families may be referred to the acute care hospital operated by Perham Health as a critical access hospital instead of to facilities where they were treated in the past because of the availability of the new facility, familiarity with the proposed facilities, or because of changes to admission privileges. There is little empirical evidence on the basis of which to estimate this potential shift, but if it were to occur, it would likely be small, because of the likely low number of affected admissions.

Table 6: Potential Financial Impact of New Psychiatric Hospital in Perham, Minnesota on Other Regional Community Hospitals[42]

	All Patients		Geriatric Psych Patients		Geriatric Psych Patients as a Percent of All Patients	
	Admissions	Charges	Admissions	Charges	Admissions	Charges
Without Proposed Hospital						
Lakewood Hospital	1,471	21,409,830	167	2,936,873	11%	14%
Lake Region Healthcare Corp.	3,158	56,060,815	67	1,865,132	2%	3%
Other Community Hospitals	21,515	346,135,790	360	5,802,453	2%	2%
With Proposed Hospital						
Lakewood Hospital	1,458	21,181,211	154	2,708,254	11%	13%
Lake Region Healthcare Corp.	**	55,942,473	**	1,746,790	**	3%
Other Community Hospitals	21,420	340,586,533	345	5,549,257	2%	2%
Difference (Remaining Patients)						
Lakewood Hospital	0.9%	1.1%	8.4%	8.4%		
Lake Region Healthcare Corp.	**	0.2%	**	6.8%		
Other Community Hospitals	0.4%	1.6%	4.3%	4.6%		

Source: MDH analysis of hospital discharge data.
** Difference is fewer than 10 patients.

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

Perham Health estimates that operating the proposed facility will require nursing staff, consulting physicians including a psychiatrist, as well as non-clinical support staff. Current staffing plans include approximately four registered nurses (RNs), four certified nursing assistants (CNAs), and four licensed practical nurses (LPNs). In addition, Perham Health plans on hiring a part-time psychiatrist to serve as program Medical Director, and a physician to serve as the medical consulting physician. Other necessary staff will include an occupational therapist, social worker, clerical staff, housekeepers, and dietary aides. At full census (12 patients per day), the facility is expected to employ 15 full time equivalent (FTE) employees.

Perham Health anticipates staffing the facility consistent with CMS requirements for inpatient psychiatric facilities, using an established scale to determine the appropriate staff and skill mix required to treat patients. Table 7 shows the approximate number of employees that Perham intends to employ by category.

[42] Regional hospitals included the following: Douglas County Hospital, Perham Health Hospital, Sanford Bemidji Medical Center, St. Joseph's Area Health Services Inc., St. Joseph's Medical Center, St. Mary's Regional Health Center, and Tri-County Hospital.

Table 7: Staffing Plan for Proposed Perham Health Psychiatric Hospital

	Full-time	Part-time	Consulting
Psychiatrist	-	1	-
Neurologist	-	-	1
Other Physician (Family Practice/Internal Medicine)	-	1	1
Registered Nurse (R.N.)	3	-	-
Licensed Practical Nurse (L.P.N.)	2	-	-
Occupational Therapist/ Physical Therapist/ Speech Therapist	-	-	1
Social Worker	Not specified	Not specified	Not specified
Activity Therapist	Not specified	Not specified	Not specified
Nursing Aides	3	-	-

Source: Perham Health's submission

Note: Application states that 15.0 FTE will be added when hospital is expected "at full census".

In general, rural Minnesota is experiencing medical care provider shortages, particularly in mental health professionals. All counties in the Perham Health service area are currently designated as Health Professional Shortage Areas (HPSAs), lacking both mental health and primary care professionals.[43]

Perham Health indicates in its application that it does not anticipate problems with staffing the proposed facility. Perham Health references three areas of evidence in support of this: (1) The health care system was able to meet enhanced staffing needs subsequent to the construction of its new facility without significant difficulties; (2) a number of health care professionals residing in Perham or surrounding areas currently have long commutes to employment – they would be happy to take employment closer to home; and (3) Perham Health already has commitments from individuals for certain key positions, including the part-time psychiatrist who would serve as medical director, and a physician, who would act as the consulting physician.

