

The Centers for Medicare & Medicaid Services' Office of Research, Development, and Information (ORDI) strives to make information available to all. Nevertheless, portions of our files including charts, tables, and graphics may be difficult to read using assistive technology. Persons with disabilities experiencing problems accessing portions of any file should contact ORDI through e-mail at [ORDI\\_508\\_Compliance@cms.hhs.gov](mailto:ORDI_508_Compliance@cms.hhs.gov).

**September 10, 2010**

# **Medicare Health Care Quality Demonstration Evaluation**

## **Gundersen Lutheran Health System Advanced Disease Coordination**

### **Final Case Study Report**

Prepared for

**Normandy Brangan**  
Research and Evaluation Group  
Office of Research, Development, and Information  
Centers for Medicare & Medicaid Services  
Mail Stop C3-21-28  
7500 Security Blvd  
Baltimore, MD 21244

Prepared by

**John Kautter, PhD**  
**Asta Sorensen, MA**  
**Shulamit Bernard, PhD**  
**Michael Trisolini, PhD, MBA**  
RTI International  
3040 Cornwallis Road  
Research Triangle Park, NC 27709

RTI Project Number 0207964.022.000.003  
CMS Contract No. 500-00-024, Task Order # 24



**Medicare Health Care Quality Demonstration Evaluation**

**Gundersen Lutheran Health System**

**Advanced Disease Coordination**

**Final Case Study Report**

by John Kautter, Asta Sorensen, Shulamit Bernard, and Michael Trisolini

Federal Project Officer: Normandy Brangan

RTI International

CMS Contract No. 500-00-024, Task Order # 24

September 10, 2010

This project was funded by the Centers for Medicare & Medicaid Services under contract no. 500-00-024, Task Order # 24. The statements contained in this report are solely those of the authors and do not necessarily reflect the views or policies of the Centers for Medicare & Medicaid Services. RTI assumes responsibility for the accuracy and completeness of the information contained in this report.

## CONTENTS

EXECUTIVE SUMMARY .....	1
I. INTRODUCTION AND BACKGROUND .....	5
II. CASE STUDY GOALS, METHODS, AND DATA SOURCES.....	6
III. GUNDERSEN LUTHERAN HEALTH SYSTEM AND LA CROSSE COMMUNITY .....	7
1. History.....	7
2. Gundersen Lutheran Health System—Overview, Mission, and Goals.....	7
3. Demographics, Health Status, Payers, and Competition .....	8
IV. ADVANCED DISEASE COORDINATION .....	9
1. Historical Background and Development.....	9
2. Involvement in the Medicare Health Care Quality Demonstration Project.....	10
3. Description of Services .....	10
4. Program Structure and Staffing .....	15
5. Information Technology System Infrastructure.....	16
6. Performance Measures.....	17
V. MEDICARE HEALTH CARE QUALITY DEMONSTRATION.....	20
1. Demonstration Design .....	20
2. Implementation and Operational Experience and Challenges to Date .....	21
3. Anticipated Benefits to the Medicare Program, Medicare Beneficiaries, and Gundersen Lutheran Health System .....	22
4. Demonstration Timetable and Current Phase .....	22
VI. GENERALIZABILITY .....	24
REFERENCES .....	26
APPENDIX A: INTERVIEW GUIDES.....	27
APPENDIX B: GUNDERSEN LUTHERAN ADVANCED DISEASE COORDINATION PATIENT POPULATION .....	35
APPENDIX C: PERFORMANCE MEASURES .....	44

## List of Tables

Table CC-1 Diagnosis Codes to Identify Patients with Congestive Heart Failure .....	37
Table CC-2 Diagnosis Codes to Identify Patients with End Stage Renal Disease .....	37
Table CC-3 Diagnosis Codes to Identify Patients with Cancer .....	38
Table CC-4 Diagnosis Codes to Identify Patients with Chronic Obstructive Pulmonary Disease	40
Table CC-5 Diagnosis Codes to Identify Patients with Disease of the Nervous System .....	41
Table CC-6 Diagnosis Codes to Identify Patients with Cerebrovascular Disease.....	41
Table CC-7 Office Visit Encounter Codes .....	42
Table CC-8 Emergency Room Encounter Codes .....	42
Table CC-9 Inpatient Hospital Care Codes .....	43
Table CC-10 Nursing Facility Services .....	43

## **EXECUTIVE SUMMARY**

### **Introduction and Background**

Section 1866C of the Social Security Act, as amended by Section 646 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, P.L. 108-173, Section 1866C(b), requires the Secretary of the Department of Health and Human Services (DHHS) to establish a 5-year demonstration program under which the Secretary may approve demonstration projects that examine health delivery factors that encourage improved quality in patient care. The Centers for Medicare & Medicaid Services (CMS) intends to use this Medicare Health Care Quality (HCQ) demonstration to identify, develop, test, and disseminate major and multi-faceted improvements to the health care system.

At present, three demonstration sites are active, including the Indiana Health Information Exchange (IHIE), the North Carolina Community Care Network (NC-CCN), and the Gundersen Lutheran Health System. This case study addresses the Gundersen Lutheran site; companion case studies address the other two sites. The information presented in this case study reflects the situation at Gundersen Lutheran as of August 2010.

### **Case Study Goals, Methods, and Data Sources**

The purpose of this case study is to provide an in-depth understanding of the Gundersen Lutheran Health System's and Advanced Disease Coordination history and goals, organizational structure and operations, and the methods it is applying to improve health care delivery systems, improve quality of care, and improve efficiency.

To achieve these case study objectives, RTI International staff conducted a 2-day site visit in May 2010 and a follow-up telephone call with Gundersen Lutheran staff in August 2010. A team consisting of three RTI staff and the CMS project officer participated in the site visit and the follow-up call. Secondary data sources included internal reports, slide presentations, Web sites, articles, and other publications.

### **Gundersen Lutheran Health System and La Crosse Community**

Gundersen Lutheran Health System is a physician-led, not-for-profit integrated delivery system serving a community of 550,000 people in western Wisconsin, northeastern Iowa, and southeastern Minnesota. Gundersen Lutheran has more than 6,600 employees, 453 of whom are physicians. It has a market share of 59% of the inpatient cases in its primary market and annual net revenue of \$732 million. The system is centered around this 325-bed teaching hospital. The annual patient volume exceeds 15,000 inpatient admissions and 1.3 million clinic visits.

The Gundersen Lutheran community is fairly homogeneous. It is predominantly healthier, less transient, and more educated than the national median, but older and poorer. Based on 2000 Census figures, the racial makeup of the city was 91.6% white and 4.7% Asian. Newly resettled Hmong refugees make up a significant portion of the Asian population. Per capita income in La Crosse was \$17,650, which was below the average Wisconsin and national per capita personal income levels. More than 30% of current La Crosse county residents are 55 years

of age or older. By 2030, this age group is estimated to be 40%. Area residents also have high rates of obesity and alcohol consumption.

### **Advanced Disease Coordination**

Gundersen Lutheran's program for advance care planning, called Respecting Choices<sup>®</sup>, involves a staged approach to advance care planning. The program consists of three key stages called steps.

- **First Steps** targets healthy patients with the goal of creating a basic advance directives document and integrating patient choices into this document. This step is the basic advance care planning at Gundersen Lutheran and involves the process of coming to understand, reflect on, discuss, and plan for a time when a patient cannot make his or her own medical decisions.
- **Next Steps** targets those with a progressive disease with complications, including functional decline along with frequent hospitalizations or emergency room use. In this step, the patients, along with their family, explore goals for life-sustaining care, engage in an in-depth disease-specific conversation to create a disease-specific plan, explore their understanding of the patient's illness progression, and explore the patient's and family's hopes, fears, and concerns.
- **Last Steps** targets patients who are likely to die in the next 12 months. These are patients who are frail or receiving long-term care and may have lost capacity. In this step, the patient and family express their care choices through the Physician Order for Life Sustaining Treatment (POLST); these decisions become part of the medical record.

In its ongoing development of advance care planning for its patients, Gundersen Lutheran has recently incorporated all of the elements of its advance care planning program to create a new model for more efficient, high-quality care for their late life patients. The name of this new program is **Advanced Disease Coordination** (formerly Late Life Care Services). The Medicare Demonstration project is providing Gundersen Lutheran with an opportunity for further development and evaluation of this new model of late life care.

The Advanced Disease Coordination program at Gundersen Lutheran is a system of patient care specifically designed for patients who have serious, eventually fatal, chronic conditions. The targeted population for the program is patients with a prognosis of 2 years or less to live. The program features an interdisciplinary care team dedicated to providing high quality, seamless medical care, individualized for each patient and family across all settings of care, from home to hospital. Advanced disease coordination services at Gundersen Lutheran include a wide range of services designed to meet the patient's goals and preferences. These services include care coordination services, primary care services, inpatient and outpatient medical and surgical procedures, home health care, palliative care, pastoral care, hospice discussion, social worker services, etc. Advanced disease coordination services are provided by a team of primary care physicians, nurse care coordinators, palliative care providers, social workers, pastoral care counselors, and other professionals.