Nevertheless, there is significant potential that the proposed facility may affect other hospitals' ability to retain specialized staff:

1. As Perham Health indicates in its application, elderly patients with psychiatric inpatient needs require specialized services. Currently, it is likely that nursing staff with relevant training and experience is limited to employment at existing facilities serving psychiatric patients and particularly elderly patients with psychiatric needs. An expansion of inpatient capacity may, at least initially, necessitate recruitment from the same pool of specialized staff, and potentially create challenges for existing facilities in maintaining their workforce and sustaining their programs. Lakewood Health System, which operates a freestanding psychiatric center with a similar focus as the proposed facility, expressed this concern in their public comment to the proposal (see the Public Comments section on the MDH Public Interest Review Webpage[44]).

[43] More detail about the mental health HPSAs can be found online here: http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/mentalhealthhpsaoverview.html

[44] Minnesota Department of Health – Public Interest Reviews: http://www.health.state.mn.us/divs/hpsc/hep/moratorium/index.html.

2. Although MDH's analysis of inpatient patterns in the service area indicates that Perham Health projections of inpatient capacity appear excessively optimistic, the gradual growth in demand for services anticipated in the proposal would require staffing increases exceeding the initial level by more than a third in 2020 and nearly two-thirds in 2030. Such expansion would likely further exacerbate workforce challenges in the service area.

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 its proposal to develop a geriatric facility for psychiatric patients, Perham Health indicates that the proposed hospital would accept all patients regardless of ability to pay. Patients who currently qualify for the Perham Health Community Care Program may receive services at low or no cost, depending on their residency within the PSA and income as a percent of the Federal Poverty Guidelines (FPL). Perham Health's Community Care Program is currently open to both uninsured and insured patients. Patients with incomes under 200 percent FPL ($11,490 for an individual in 2013) will not be charged for care, and a sliding scale will determine payments for patients with incomes from 200 to 400 percent of FPL ($22,980 to $45,960 for an individual in 2013).

MDH's 2011 analysis of uncompensated care found that Minnesota hospitals provided about $324 million in uncompensated care, amounting to about 2.3 percent of operating expenses (see Table 8). On average, charity care represented 1.1 percent of operating expenses for Minnesota hospitals in 2011, while bad debt accounted for 1.2 percent of expenses.

At the existing acute care facility, Perham Health delivered higher than average levels of uncompensated care relative to operating expenses compared to Minnesota hospitals overall (3.8 percent vs. 2.3 percent, respectively). Perham's level of uncompensated care is also higher than at other area community hospitals with dedicated psychiatric units.

Perham Health's reported share of uncompensated care attributable to charity care is comparatively low relative to other area hospitals (2 percent vs. 34 percent, respectively). This is surprising given that the provisions of the Perham Health Community Care policy are comparable to those at other facilities and that Perham Health is a signatory of the agreement with the Minnesota Attorney General, which extends discounts to low income uninsured patients. It is not clear whether this truly reflects provision of low levels of charity care or rather insufficient information at the time care was delivered to accurately document whether it represents charity care delivered for free or at a discount (or bad debt). Nonetheless, the application indicates that the new hospital would conform to the community care program offered to patients at all other Sanford Health hospitals.