Most patients receiving advanced disease coordination services have participated in the Next Steps conversation and have chosen the Advanced Disease Coordination team as their primary care providers. The outcome of the Next Steps conversation is a Statement of Treatment Preferences and a detailed summary of the Next Steps conversation. These are key tools for the Advanced Disease Coordination team to understand a patient's goals and to help them develop the treatment plan for the patient, which is an ongoing process. Note however that patients can receive services under the Advanced Disease Coordination program regardless of completion of Next Steps conversation. Also, patients who complete the Next Steps conversation and receive Advanced Disease Coordination services may opt to continue seeing their primary care provider, with the Advanced Disease Coordination team providing adjunctive care.

With the goal of adhering to a national standard that can be recognized by most professionals, performance measures used by Gundersen Lutheran to evaluate the effectiveness of Advanced Disease Coordination are based on national palliative care measures and the Dartmouth Atlas. Most of the measures are currently under development trying to address definitional, data source, and data documentation issues. Program staff recognized that most of the current measures are process measures and that program staff needed to ensure that they were collected in a standardized way. Currently, they envision that most of these measures will be documented in electronic medical records. The list of measures is intended to be additive: measures identified in the first year of the demonstration will continue throughout the demonstration period.

### **Medicare Health Care Quality Demonstration**

Under the Medicare HCQ demonstration, Gundersen Lutheran is implementing an Advanced Disease Coordination program (see previous sections for details). Medicare beneficiary participation in the program will not limit or restrict the Medicare benefits otherwise available to Medicare beneficiaries under Parts A, B, or D and will not limit the ability of beneficiaries to seek care from any participating Medicare provider.

Gundersen Lutheran's Advanced Disease Coordination program under the demonstration targets Medicare beneficiaries with serious specified chronic conditions. Eligibility requirements stipulate that the beneficiary

1. is enrolled in traditional Medicare FFS;
2. is aged 65 or older;
3. has a qualifying diagnosed condition;
4. is managed by Gundersen Lutheran as determined by utilization of office visits, emergency room visits, and/or hospitalizations;
5. has a prognosis of 24 months or less to live;
6. participates in the Next Steps conversation; and
7. elects the Advanced Disease Coordination team as his/her primary care providers.

For each performance period in the demonstration, Gundersen Lutheran will propose and, with CMS approval, adopt the quality measures that will be used to track changes in the quality of care received by beneficiaries participating in the demonstration. The denominator for the quality measures will be restricted to beneficiaries in the demonstration group.

The implementation date for the Gundersen Lutheran demonstration was February 1, 2010. The demonstration project is scheduled to end May 31, 2014. As of May 2010, approximately 320 patients were in the palliative care census. Among those, approximately 40 patients met the requirements for the Medicare demonstration.

### **Generalizability**

The success of the Advanced Disease Coordination program will be determined through patient and family satisfaction with the program over time. Program success will be evident from referrals of those who had first-hand experience with the program as well as primary care providers who care for the patients who participate in Advanced Disease Coordination.

Key components for potential replication of Advanced Disease Coordination in other communities include a high level of integration of a health care delivery system and services; organizational mission and commitment to patients; presence of palliative care providers and services; integration of electronic medical records, and recruitment, training, and retention of qualified staff. Some of these, such as integration of electronic medical records, are already available or can be implemented in integrated delivery systems. However, components such as strength of organizational mission and commitment to patients might take a long time to truly achieve in practice elsewhere. Gundersen Lutheran's Advanced Disease Coordination team believes that the primary reason that the program was implemented at their organization is because it is consistent with their organizational mission. Leadership for this type of late-life care model is part of their culture that emphasizes what is right for the patient. Thus, the organizational mission is critically important for the generalizability of this type of late-life care model.

Finally, provision of Advanced Disease Coordination is labor intensive and requires time resources of physicians, nurses, and other health care professionals. The level of required resources will be assessed through the course of this demonstration. Information on the costs of providing this type of late-life care services, and how to provide them most efficiently, is critical to future assessment of program generalizability, because each mission has to be balanced with financial resources: "If I don't make a margin, then I don't have a mission."



## I. INTRODUCTION AND BACKGROUND

The current payment methodology in the U.S. health care system typically fragments care, while also encouraging both omissions and duplication of care. To rectify this, Congress has directed the Centers for Medicare & Medicaid Services (CMS) to test major delivery system and payment changes to improve the quality of care, while also increasing efficiency across the health care system.

Section 1866C of the Social Security Act, as amended by Section 646 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, P.L. 108-173, Section 1866C(b), requires the Secretary of the Department of Health and Human Services (DHHS) to establish a 5-year demonstration program under which the Secretary may approve demonstration projects that examine health delivery factors that encourage improved quality in patient care. This section also authorizes the Secretary to waive compliance with such requirements of Titles XI and XVIII of the Social Security Act (42 U.S.C. 1395 et seq.) as may be necessary for the purposes of carrying out the demonstration project.

This legislation anticipates that CMS can facilitate these overarching goals by providing incentives for system redesign. This would be achieved through several types of interventions: adoption and use of information technology and decision support tools by physicians and their patients, including evidence-based medicine guidelines, best practice guidelines, and shared decision-making programs; reform of payment methodologies; improved coordination of care among payers and providers serving defined communities; measurement of outcomes; and enhanced cultural competence in the delivery of care. CMS intends to use this demonstration to identify, develop, test, and disseminate major and multifaceted improvements to the health care system.

Three types of “health care groups” are eligible to participate in the Medicare Health Care Quality (HCQ) Demonstration: (1) groups of physicians, (2) integrated health care delivery systems (IDSs), and (3) organizations representing regional coalitions of groups or systems. The HCQ Demonstration programs are designed to examine the extent to which major, multifaceted changes to traditional Medicare’s health delivery and financing systems lead to improvements in the quality of care provided to beneficiaries without increasing total program expenditures.

Three demonstration sites are currently active, including the North Carolina Community Care Network (NC-CCN), the Indiana Health Information Exchange (IHIE), and the Gundersen Lutheran Health System. Each demonstration site uses a different approach for changing health delivery and financing systems, but all share the goal of improving quality of care for Medicare beneficiaries. This case study addresses the Advanced Disease Coordination program<sup>1</sup> demonstration at the Gundersen Lutheran Health System; companion case studies address the other two sites. The information presented in this case study reflects the situation at Gundersen Lutheran as of August 2010.

---

<sup>1</sup> The name of the program was changed from “Late Life Care Services” to “Advanced Disease Coordination” in June 2010.

## II. CASE STUDY GOALS, METHODS, AND DATA SOURCES

The purpose of this case study is to provide an in-depth understanding of Gundersen Lutheran Health System's and Advanced Disease Coordination's history and goals, organizational structure and operations, and plans for demonstration implementation for the Medicare population during the first year of demonstration performance, as of August 2010.

To achieve these case study objectives, RTI International staff conducted a 2-day site visit in May 2010 and a follow-up telephone call with Gundersen Lutheran staff in August 2010. We conducted interviews with a total of 11 individuals, including the program director; director of quality for ambulatory care services; vice president of operations and quality improvement; director of finance; director of health information management and clinical systems; information systems; administrative director of home health, hospice, and palliative care; two palliative care physicians; two palliative care nurses; and a patient relations specialist. A team consisting of three RTI staff and the CMS project officer participated in the site visit. Discussion guides are included in **Appendix A**.

RTI's Institutional Review Board (IRB) reviewed and approved the study protocols. We obtained informed consent from each participant prior to each interview.

Our case study analysis focused on documenting the current activities and future plans of Gundersen Lutheran as reported in the interviews. We identified patterns and common themes across respondents. We used triangulation across multiple data sources, including interviews and secondary data sources. We also summarized and categorized the content of the interviews with multiple participants on the same topics. Secondary data sources included internal reports, slide presentations, Web sites, articles, and other publications. Prior to finalizing this report we shared a draft with key Gundersen Lutheran staff to ensure the accuracy of information.

This case study is a first step to document Gundersen Lutheran's current activities and future plans for its Advanced Disease Coordination program. An evaluation of the Gundersen Lutheran site will continue through the entirety of the Medicare demonstration period with the goal of examining the impact of the Advanced Disease Coordination program on Medicare beneficiaries' health and satisfaction, providers' ability to provide high-quality care, and cost and use of health services. Of particular interest will be evaluating the role of Medicare in a this type of new system that redesigns how health care services are provided and seeks to improve quality of care.

### **III. GUNDERSEN LUTHERAN HEALTH SYSTEM AND LA CROSSE COMMUNITY**

#### **1. History**

The origins of Gundersen Lutheran go back to the 19<sup>th</sup>-century frontier culture that was a major economic hub for the lumber industry connecting the cities along the Mississippi River and the railroad between Milwaukee and St. Paul, Minnesota.