Table 8: Uncompensated Care as a Percent of Operating Expenses for Select Hospitals, 2011

	Charity Care	Bad Debt	Total Uncompensated Care
Millions of dollars:			
All Minnesota Hospitals	$151.96	$171.80	$323.76
Perham Health Hospital	$0.01	$0.58	$0.60
Lakewood Health System	$0.61	$0.28	$0.90
St. Joseph's Medical Center	$1.12	$1.79	$2.91
Sanford Bemidji Medical Center	$0.56	$2.21	$2.77
Lake Region Healthcare	$0.35	$0.85	$1.20
Percent of operating expenses:			
All Minnesota Hospitals	1.1%	1.2%	2.3%
Perham Health Hospital	0.1%	3.7%	3.8%
Lakewood Health System	0.9%	0.4%	1.3%
St. Joseph's Medical Center	0.9%	1.5%	2.4%
Sanford Bemidji Medical Center	0.7%	2.8%	3.5%
Lake Region Healthcare	0.3%	0.8%	1.2%

Source: MDH analysis of the Health Care Cost Information System

Factor 5: The views of affected parties

As part of the public interest review process, MDH requested public comments on the proposal through a letter submitted to administrators of hospitals within 100 miles of the proposed facility and by announcing the opportunity for public comments through publication of a notice in the State Register. MDH received feedback from three organizations.

Lakewood Health System (Lakewood), which operates a hospital with freestanding psychiatric inpatient capacity 45 miles from the proposed facility, expressed concern that the proposed hospital would increase competition for psychiatric staff in the region. The letter indicated that Lakewood recently raised nurse staffing levels in response to increases in acuity. It expressed the belief that maintaining adequate staff in an environment of nursing shortage in the region would be complicated by the opening of a new facility. In the letter Lakewood also questioned the viability of additional geriatric psychiatric care in the region. Lakewood's primary concern, however, was not over competition for patients but rather the impact of competition for workforce.

The Minnesota Department of Human Services, the state agency that operates two 16 bed inpatient Community Behavioral Health Hospitals in the area, reiterated in its comments the position that there

are adequate numbers of acute psychiatric beds and that any additional service development should occur in the area of non-acute services.[45]

Representatives from Elders' Home, a skilled nursing facility in New York Mills, MN, about 12 miles away from Perham, MN, expressed their support for the proposal. The board of Elder's Home reached a resolution in support of the facility because of the occasional experience of having to refer patients with behavioral conditions to facilities in Fergus Falls or Brainerd, when the nearest facility in Staples had reached patient capacity for their staffing levels.

Section 4: Discussion and Finding

Minnesota's mental health system has undergone significant change in recent years, with coordinated and comprehensive efforts to make the system more patient-centered, more integrated, and better able to provide patients with the right level of care at the right time, in the right setting.

Although some elderly patients with psychiatric health care needs in the area served by Perham Health, and elsewhere in Minnesota, are likely not always served well by the current mental health system, and experience barriers to accessing needed inpatient care due to travel distances, MDH reached its findings that the proposal at this time is not in the public interest on the basis of the following conclusions:

- Despite the expected growth in the elderly population in the Perham Health area over the next two decades (65 percent), the increase in volume of elderly patients likely requiring inpatient psychiatric care will remain modest. At a rate of 7 admissions per 1,000 elderly, there will be approximately 300 admissions per year for geriatric psychiatric care in 2030 in the Perham Health service area.
- The proposed facility is large relative to the expected need for inpatient capacity. Assuming that all patients who are nearest to the facility will be admitted to it, an assumption that may be unrealistically optimistic, Perham Health would require between three and four inpatient beds to meet the anticipated need at the expected occupancy. The facility is proposed to hold 12 inpatient beds.
- Specialty capacity currently available to serve psychiatric patients in the Perham area experiences low levels of utilization. Occupancy for psychiatric units at community hospitals ranges from 13 percent to 45 percent, and occupancy at state operated Community Behavioral Health Hospitals in the area is between 60 and 69 percent. Additional capacity is likely to further reduce use rates at these facilities.
- The proposed facility, designed as a freestanding psychiatric hospital, may not be well suited to the complex medical needs of many among the intended patient population. Of psychiatric patients requiring hospitalization, elderly patients in particular are characterized by complex

[45] The comment from Anne Barry, Deputy Commissioner of Human Services (DHS), clarified that an earlier comment received by MDH from one of the Community Behavioral Health Hospitals was based on a misunderstanding of the proposed project. Based on conversations with DHS representatives, the earlier comment was supportive of the proposal, because it assumed the project would expand nursing capacity.

medical needs. About four in ten elderly patients admitted in the area to a hospital for psychiatric care have two or more identified co-morbidities, many of which may require medical care not available in a freestanding psychiatric facility.

- Although the financial impact of the proposed hospital on other facilities in the area is likely to be marginal, the proposed hospital could potentially have a negative impact on other hospitals' ability to maintain their workforce by drawing patients from inpatient psychiatric programs that already operate at low rates of utilization. Staffing needs of a new facility may further exacerbate the area's professional shortage status and create bottlenecks to inpatient psychiatric are in other areas.
- The development of lower-acuity treatment options may be more important long-term solutions for the care of elderly patients with psychiatric conditions or with behavioral events than the development of additional inpatient capacity. Such services may also be more effective in preventing hospitalizations and improving outcomes. There is supporting evidence for this approach from a study of Minnesota hospitals[46] which found that a high level of inpatient psychiatric care was delivered for non-acute reasons and that inpatient capacity in use at existing hospitals could be made available if intermediate resources were made available.
- Our review of the literature found that compared to inpatient care, outpatient psychiatric care is underutilized, particularly for older nursing home patients.[47,48] Research suggests that older adults are least likely to use psychotherapy, despite its effectiveness, [49] display high rates of unnecessary hospitalizations,[50] and experience heightened relocation stress related to inpatient hospitalization. [51] Patients with dementia, for example, have been shown to benefit from greater community-based treatment options, resulting in delayed institutionalization,[52] reduced neuropsychiatric symptoms,[53] and greater cost-effectiveness of care.[54]

Finding: For the reasons listed above, MDH finds that Perham Health's proposal to build a specialty psychiatric hospital in Perham is not in the public interest.

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[46] Op Cit. "Psychiatric Patient Flow Study," March 2007.

[47] Op Cit. Grabowski DC, Aschbrenner KA, Rome VF and S Bartels. (2010).

[48] Becker M, Andel R, Boaz T, and Howell T. (2009). The Association of Individual and Facility Characteristics with Psychiatric Hospitalization among Nursing Home Residents. *International Journal of Geriatric Psychiatry*; 24:261-268.

[49] Bharucha AJ, Dew MA, Miller MD, Borson S, Reynolds C III. (2006). Psychotherapy in Long-term Care: A Review. *Journal of the American Medical Directors Association*;7:568–580.

[50] Saliba et al. (2000). Appropriateness of the Decision to Transfer Nursing Facility Residents to the Hospital. *Journal of the American Geriatrics Society*, 48(2), 154-163.