A Norwegian surgeon, Adolf Gundersen, moved to La Crosse in 1891, established a clinic, and became a prominent physician in the area. The local clergy established the Lutheran Hospital in 1902, where Dr. Gundersen served as the hospital's first medical director. Dr. Gundersen's mission was to provide high-quality, compassionate medicine to families in the area. In this role, he implemented many innovations, such as a national precedent to allow hospitals to set their own criteria for their medical staff membership, typewritten medical records, and hospital safety plans that allowed safe evacuation of all staff and patients in a 1961 fire. Dr. Gundersen was joined in his practice by his four sons. The Gundersen family continues to be involved; Dr. Gundersen's granddaughter is currently employed at Gundersen Lutheran as a patient relations specialist. Gundersen Clinic and La Crosse Lutheran Hospital formed Gundersen Lutheran, Inc., in 1995. Prior to incorporating, the two entities operated next to each other for decades and shared common medical records, a heating plant, and a security service.

#### **2. Gundersen Lutheran Health System—Overview, Mission, and Goals**

Gundersen Lutheran Health System is a physician-led, not-for-profit integrated delivery system serving a community of 550,000 people in western Wisconsin, northeastern Iowa, and southeastern Minnesota. Gundersen Lutheran has more than 6,600 employees, 453 of whom are physicians. It has a market share of 59% of the inpatient cases in its primary market and annual net revenue of \$732 million. The system is centered around this 325-bed teaching hospital. The annual patient volume exceeds 15,000 inpatient admissions and 1.3 million clinic visits.

The mission set by Dr. Gundersen in the 19th century is carried through to this day, with the goal of distinguishing the system through excellence in patient care, education, and improved health in communities that it serves. Three of the system's five key strategies (superior quality and safety, superior service, and low cost of care) are measured "through the eyes of patients." Dr. Gundersen envisioned the location of the hospital, which is adjacent to the outpatient clinic, as being a convenient way for patients and providers to coordinate and integrate services.

Gundersen Lutheran staff proudly shared that their mission to provide patient-centered care has been part of its organizational culture since more than 100 years ago, when Dr. Gundersen and his physician sons would visit the patients and bond with the families before each surgery. The importance of this mission extends beyond organizational history and strategic marketing materials; Gundersen Lutheran employees recognize that they, too, are part of the community that includes their patients and their patients' family members:

Everybody believes in our mission—poll anyone and the words out of their mouths will be patients. These patients are "us"—our neighbors and friends. So part of what we want is for us.

All physicians practicing at Gundersen Lutheran are system employees and are directly involved in every level of organizational governance and initiatives. Most organizational leaders, including the chief executive officer (CEO), are practicing physicians. Not all organizational leaders are physicians however—Gundersen Lutheran has a medical/administrative partnership at every level (e.g., CEO [MD] and senior vice president [VP] [administrative]). The board of directors is elected by medical staff.

In contrast to self-employed physicians, for whom the content of the hours drives the salary, each physician at Gundersen Lutheran is expected to have 35 contact hours per week, regardless of patient visit length. Instead of an incentive-based compensation system, Gundersen Lutheran salaries are based on market value. This structure allows the system to support and balance the services that have low or no reimbursement, such as palliative care, and those that have a very high reimbursement, such as radiology services. Gundersen Lutheran physicians are evaluated based on clinical and financial data goals and several measures of patient satisfaction, disease management, and patient access. Physicians share accountability with department chairs and administrators, who are evaluated on the same measures.

### **3. Demographics, Health Status, Payers, and Competition**

The Gundersen Lutheran community is fairly homogeneous. It is predominantly healthier, less transient, and more educated than the national median, but older and poorer. Based on 2000 U.S. Census figures, the racial makeup of the city was 91.6% white and 4.7% Asian. Newly resettled Hmong refugees make up a significant portion of the Asian population. Per capita income in La Crosse was \$17,650, which was below the average Wisconsin and national per capita personal income levels. More than 30% of current La Crosse county residents are 55 years of age or older. By 2030, this age group is estimated to be 40%. Area residents also have high rates of obesity and alcohol consumption. Gundersen Lutheran Health Plan offers employer-group, Medicare Advantage, and Medicaid coverage.

The major competitor with Gundersen Lutheran in La Crosse is Franciscan Skemp La Crosse Hospital, which is part of the Mayo Health System. According to interviewees, this competitor uses a similar service model as Gundersen Lutheran (see **Section IV.1** on *Respecting Choices* end-of-life care program). Other competitors are Marshfield Clinic, University of Wisconsin-Madison (UWM), and the Mayo Health System's affiliates. However, most of these competitors, especially UWM, are also collaborators. For example, UWM medical students perform their rotations at Gundersen Lutheran. In addition, Gundersen Lutheran provides training for UWM nursing schools and partners in cancer care programs.

## IV. ADVANCED DISEASE COORDINATION

### 1. Historical Background and Development

A program similar to the program currently called Advanced Disease Coordination was conceptualized by Dr. Bernard Hammes, a clinical ethicist with a background in philosophy who joined Gundersen Lutheran in 1984. When he began his career at Gundersen Lutheran, Dr. Hammes spent a lot of time with dialysis patients who suffered serious neurologic injuries from which they were not likely to recover. Not knowing what their patients wanted, providers and family members were faced with difficult ethical decisions concerning end-of-life care. In 1986, the Gundersen Lutheran administration approved a program called “If I Only Knew” for dialysis patients and families that sought to engage patients and their families in advance care planning.

Based on the success of If I Only Knew, in 1991 the leaders in La Crosse decided to extend the program to the entire community through a program called “Respecting Choices<sup>®</sup>.” This program sought to engage patients and their families in informed conversations about end-of-life decisions and to improve the systems and processes used to collect and store advance care planning decisions in patients’ medical records. A study conducted that assessed the effectiveness of this program found that, over 11 months in 1995 and 1996, 85% of surveyed adult patients who died in any health care settings in La Crosse County that participated in the program had advance care plans, most of which were found in the patient’s medical record. The Gundersen Lutheran leadership has continued its support for this program by providing an infrastructure that has allowed for the continued development and reshaping of the program. These efforts have extended beyond the system and community in the form of educational programs, services, and materials for advance care planning.

Gundersen Lutheran’s program for advance care planning, “Respecting Choices<sup>®</sup>,” involves a staged approach to advance care planning. The program consists of three key stages called “steps”:

- **First Steps** targets healthy patients with the goal of creating a basic advance directives document and integrating patient choices into this document. This step is the basic advance care planning at Gundersen Lutheran and involves the process of coming to understand, reflect on, discuss, and plan for a time when a patient cannot make his or her own medical decisions. The process is crucial to assist those closest to patients and their physician(s) to provide the patient the best care when they cannot make their own decisions. Through this process, the patient can create a plan. For most adults, the best way to document their plan is to use a power of attorney for health care form. The result of a plan that includes patient choices is called an “advance directive.”
- **Next Steps** targets those with a progressive disease with complications, including functional decline along with frequent hospitalizations or emergency room use. In this step, the patients, along with their families, explore goals for life-sustaining care, engage in an in-depth disease-specific conversation to create a disease-specific plan, explore their understanding of the patient’s illness progression, and explore the

patient's and family's hopes, fears, and concerns. The target population for the Medicare demonstration comes from this step of the advance care planning process.

- **Last Steps** targets patients who are likely to die in the next 12 months. These are patients who are frail or receiving long-term care and may have lost capacity. In this step, the patient and family express their care choices through the Physician Order for Life Sustaining Treatment (POLST); these decisions become part of the medical record. POLST is an order that reflects patient preferences in a critical event; it includes information on how aggressive patients would like their treatment to be, resuscitation status, antibiotics, and feeding tubes. This document guides patient care, and the patients keep this document with them when they travel or come to the hospital.

In its ongoing development of advance care planning for its patients, Gundersen Lutheran has recently incorporated all of the elements of its advance care planning program to create a new model for more efficient, high-quality care for their late life patients. The name of this new program is “Advanced Disease Coordination,” which is described in **Section IV.3**. The Medicare Demonstration project is providing Gundersen Lutheran with an opportunity for further development and evaluation of this new model of late life care.

## **2. Involvement in the Medicare Health Care Quality Demonstration Project**

The motivation for involvement in the Medicare demonstration project is mission driven, coming from a desire to lead the change in caring for the aging baby boomer generation. As care becomes more complex and multiple providers are involved in caring for the patient, it becomes increasingly more difficult for patients and families to understand care options as well as for providers to be aware of patient and family care goals and preferences. The Gundersen Lutheran staff viewed the demonstration as an opportunity to grow their Advanced Disease Coordination program, thereby helping patients and families to make informed care choices and to communicate those choices to everyone involved in their care. Participation in this demonstration allows the Gundersen Lutheran staff to capture, demonstrate, and share strategies that they believe will help to fix fundamental health system flaws and provide quality care for Medicare beneficiaries in a sustainable manner. In addition, the Medicare demonstration provides an opportunity to further operationalize the program by establishing quality of care metrics for late life care services (see **Section IV.6**) and solidifying the Advanced Disease Coordination program structure and staffing in a more rigorous fashion (see **Section IV.4**). The Medicare demonstration will allow Gundersen Lutheran staff to demonstrate that providing these types of late life care services can be a successful model of health care delivery.

## **3. Description of Services**

The Advanced Disease Coordination program at Gundersen Lutheran is a system of patient care specifically designed for patients who have serious, eventually fatal, chronic conditions. The targeted population for the program is patients with a prognosis of 2 years or less to live. The program features an interdisciplinary care team dedicated to providing high-quality, seamless medical care, individualized for each patient and family across all settings of care, from home to hospital. Advanced Disease Coordination services at Gundersen Lutheran include a wide range of services designed to meet patients' goals and preferences. These services include

care coordination services, primary care services, inpatient and outpatient medical and surgical procedures, home health care, palliative care, pastoral care, hospice discussion, social worker services, and so forth. Advanced Disease Coordination services are provided by a team of primary care physicians, nurse care coordinators, palliative care providers, social workers, pastoral care counselors, and other professionals.

Coordination of care is a key element in the Advanced Disease Coordination program. The need for care coordination goes back to the root philosophy and mission of the Gundersen Lutheran system: “every patient at this stage needs a nurse advocate.” Service coordination for late-life patients requires a “custom fit approach” and does not have a specific set of protocols. The care coordination is flexible to meet the needs of patients who choose to receive aggressive, intermediate, or the least-invasive care. Unlike the typical general care coordination program in which nurse care coordinators might be working with dozens of physicians, the Advanced Disease Coordination team at Gundersen Lutheran focuses only on late life care coordination, which is an advantage: “This is true care coordination.”

Most patients receiving Advanced Disease Coordination services have participated in the Next Steps conversation and have chosen the Advanced Disease Coordination team as their primary care providers. The outcome of the Next Steps conversation is a Statement of Treatment Preferences and a detailed summary of the Next Steps conversation. These are key tools for the Advanced Disease Coordination team to understand patients’ goals and to help them develop the treatment plan for the patients, which is an ongoing process. Note, however, that patients can receive services under the Advanced Disease Coordination program regardless of completion of Next Steps conversation. Also, patients who complete the Next Steps conversation and receive Advanced Disease Coordination services may opt to continue seeing their primary care provider, with the Advanced Disease Coordination team providing adjunctive care.

The Next Steps interview is a structured and individualized process for individuals with chronic, progressive illness who are experiencing significant decline in their functional status, illness complications, or frequent hospitalizations. Such changes in health require an exploration of patients’ goals and related treatment decisions. Next Steps includes the development of a condition-specific plan based on decisions the patient is likely to face in the near future. During these discussions, a trained facilitator explores what patients know about their disease, aims to gain an understanding of the patients’ values, and develops an understanding of the risks that patients would or would not want to take. Gundersen Lutheran offers the Next Steps conversation to patients, as well as the opportunity to receive the additional services that the Advanced Disease Coordination team offers. There are four scenarios that could occur after the offer of Next Steps and Advanced Disease Coordination is made:

1. Patients may refuse a Next Steps conversation and continue to receive care as they have been.
2. Patients may participate in a Next Steps conversation but decline any services provided by the Advanced Disease Coordination team. These patients would continue to receive care as usual.

3. Some patients may choose to have just a consult visit with the Advanced Disease Coordination team after the Next Steps conversation. These patients would continue to receive care as usual from their primary care provider.
4. Some patients may decide after Next Steps to receive their primary care services from the Advanced Disease Coordination team. The team would provide the patient with the usual primary care services that the patient has always received but would provide additional care coordination and palliative care services.

This fourth group is the focus of the Medicare demonstration intervention. These patients receive care from the Advanced Disease Coordination team in addition to having the Next Steps conversation.

The target population of patients for the Next Steps discussion is identified through a daily palliative care census based on the following criteria (see **Appendix B**):

1. **Is this a patient with a targeted disease or condition?** All patients aged 65 years and older with Congestive Heart Failure; End Stage Renal Disease; Metastatic Cancer; or Chronic Obstructive Pulmonary Disease; or Parkinson’s Disease or; Alzheimer’s Disease, or ALS [amyotrophic lateral sclerosis]; or MS [multiple sclerosis]; or Stroke or any combination thereof.
2. **Is this a patient whose care is managed by Gundersen Lutheran?** Patients who had one or more of the following visits at Gundersen Lutheran during the last 6 months: office visit (including urgent care or nursing home) (CC-7; CC-10); or emergency room visit (CC-8); or hospitalization (CC-9). [Tables CC-1 through CC-10 can be found in **Appendix B**.]

The census provides names of patients who are being discharged from the hospital or readmitted within 30 days and issues alerts on patients whose names already exist in the database and require follow-up. A member of the palliative care team visits the patients in the hospital or contacts them as soon as possible following the hospital visit—within the same day or within 24 to 48 hours at the latest to educate patients about the program, invite them to participate, and schedule the time for the Next Steps conversation for interested patients. If patients choose to participate, a facilitator coordinates with the patient’s primary care provider to do advance care planning.

Next Steps discussions take about 1 to 2 hours and involve patients, their surrogates, or family members (home visits take longer). These discussions are conducted face to face, preferably in a nonhospital environment. The Next Steps discussion begins with an assessment of the patients’ and family members’ understanding of the disease and its causality, the meaning of quality of life to them, and what can be done to maintain their goals and wishes. The discussions address event that may occur as their disease progresses and actions that patients prefer that their providers take if these events do occur: “It’s all about what patient wants.” Patients are presented with a range of options regarding their treatment preferences. The questions are very clear and specific (e.g., “Do you want a ventilator? If you had a serious complication with prolonged



hospital stay and did not know who you were and where you were, what would you want? If you knew who you were but could not talk, what would you want?”)

Facilitators use scripts as part of the Respecting Choices Next Steps discussion as a way to identify patient treatment choices. Interview questions follow a prescribed pattern that helps to keep the interview on track. The most challenging aspect of the discussions includes unanticipated issues that may arise during the conversation.

In essence, facilitators aim to gain an understanding of patient goals and how health care providers can help patients to achieve those goals and preferences, which are then documented and become part of patients’ medical records. Having such conversations and understanding options before patients face difficult choices helps to establish the care plans that are optimal for individual patients. After interviews, facilitators document the time taken to complete the process (including preparing for the conversation, conducting the conversation, creating or revising the health power of attorney document, and documenting the content of the conversation). The resulting document is signed by two witnesses and scanned into the Gundersen Lutheran information technology (IT) system. It lists the people whom patients delegate to make health care decisions as well as decisions regarding resuscitation status, tube feeding, organ donation, nursing home placement, what patients want when they are near death, and what their family would want to know. In addition, the facilitators document the type of follow-up the patient opts to receive and the timing of the follow-up. The follow-up is documented within Clinical Workstation (see **Section IV.5**) via a dictated note by the Next Steps facilitator. The follow-up document is not signed by anyone.

The key benefit of the Next Steps conversation for patients is education: “we educate patients and families, and they make the decision.” Those who prefer aggressive treatment have a choice to receive their care in the hospitals. Those whose goal is comfort care have a choice of home care services or hospice care. Patients who receive care from the Advanced Disease Coordination team have their plan of care revised on an ongoing basis and updated accordingly to reflect patients’ changing needs:

People make these documents and things change in their lives. Their wishes change, technology changes, their primary care takers change.

Advance care planning should never be a one-time conversation. It should start early in life and continue to build into the system.

Based on Gundersen Lutheran staff experience, patients who choose to participate in the Next Steps conversation have a better understanding of their expected course, options, and treatments and are engaged in a thoughtful planning process in end-stage illness.

The Advanced Disease Coordination program collaborates and overlaps with several related programs and services at Gundersen Lutheran, including primary care services, palliative care program, home health services, and hospice program. The goal of Advanced Disease Coordination is continuity of care, quality of life, and respect for the patients’ wishes.

**Primary Care Services.** Gundersen Lutheran’s primary care physicians offer comprehensive diagnostic and primary care services. Primary care physicians are experts at

treating patients with complex medical problems. They also provide a complete range of medical care, including the diagnosis and treatment of acute and chronic illnesses. Primary care services include (but are not limited to): (1) management of complex, ongoing disorders, (2) acute care, (3) referrals to specialists for further diagnosis and/or treatment, (4) physical exams, (5) mild injury care, (6) disease prevention and screening, and (7) healthy lifestyle management.

**Palliative Care Program.** Gundersen Lutheran's Palliative Care program is designed to improve symptoms and pain for people with progressive, serious illnesses or medical conditions. It is appropriate for patients whether they are pursuing a cure for their condition or looking to manage symptoms resulting from their disease or its treatment. Palliative care can be provided in the clinic or hospital, at home, or in a nursing home. The palliative care team works closely with the patient's primary physician. They meet with patients to assess their physical needs and determine the best treatment options for symptoms including pain, fatigue, shortness of breath, nausea, and loss of appetite. The palliative care team also addresses concerns such as depression, loss of control, anxiety, loneliness, and fear of being a burden or dying.

The purpose of the palliative care program is to ease the physical, emotional, and spiritual suffering of people with progressive diseases and to manage disease symptoms (e.g., pain, fatigue, nausea, depression) for these patients. The emotional and spiritual needs of patients and their families are supported through an enhanced understanding of illness, and also through assistance with the transition from the active treatment of disease to an approach that is focused on comfort and quality of life.