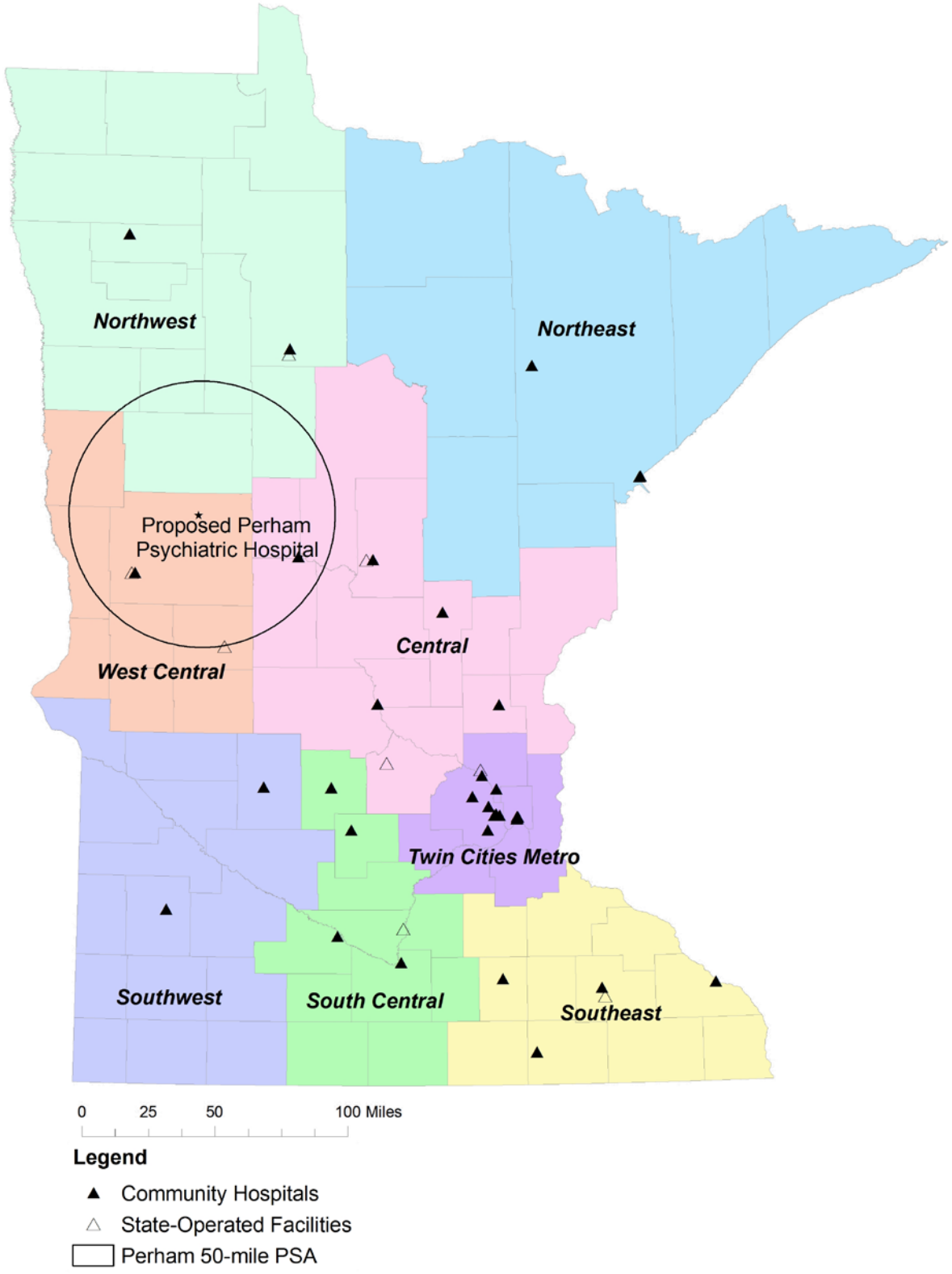
[51] Op Cit. McKinney, A.A. & Melby V. (2002).

[52] Op Cit. Mittelman MS, et al. (2006).