Palliative care team members provide information about the medical situation and what to expect in the future through extended conversations between patients, their families and health care teams, completion and review of advance care plans, coordination of community resources, and guidance regarding immediate and future plans that need to be made. The palliative care team works closely with the hospice.

**Home Health Services.** Home health services provide comprehensive care services to patients who need advanced medical treatment in their home environments. These services are tailored to the type of care that is needed, with the goal of helping patients to remain independent at home as long as possible. Services may include medication injections; tube feeding; catheter care; colostomy care; diabetes education; infusion (intravenous) therapy; wound care; bowel care; exercise programs; assessment of medical, social, and financial needs; referrals to other community resources; palliative care; long-range planning and decision making; assistance with advance directives (making end-of-life decisions); coordination of insurance benefits; necessary medical equipment for proper care; and daily nursing contact via telemedicine.

**Hospice Services.** Hospice services provide care for patients with medical conditions that cannot be cured and have a life expectancy of 6 months or less and whose focus of treatment is on symptom management, comfort care, and quality of life. Hospice providers assist family members in caring for patients with a terminal illness by shifting from a curative focus to an emphasis on comfort.

#### 4. Program Structure and Staffing

The Advanced Disease Coordination team at Gundersen Lutheran consists of primary care physicians, nurse care coordinators, palliative care providers, social workers, pastoral care counselors, and other professionals. The Advanced Disease Coordination team has weekly meetings to discuss the status of care for patients receiving Advanced Disease Coordination services. Important for the team are the nurse care coordinators, who are the primary contact persons for the patients participating in the Advanced Disease Coordination program, and who have regular telephone calls with the patients.

The Advanced Disease Coordination program is overseen administratively by a director, director of quality for ambulatory care services, and a project manager who was recently hired to support the Medicare demonstration. The program staff anticipates some overlap in program staffing because the goal of the system is to meet the needs of all patients. Because the program is closely linked with clinical operations, it uses additional resources, which are identified subsequently. Support for the program is provided by Bud Hammes (program director) and Betsy Clough (director of quality for ambulatory care services).

The Next Steps conversations are conducted by 14 trained facilitators who have various existing roles and responsibilities at Gundersen Lutheran and have appropriate skill sets (nursing, social work, pastoral care, etc.). A key characteristic of a successful facilitator is excellent interview skills. Facilitators are selected based on their management approval and completion of the required 2-day training. The Next Steps training provides a competency-based training that leads to a high skill level that is standardized so that all participants trained will conduct the Next Steps discussion in a similar way and document it in a uniform format. Most recently, the organization started gearing the training toward specific clinical areas, such as dialysis. If there are medical questions that facilitators cannot answer, the facilitators refer the question to physicians or other clinicians.

In preparation for the Next Steps conversation, a trained facilitator reviews the patient record and data summary currently maintained in a Clinical Workstation (see **Section IV.5**) application developed specifically for this program. The spreadsheet contains information on the referring primary care provider, patient identification (ID), power of attorney document, date of interview, and assigned facilitator.

Preparation time includes the chart review, discussion with the physician, review of patient comorbidities, physician notes, including documentation of family and social aspects of the patient's life, and anything else that might help gain a better understanding of the patient and be useful in the interview. Preparation time takes about an hour for new facilitators and half an hour for experienced facilitators who can more quickly "hone in on what it is that will help the patient."

The initial goal for each facilitator is to conduct one Next Steps interview per month on average, and eventually four interviews per month on average. This frequency allows facilitators to maintain the needed skill set, yet at the same time to prevent burnout, given that the interviews are emotionally draining. To ensure that their emotional needs are met, facilitators debrief with their colleagues after each interview. Staff holds monthly "huddles" in which they talk to one

another and provide support and strategies for dealing with different situations. In addition, staff at Gundersen Lutheran started conducting Schwartz rounds, which help providers to take care of themselves via a conference format conducted six times per year. At these rounds, providers who have been involved have a chance to debrief on difficult cases, process, and to talk about how they feel: “we all need that support because it does wear on you at times.”

Patient choices and preferences resulting from the Next Steps conversations are documented and available to the health care team via the patient’s medical record (this is discussed in greater detail in the IT section below). The information is also used for care planning purposes by the Advanced Disease Coordination team

The Advanced Disease Coordination team collaborates and overlaps with several related health care teams at Gundersen Lutheran, including the palliative care, home health, and hospice teams. The palliative care team consists of a medical director, four physicians, three nurses, three nurse practitioners, a coordinator, a medical assistant, and a patient liaison. The team has weekly meetings on patient care. Palliative care services are financially supported through a shared group practice model to ensure the sustainability of such services (“We don’t bill enough to sustain ourselves, but group practice fills what we can’t bill”). Palliative services are provided using a primary care mindset—they are customized to provide safety net services to patients who do not have a support network or a primary care provider—but can also be scaled down and provided only “as needed” to those patients who prefer to continue receiving their services from current primary care providers. Because palliative care services are relatively new to some community providers, the Gundersen Lutheran palliative care team uses several strategies to educate them about these services:

Sharing stories is the most powerful, both good and bad. Physicians often do not see the impact on families after someone dies because they are no longer involved in that process, but we’ve seen it.

The home health care team includes registered nurses, home health aides, physical and occupational therapists, registered dietitians for nutrition counseling, and social workers. Nurses are also available to assist patients by telephone 24 hours per day, 7 days per week. The hospice team consists of the patient’s primary care physician; a medical director; registered nurses; a social worker; a chaplain; home health aides; trained volunteers who run errands and offer moral support; registered dietitians; and physical, occupational, and speech therapists. Patients can maintain daily contact with nurses in their home through telemedicine.

## **5. Information Technology System Infrastructure**

Currently, providers at Gundersen Lutheran work with two different IT systems. The outpatient care clinics and nursing homes use a homegrown Oracle-based IT system called Clinical Workstation (CWS), developed in 1995. The system integrates laboratory, radiology, and other data to a data warehouse. Regional clinics have electronic access to CWS and can access or share the same information as providers in La Crosse. In 2008, the hospital implemented the Epic system, which incorporates provider order entry. Epic will replace the homegrown system used in outpatient facilities over the course of the next year.

CWS has an application that allows providers to access end-of-life documents and to dictate advance directive notes reflecting ongoing discussions about goals of care or treatment plans that are retrievable in an easy, quick fashion. Currently the Advanced Disease Coordination team is in discussion with Epic to incorporate many of these functions into the ambulatory system being developed for the outpatient setting. CWS has an application that allows providers to access end-of-life documents and take dictation. The Epic system does not have such functionality, but the IT staff indicated that they plan to incorporate these functions.

Performance data for Advanced Disease Coordination was previously collected in an Excel spreadsheet format. As of August 19, 2010, Gundersen Lutheran has moved away from Excel data collection and is capturing nearly 100% of data within a homegrown tool within CWS. Providers anticipate that the system will flow better following its integration to Epic. The Gundersen Lutheran staff anticipates that in addition to existing functionality, it will integrate patient information and quality measures needed for the Medicare demonstration.

The system home page has a button for patients, which directly links them to their advance directive. Palliative care staff can dictate patients' preferences directly into the system. When providers are working in the end-of-life care situation, they can access those records directly. In the words of a palliative care physician, "If we didn't have that system, you'd be relying on the family to bring those documents in, and that is not a good time for such things. Integrating this into your EMR [electronic medical record] is critical."

## **6. Performance Measures**

With the goal of adhering to a national standard that can be recognized by most professionals, performance measures used to evaluate the effectiveness of Advanced Disease Coordination are based on national palliative care measures and the Dartmouth Atlas. A list of measures, numerators, proposed and current targets, and sources of data are included in **Appendix C**. Most of these measures are currently under development trying to address definitional, data source, and data documentation issues.

Program staff recognized that most of the current measures are process measures and that program staff needed to ensure that they were collected in a standardized way. Currently, they envision that most of these measures will be documented in electronic medical records. The list of measures is intended to be additive: measures identified in the first year of the demonstration will continue throughout the demonstration period.

Measures for the first year of the demonstration include numbers and percentages of the following:

- Communication—patients who have monthly communication to assess contentment with current symptom management;

- Next Steps—patients who have documentation of completion of the Next Steps conversation by the end of the first month of care in Advanced Disease Coordination;<sup>2</sup>
- Power of Attorney—patients who have power of attorney within 6 months of death;
- Access to Care—patients with symptom management problems or active symptoms offered a visit within 1 week; and
- Hospice Discussion—patients who have a discussion 6 months prior to death about what hospice is and how to enroll if they so choose.

Note that some of the measures for the first year of the demonstration (e.g., the Next Steps measure) reflect participation in Advanced Disease Coordination, and given that Gundersen Lutheran restricts demonstration eligibility to patients that have participated in the Next Steps conversation, performance on those measures will necessarily be high.

Measures planned for development during the second year of the demonstration include mainly process measures. The measures include numbers/percentages of the following:

- POLST—patients with a Physician Order for Life Sustaining Treatment (POLST) completed 2 months before death;
- Depression Assessment—patients who had depression (and anxiety) symptoms assessed at initial evaluation and routine follow-up;
- Depression Treatment—patients who had a treatment plan (developed and followed);
- Pain Assessment—patients with regular pain assessment;
- Pain Treatment—patients who screen positive for pain who have treatment plans in place;
- Dyspnea Assessment—patients with regular dyspnea assessment;
- Dyspnea Treatment—patients who screen positive for dyspnea and have treatment plans in place;
- Spiritual Support—patients who are not part of the hospice program will be asked about the need for spiritual support and life review in the last 3 months of life;
- Hospice Patient Quality of Care—quality of care of hospice patients assessed using the PEACE (Prepare. Embrace. Attend. Communicate. Empower.) tool;<sup>3</sup>

---

<sup>2</sup> Gundersen Lutheran noted that this measure may need to be revised because it can take multiple approaches to the patient/family before Next Steps is initiated, which can take more than one month's time.

- Symptom Control Plan—patients who have developed a symptom-control plan;
- Advance Care Directive—patients who died who had an advance care directive available at place of death;
- Treatment Plan—patients (and/or surrogates) with whom current standards of care (evaluations, medications, screenings, and follow-up) have been discussed; and
- Goals of Care—patients with whom a mutual decision (whether or not it followed the standard) achieved the patient’s goals of care.

Program staff is engaged in an ongoing pursuit of the most convincing measures supporting the effectiveness of the program that are important but also feasible to capture with available staffing resources. From the perspective of the palliative care team, the most important acute care measure was having contact with the patient within 24 hours of presentation: “For me, quality on the acute side is about communication and physically being there for the patient.”

Measures under consideration for the third year of the demonstration include quality of life assessment (measured using SF-36 or Advanced Illness Index), patient and family satisfaction (measured using Press Ganey or other tested tool), and acute care assessment (length of stay, deep venous thrombosis [DVT] prophylaxis, readmission rates, mortality, congestive heart failure [CHF] composite, stroke composite).

---

<sup>3</sup> The PEACE Project was sponsored CMS and conducted by the Carolinas Center for Medical Excellence, the Quality Improvement Organization for North and South Carolina.

## V. MEDICARE HEALTH CARE QUALITY DEMONSTRATION

### 1. Demonstration Design

The Medicare Health Care Quality Demonstration is designed to examine the extent to which major, multifaceted changes to the traditional Medicare health delivery and financing systems can lead to improvements in the quality of care provided to Medicare fee-for-service (FFS) beneficiaries. Gundersen Lutheran, a multilocation health system consisting of hospitals, physician practices, and specialized health centers, is the third project to be implemented under the demonstration. It is headquartered in La Crosse, Wisconsin, and includes satellite clinics and critical access hospitals in Iowa, Minnesota, and Wisconsin.

Under the demonstration, Gundersen Lutheran is implementing an Advanced Disease Coordination program (see **Section IV**). Medicare beneficiary participation in the program will not limit or restrict the Medicare benefits otherwise available to Medicare beneficiaries under Parts A, B, or D and will not limit the ability of beneficiaries to seek care from any participating Medicare provider.

**Advanced Disease Coordination.** The program is designed for patients with serious, eventually fatal, chronic conditions or frailty. These include congestive heart failure, end-stage renal disease, metastatic cancer, chronic obstructive pulmonary disease, Parkinson's disease, Alzheimer's disease, ALS, MS, stroke, or any combination of these conditions. Gundersen Lutheran will target patients with life expectancies of 2 years or less. The program is expected to improve care provided to these patients by focusing on continuity of care, quality of life, and respect for the patient as a person and family member. Advanced Disease Coordination includes the establishment of a team of care providers and comprehensive monitoring of quality measures for all new enrollees. The goal of Gundersen Lutheran's program is to significantly improve the care of end-stage, chronically ill patients. Prior to enrolling in Advanced Disease Coordination, patients participate in a decision support intervention (Next Steps) that helps the care providers to understand patient choice, and enables the patient and the patient's caregiver to gain a better understanding of disease progression, set realistic goals for treatment, and formulate specific plans for medical care.

**Medicare Beneficiary Eligibility for the Demonstration.** Gundersen Lutheran's Advanced Disease Coordination program under the demonstration targets Medicare beneficiaries with serious specified chronic conditions. To be eligible for the demonstration, beneficiaries must:

1. be enrolled in traditional Medicare FFS;
2. be aged 65 or older;
3. have a qualifying diagnosed condition (see **Appendix B**);
4. be managed by Gundersen Lutheran as determined by utilization of office visits, emergency room visits, and/or hospitalizations (see **Appendix B**);
5. have a prognosis of 24 months or less to live;



6. participate in the Next Steps conversation; and
7. elect the Advanced Disease Coordination team as their primary care providers.

**Quality Measurement.** For each performance period, Gundersen Lutheran will propose and, with CMS approval, adopt the quality measures that will be used to track changes in the quality of care received by beneficiaries participating in the demonstration (see **Section IV** for details). The denominator for the quality measures will be restricted to beneficiaries in the demonstration group. Performance measures used in Years 1 and 2 are listed in **Appendix C**. Gundersen Lutheran may adopt and use any performance measures that it determines are necessary and useful for purposes of program management. CMS approval of measures adopted for purposes of program management is not required, but Gundersen Lutheran will include a description of all such measures in the annual performance plan, the midyear activity report, and the annual performance improvement report.

## **2. Implementation and Operational Experience and Challenges to Date**

Gundersen Lutheran interviewees posed several issues related to demonstration implementation experience and challenges to date. Key issues included enrollment, economic resources, and timing.

**Enrollment.** Although Advanced Disease Coordination focuses on the Medicare demonstration patients, the program does not turn down any patient with a need for these services. However, Gundersen Lutheran will track the Medicare demonstration patients separately. Often the providers are not aware of the patient’s demonstration status; in the words of one physician, “I don’t want to know who is part of the demonstration project and who is not when I’m seeing my patients. I just want to take the best care of my patients that I can.” Although the goal is to use the same process to care for all their patients, program staff also finds that they need to prioritize and focus their resources on the Medicare patients who are eligible for the demonstration.

Program staff shared that identifying patients for participation in the Next Steps conversations has been challenging, and that presents a challenge to getting the demonstration going as well. Obtaining and maintaining an accurate patient list requires frequent updates. Gundersen Lutheran has been identifying the target patient population monthly from their internal data systems; however, they have been unable to reach all of the potential patients. Program staff anticipates that it will be easier to approach patients during or immediately following a hospitalization, because “patients generally don’t want to invest time and energy in this program when they aren’t having any problems.” In addition, Gundersen Lutheran staff note that once these patients are identified, possibly their biggest hurdle in getting the demonstration going is figuring out how to best approach these patients for the Next Steps conversation (e.g., under what circumstances).

**Economic Resources.** Several initial steps have been taken to implement Advanced Disease Coordination by Gundersen Lutheran. Program staff believe there is a dedicated group of physicians and nurses that are committed to the program, and they have excellent leadership. They meet monthly with senior administration staff and have appointed and assigned a project coordinator. Initial staffing needs have been addressed, and they have a care coordination team

that meets weekly to review patient care. Two nurse care coordinators have been assigned to work on the late-life care team.

However, providing these types of late-life care services is labor intensive and creates a challenge for Gundersen Lutheran because, like all health care organizations, it is economically constrained. As Gundersen Lutheran staff expressed, however, the reality is that they are not taking care of a new group of patients; they are taking care of their patients in new ways and offering new services. As a result, they believe that the program should not require hiring many new staff but rather, re-allocating current staff responsibilities more efficiently. Thus, the real economic challenge is how to expand the program without new hires by shifting staff to assume new roles.

**Timing.** The original start date for the Gundersen Lutheran demonstration was changed. This delayed start date was a challenge to Gundersen Lutheran because, in anticipation of two different start dates, they started working on how they would implement and test the systems so they could start in a timely manner. However, enrollment has been low to date, so they are not overly concerned.

### **3. Anticipated Benefits to the Medicare Program, Medicare Beneficiaries, and Gundersen Lutheran Health System**

For more than 100 years, Gundersen Lutheran has had a strong culture focused on trying to do what is right for the patient and family. It is part of their mission and a reason why the organization was founded. As a service line, it was recognized that as Gundersen Lutheran got larger, it became increasingly more difficult to deliver late-life care that respected the wishes of the patient and family. As care becomes more complex, and more and more providers are involved in a patient's care, it is difficult for patients and families to know the range of options and difficult for providers to know the patient's and family's preferences. Gundersen Lutheran saw this as a clear opportunity to assist the patient and family in making choices and making those choices clear to everyone involved in their care. Their goal is to provide a health care system for patients that allows them to achieve what is most important to them at the end of their lives.

Gundersen Lutheran also strives to be perceived as a leading organization and an institution of excellence. Their Advanced Disease Coordination model provides them with an opportunity to be at the forefront of health care reform, which aligns with the goals of the demonstration.

At the time of the data gathering for this case study, the Advanced Disease Coordination program at Gundersen Lutheran was getting off the ground and did not yet include enough patients to be able to make any statements or conclusions regarding the impact of the program. The demonstration program expects to continue seeing increased volume of patients, as well as ongoing improvements and refinements in care processes and coordination.