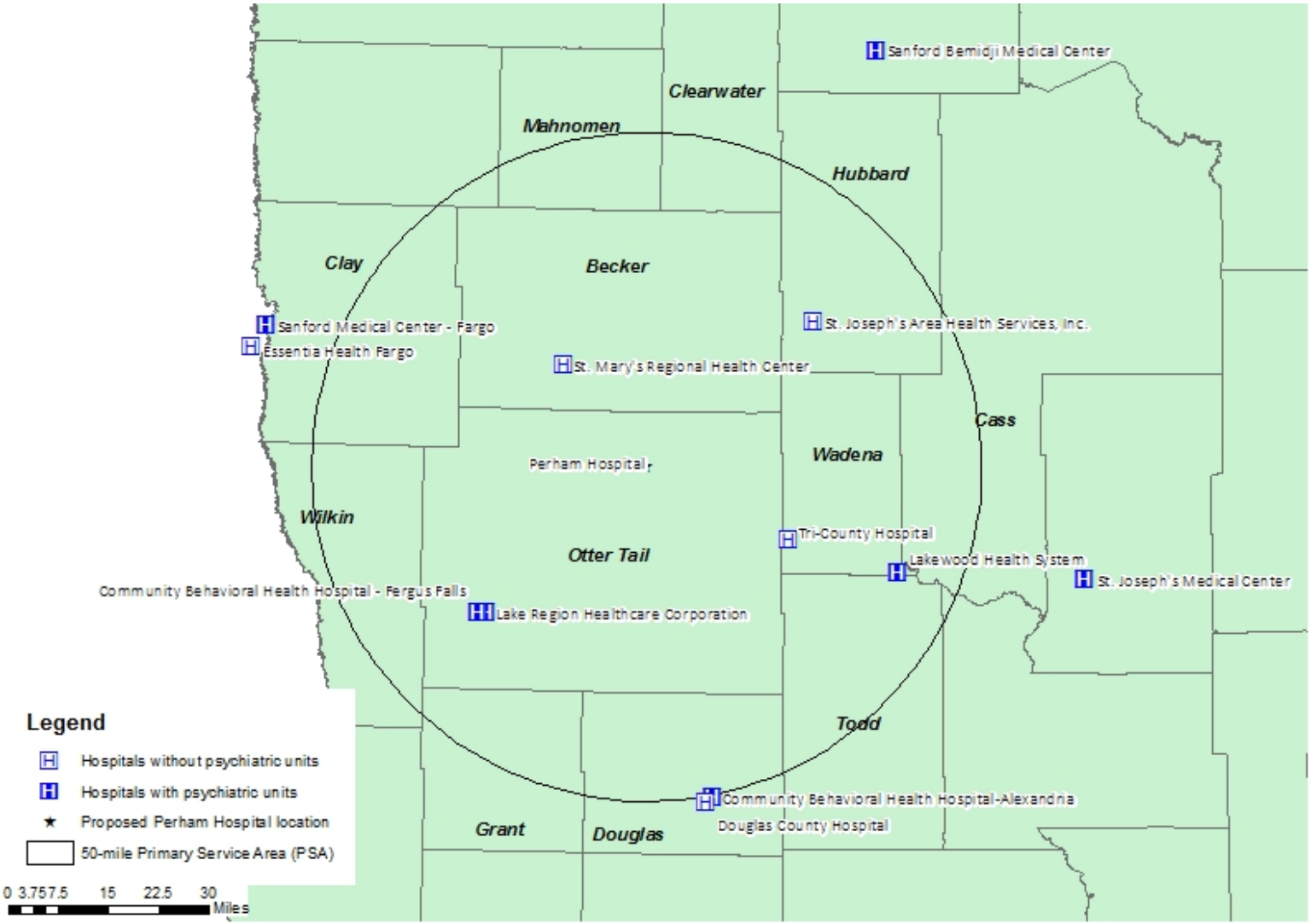
[53] Op Cit. Callahan, C.M. et al. (2006).

[54] Wolfs, C. et al. (2009).Economic Evaluation of an Integrated Diagnostic Approach for Psychogeriatric Patient: Results from a Randomized Control Trial; *Archives of General Psychiatry*, 66(3), 313-323.

Appendix A: Map of Minnesota Hospitals with Inpatient Psychiatric Services Available



Appendix B: Map Proposed Service Area with Inpatient Psychiatric Services Available



Appendix C: Minnesota Inpatient Bed Capacity for Psychiatric Care, 2011

Community Hospitals					
Hospital Name	**Hospital City**	**Region**	**Available Psychiatric Beds**	**Psychiatric Inpatient Days**	**Occupancy Rate**
Abbott Northwestern Hospital	Minneapolis	Twin Cities Metro	87	20,614	64.9%
Bethesda LTACH	St. Paul	Twin Cities Metro	12	4,334	98.9%
Fairview Southdale Hospital	Edina	Twin Cities Metro	18	5,761	87.7%
Hennepin County Medical Center	Minneapolis	Twin Cities Metro	114	30,654	73.7%
Mercy Hospital	Coon Rapids	Twin Cities Metro	36	11,275	85.8%
North Memorial Medical Center	Robbinsdale	Twin Cities Metro	26	7,442	78.4%
St. Joseph's Hospital	St. Paul	Twin Cities Metro	38	10,330	74.5%
Regions Hospital	St. Paul	Twin Cities Metro	96	27,866	79.5%
United Hospital	St. Paul	Twin Cities Metro	60	14,694	67.1%
Unity Hospital	Fridley	Twin Cities Metro	15	3,096	56.5%
University of Minnesota Medical Center - Fairview	Minneapolis	Twin Cities Metro	143	46,967	90.0%
Cambridge Medical Center	Cambridge	Central	14	3,824	74.8%
Mille Lacs Health System	Onamia	Central	10	**	**
St. Cloud Hospital	St. Cloud	Central	28	6,021	58.9%
St. Joseph's Medical Center	Brainerd	Central	22	3,466	43.2%
Lakewood Health System	Staples	Central	10	473	13.0%
Fairview University Medical Center - Mesabi	Hibbing	Northeast	19	4,533	65.4%
SMDC Medical Center	Duluth	Northeast	53	13,998	72.4%
St. Luke's Hospital	Duluth	Northeast	22	4,704	58.6%
Sanford Bemidji Medical Center	Bemidji	Northwest	12	919	21.0%
Sanford Medical Center Thief River Falls	Thief River Falls	Northwest	10	2,594	71.1%
Hutchinson Area Health Care	Hutchinson	South Central	12	3,615	82.5%
Mayo Clinic Health System - Mankato	Mankato	South Central	18	2,402	36.6%
Meeker Memorial Hospital	Litchfield	South Central	8	605	20.7%
New Ulm Medical Center	New Ulm	South Central	10	2,203	60.4%
Winona Health Services	Winona	Southeast	11	1,614	40.2%
Owatonna Hospital	Owatonna	Southeast	10	2,601	71.3%
Saint Marys Hospital	Rochester	Southeast	73	20,038	75.2%
Mayo Clinic Health System-Austin	Austin	Southeast	14	2,558	50.1%
Rice Memorial Hospital	Willmar	Southwest	8	2,369	81.1%
Avera Marshall Regional Medical Center	Marshall	Southwest	10	2,423	66.4%
Lake Region Healthcare Corporation	Fergus Falls	West Central	14	2,297	45.0%
Total, Community Hospitals			**1,033**	**266,299**	70.6%

Psychiatric Hospitals					
PrairieCare	Maple Grove	Metro	20	4,021	55.1%

State Operated Facilities					
Anoka Metro State Operated Hospital	Anoka	Twin Cities Metro	200	33,840	46.4%
Community Behavioral Health Hospitals					
Annandale	Annandale	Central	16	4,248	72.7%
Baxter	Baxter	Central	16	4,173	71.5%
Wadena*	Wadena	Central	16	1,556	26.6%
Bemidji	Bemidji	Northwest	16	3,850	65.9%
St. Peter	St. Peter	South Central	16	4,282	73.3%
Rochester	Rochester	Southeast	16	3,406	58.3%
Willmar*	Willmar	Southwest	16	2,555	43.8%
Alexandria	Alexandria	West Central	16	4,083	69.9%
Fergus Falls	Fergus Falls	West Central	16	3,558	60.9%
Total, State Operated Services Facilities			**344**	**65,551**	**52.2%**

Source: MDH analysis of the Health Care Cost Information System.

*State operated CBHH Hospitals in Wadena and Willmar closed in 2011.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