### **4. Demonstration Timetable and Current Phase**

The implementation date for the Gundersen Lutheran demonstration was February 1, 2010. The demonstration project is scheduled to end May 31, 2014. As of May 2010,

approximately 320 patients were in the palliative care census. Among those, approximately 40 patients met the requirements for the Medicare demonstration.

## VI. GENERALIZABILITY

Several key operational features and requirements form the basis of Advanced Disease Coordination, including

- the Next Steps conversation, scheduled while the patient is medically stable and well before a medical crisis.
- advance care planning facilitator skills, education, and training that fosters effective communication with patients and families.
- an individualized late-life care plan (Statement of Treatment Preferences) that addresses patients' wishes, need for information, additional resources, and further discussion with others.
- documentation and communication of patient's decisions that can be honored by health care providers at all care settings within the system.
- an Advanced Disease Coordination team consisting of primary care physicians, nurse care coordinators, palliative care providers, social workers, pastoral care counselors, and other professionals with experience and expertise in providing care coordination services for late-life patients.
- interoperability of health information technologies within inpatient and outpatient care services that allows ongoing entry and access to patient's data that entails power-of-attorney document and patient's wishes specific to late-life care.

The success of the Advanced Disease Coordination program will be determined through patient and family satisfaction with the program over time. Program success will be evident from referrals of those who had first-hand experience with the program as well as primary care providers who care for the patients who participate in Advanced Disease Coordination:

You won't get an answer for whether the program is successful based on metrics. Patients and families will tell us. They have good voices, and they are not shy. We will also be getting feedback from primary care providers who had been taking care of these patients before and after their enrollment. The marker will be increased acceptance on behalf of clinicians.

If we have happy and satisfied patients, families who rave about the program, fiscal responsibility that you can sustain, then we can do this for fifty years.

Key components for replicating Advanced Disease Coordination in other communities include:

- a high level of integration of a health care delivery system and services;
- strong organizational mission and commitment to patients;

- presence of palliative care providers and services;
- integration of electronic medical records; and
- recruitment, training, and retention of qualified staff.

Some of these, such as integration of electronic medical records, are already available or can be easily implemented in integrated delivery systems. However, components such as having a strong organizational mission and commitment to patients might take a long time to truly achieve in practice elsewhere. Gundersen Lutheran's Advanced Disease Coordination team believes that the primary reason that the program was implemented at their organization is because it is consistent with their organizational mission. Leadership for this type of late-life care model is part of their culture that emphasizes what is right for the patient. Thus, the organizational mission is critically important for the generalizability of this type of late-life care model.

Finally, provision of Advanced Disease Coordination is labor intensive and requires the time resources of physicians, nurses, and other health care professionals. The level of required resources will be assessed through the course of this demonstration. Information on the costs of providing this type of late-life care services, and how to provide them most efficiently, is critical to future assessment of program generalizability, because each mission has to be balanced with financial resources: "If I don't make a margin, then I don't have a mission."

## REFERENCES

- Bintz, M., Turcker, L., and Cachman, V.: Transformation patient care: a system of care coordination that works. Group Pract. J. Apr. 2009.
- Centers for Medicare & Medicaid Services: Gundersen protocol. 2010.
- Centers for Medicare & Medicaid Services: Gundersen fact sheet. 2010.
- Gawande, A.: Letting go. What should medicine do when it can't save your life? New Yorker. Aug. 2, 2010.
- Gundersen Lutheran Health System: Transforming healthcare: advance care planning. Available from <http://www.gundluth.org/upload/docs/TransformACP.pdf>.
- Gundersen Lutheran Health System: Advance care planning overview and tutorial. Available from <http://www.gundluth.org/AdvanceCare/>.
- Gundersen Lutheran Health System: Respecting choices: an advance care planning system that works! Available from <http://respectingchoices.org/>.
- Gundersen Lutheran Health System: Our services. Available from <http://www.gundluth.org/?id=4&sid=1>.
- Hammes, B.J., and Rooney, B.L.: Death and end-of-life planning in one Midwestern community. Arch. Intern. Med. 158(4):383-390, 1988.
- Hammes, B.J., Rooney, B.L., and Gundrum, J.D.: A comparative, retrospective, observational study of the prevalence, availability, and specificity of advance care plans in a county that implemented an advance care planning microsystem. J. Am. Geriatr. Soc. 58:1249-1255, 2010.
- Hickman, S.E., PhD, Nelson, C.A., et al.: A comparison of methods to communicate treatment preferences in nursing facilities: traditional practices versus the physician orders for life-sustaining treatment program. J. Am. Geriatr. Soc. 58:1241-1248, 2010.
- Kirchhoff, K.T., Hammes, B.J., Kehl, K.A., et al.: Effect of a disease-specific planning intervention on surrogate understanding of patient goals for future medical treatment. J. Am. Geriatr. Soc. 58:1233-1240, 2010.
- Klein, S., and McCarthy, D.: Gundersen Lutheran Health System: Performance Improvement Through Partnership. Commonwealth Fund Publication 1307, Vol. 28. New York. Commonwealth Fund, Aug. 2009.

**APPENDIX A:  
INTERVIEW GUIDES**

## **DISCUSSION GUIDE FOR GUNDERSEN LUTHERAN LATE LIFE CARE SERVICE (LLCS)**

### **MANAGEMENT AND PROGRAM STAFF**

The goal of this discussion is to learn about the Gundersen Lutheran Health System and its Late Life Care Services. Please note that you do not need to share any information that might contain confidential information such as patient-level or proprietary data. Likewise, you do not have to answer question(s) that you may not feel comfortable sharing for any reason.

#### **General Questions Regarding Gundersen Lutheran Health System Late Life Care Services**

1. First, we would like to ask about your role at Gundersen Lutheran. What is your title and area of responsibility?
2. What is your role with Late Life Care Services (LLCS)?
3. What prompted the effort to establish this service?
4. What are the LLCS goals?
5. What do LLCS services entail? (Probe in depth on each service: provider education and outreach, patient education and outreach, late life care referral process, late life care services for patients, late life care support for providers, information technology support.)
6. How do services provided through LLCS differ from usual care?
7. Please describe operational structure required to provide LLCS services. What organizational units and staff do these services entail? (Probe on LLCS leadership, information technology systems and data system staff, physician/patient education and outreach staff, referral staff, other.)
8. Who oversees services provided by LLCS? (Probes: Gundersen Lutheran management, board of directors.)
9. What other external organizations or entities collaborate with Gundersen Lutheran in provision of LLCS services? How do they work with Gundersen Lutheran? How do they influence LLCS services?
10. How are LLCS services funded?
11. Do you have any plans for expansion LLCS services (e.g., in terms of types of services, revenue sources, participating providers, outreach)?
12. Which medical specialties are currently engaged in LLCS services? Which other medical specialties do you plan to engage?



13. How do LLCS services improve the health of Medicare enrollees?
14. How do you collect, report, and track data related to LLCS? How do you receive laboratory and/or pharmaceutical data?
15. What data sources do LLCS entail?
16. How do you track provider performance related to LLCS? What measures do you use?
17. How does Gundersen Lutheran work with other public or private payers in provision of LLCS services?
18. How many physicians (or physician practices) participate in provision of LLCS services? How many practices or practices do you plan to engage?
19. What motivates physicians to participate in LLCS? Did you experience any difficulties in gaining physician participation? What helped to overcome these?
20. What feedback do you receive about LLCS services from providers?
21. What feedback about LLCS services do you receive from patients and their families?
22. How do physicians and physician groups use (or plan to use) LLCS data and reports to improve medical care? How would you like them to use the data?
23. In your opinion, what basic components would be necessary for other communities to implement LLCS model?

### **Questions Regarding Medicare Demonstration**

1. What is your understanding of Gundersen Lutheran's role in the Medicare Health Care Quality demonstration?
2. How does this Medicare demonstration fit with the current LLCS goals and services?
3. What motivated Gundersen Lutheran to participate in the Medicare demonstration?
4. What benefits do you anticipate this demonstration will bring to Medicare beneficiaries?
5. What changes did you have to make to existing LLCS processes or information technology systems in order to participate in the Medicare demonstration?
6. Which performance measures have you implemented for the Medicare demonstration thus far? Which additional measures do you plan to implement?
7. Did participation in this Medicare demonstration require staff training, recruitment, or external technical assistance for existing LLC services?

8. What challenges have you experienced in carrying out this Medicare demonstration thus far?
9. At this time, is there anything that hinders your ability to carry out the Medicare demonstration?
10. How will we know that LLCS demonstration is successful?

## **DISCUSSION GUIDE FOR GUNDERSEN LUTHERAN LATE LIFE CARE SERVICE (LLCS)**

### **PROVIDERS**

The goal of this discussion is to learn about the Gundersen Lutheran Health System and its Late Life Care Services. Please note that you do not need to share any information that might contain confidential information such as patient-level or proprietary data. Likewise, you do not have to answer question(s) that you may not feel comfortable sharing for any reason.

#### **General Questions Regarding Gundersen Lutheran Health System Late Life Care Services**

1. First, we would like to ask about your background and your role at Gundersen Lutheran. What is your specialty? Where does your practice fit within the overall structure of Gundersen Lutheran Health System?
2. What portion of your patients are Medicare beneficiaries?
3. What has been the nature of your involvement with Late Life Care Services (LLCS)? When did you become involved?
4. What prompted you to be part of LLCS? What motivates you to stay involved?
5. How do you (your practice) use LLCS information technology support services? How does this information help you to improve patient care?
6. In what ways have your office practices or processes changed as result of participation in LLCS? In what ways do you anticipate they may be modified in the future?
7. How do services provided through LLCS differ from usual care?
8. How does participation in LLCS affect your workload?
9. How do you identify and refer patients for “late life treatment subgroup?”
10. How do you coordinate the care of LLCS patients with other providers, care settings, or services?
11. What practice changes have you observed thus far from your involvement with LLCS?
12. What benefits LLCS bring to the patients? What feedback do you receive from LLCS patients and their families?
13. How do LLCS benefit the local community?

14. In your opinion, what key elements would be necessary to replicate the LLCS elsewhere?

**Medicare Demonstration Questions**

1. What is your understanding of Gundersen Lutheran's role in the Medicare Health Care Quality demonstration?
2. What is your/your practice's involvement with this Medicare demonstration?
3. What benefits does the Medicare demonstration project bring to your practice or group?
4. What practice changes do you anticipate from participation in the Medicare demonstration?
5. What benefits will this demonstration project bring to Medicare patients?

## **DISCUSSION GUIDE FOR GUNDERSEN LUTHERAN LATE LIFE CARE SERVICE (LLCS)**

### **INFORMATION TECHNOLOGY STAFF**

The goal of this discussion is to learn about the Gundersen Lutheran Health System and its Late Life Care Services. Please note that you do not need to share any information that might contain confidential information such as patient-level or proprietary data. Likewise, you do not have to answer question(s) that you may not feel comfortable sharing for any reason.

#### **General Questions Regarding Gundersen Lutheran Health System Late Life Care Services**

1. First, we would like to ask about your role at Gundersen Lutheran. What is your title and area of responsibility?
2. What is the nature of your involvement with Late Life Care Services (LLCS)?
3. What role do information technology systems (EMR) play in provision of LLC services?
4. How do information technology systems support LLCS? (Probe on clinical decision support tools)
5. How do information technology services that support LLCS fit into overall Gundersen Lutheran organizational and information technology structure?
6. How many and what types of employees support the IT structure for LLCS?
7. Please describe data input, processing, and reporting systems required to support LLCS. Do you anticipate making any changes in these processes?
8. What challenges do you experience with the currently existing data systems that support LLCS? How do you plan to overcome these challenges?
9. How do you track provider performance? What measures do you use?
10. How do you share feedback with providers? Do you plan to make any changes in these processes for the MHCQ demonstration?
11. How do you monitor the quality of data? What processes do you use to receive feedback or corrections of the data?
12. Please describe LLCS data sources. In addition to getting Medicare data for the MHCQ demonstration, do you anticipate incorporating any additional data?
13. How do you attribute patients to physicians and/or physician groups? What attribution-related changes, if any, do you anticipate for the MHCQ demonstration?

14. What are the strengths and weaknesses of data collection, reporting, and tracking systems used for LLCS? How do you conduct data quality assurance and enable updates and corrections?
15. Has you experienced any issues with data security related to provision of LLCS? If so, please share examples.
16. Do you have any plans for future development of additional data sources, data processing capabilities, reports, services, revenue sources, and community service areas?
17. In your opinion, what basic IT components would be necessary for implementation of LLCS model elsewhere?

### **Questions Regarding Medicare Demonstration**

1. What is your understanding of Gundersen Lutheran's role in the Medicare Health Care Quality demonstration?
2. What is your involvement with this Medicare demonstration?
3. What changes did you have to make to existing processes or information technology systems in order to participate in the Medicare demonstration?
4. Did participation in this Medicare demonstration require staff training, recruitment, or external technical assistance?
5. What challenges, if any, have you experienced thus far in carrying out this Medicare demonstration?
6. At this time, is there anything that hinders your ability to carry out the Medicare demonstration?

**APPENDIX B:  
GUNDERSEN LUTHERAN  
ADVANCED DISEASE COORDINATION PATIENT POPULATION**

## **Denominator Population**

[Question 1] – Is this a patient with the disease, or condition?

All patients aged 65 years and older with Congestive Heart Failure (CC1); End Stage Renal Disease (CC-2); Metastatic Cancer (CC-3); or Chronic Obstructive Pulmonary Disease (CC-4); or Parkinson's Disease (CC-5) or; Alzheimer's Disease (CC-5), or ALS (CC-5); or MS (CC-5); or Stroke (CC-6) or any combination thereof.

[Question 2]—**Is this a patient whose care is managed by Gundersen Lutheran?**

Patients who had three or more of the following during the last 6 months regardless of diagnosis:

- Office visit (including urgent care or nursing home) (CC-7; CC-10); or
- Emergency room visit (CC-8); or
- Hospitalization (CC-9).



**Table CC-1**  
**Diagnosis Codes to Identify Patients with Congestive Heart Failure**

ICD-9-CM CODE	ICD-9-CM CODE DESCRIPTION
402.01	HYPERTENSIVE HEART DISEASE, MALIGNANT, W/ HEART FAILURE
402.11	HYPERTENSIVE HEART DISEASE, BENIGN, W/ HEART FAILURE
402.91	HYPERTENSIVE HEART DISEASE, UNSPECIF, W/ HEART FAILURE
404.01	HYPERTENS HEART/KIDNEY DIS, MALIG, WITH HEART FAILURE
404.11	HYPERTENS HRT/KIDNEY DIS, BENIGN, W HEART FAILURE
404.91	HYPERTENS HRT/KIDNEY DISEASE, UNSPEC, W HEART FAILURE
428.0	CONGESTIVE HEART FAILURE, UNSPECIFIED
428.1	LEFT HEART FAILURE
428.20	UNSPECIFIED SYSTOLIC HEART FAILURE
428.21	ACUTE SYSTOLIC HEART FAILURE
428.22	CHRONIC SYSTOLIC HEART FAILURE
428.23	ACUTE ON CHRONIC SYSTOLIC HEART FAILURE
428.30	UNSPECIFIED DIASTOLIC HEART FAILURE
428.31	ACUTE DIASTOLIC HEART FAILURE
428.32	CHRONIC DIASTOLIC HEART FAILURE
428.33	ACUTE ON CHRONIC DIASTOLIC HEART FAILURE
428.40	UNSPECIFIED COMBINED SYSTOLIC & DIASTOLIC HEART FAILURE
428.41	ACUTE COMBINED SYSTOLIC & DIASTOLIC HEART FAILURE
428.42	CHRONIC COMBINED SYSTOLIC & DIASTOLIC HEART FAILURE
428.43	ACUTE/CHRONIC COMBINED SYSTOLIC & DIASTOLIC HEART FAIL

**Table CC-2**  
**Diagnosis Codes to Identify Patients with End Stage Renal Disease**

ICD-9-CM CODE	ICD-9-CM CODE DESCRIPTION
585.6	END STAGE RENAL DISEASE (EFF. 10/05)

**Table CC-3  
Diagnosis Codes to Identify Patients with Cancer**

ICD-9-CM CODE	ICD-9-CM CODE DESCRIPTION
151.0	MALIGNANT NEOPLASM STOMACH CARDIA
151.1	MALIGNANT NEOPLASM STOMACH PYLORUS
151.2	MALIGNANT NEOPLASM STOMACH PYLORIC ANTRUM
151.3	MALIGNANT NEOPLASM STOMACH FUNDUS
151.4	MALIGNANT NEOPLASM STOMACH BODY
151.5	MALIGNANT NEOPLASM STOMACH LESSER CURVATURE
151.6	MALIGNANT NEOPLASM STOMACH GREATER CURVATURE
151.8	OTHER SPECIFIED SITES OF STOMACH
151.9	MALIGNANT NEOPLASM STOMACH NOS
152.0	MALIGNANT NEOPLASM DUODENUM
152.1	MALIGNANT NEOPLASM JEJUNUM
152.2	MALIGNANT NEOPLASM ILEUM
152.3	MALIGNANT NEOPLASM MECKEL'S DIVERTICULUM
152.8	OTHER SPECIFIED SITES OF SMALL INTESTINE
152.9	MALIGNANT NEOPLASM SMALL INTESTINE NOS
153.0	MALIGNANT NEOPLASM HEPATIC FLEXURE
153.1	MALIGNANT NEOPLASM TRANSVERSE COLON
153.2	MALIGNANT NEOPLASM DESCENDING COLON
153.3	MALIGNANT NEOPLASM SIGMOID COLON
153.4	MALIGNANT NEOPLASM CECUM
153.5	MALIGNANT NEOPLASM APPENDIX
153.6	MALIGNANT NEOPLASM ASCENDING COLON
153.7	MALIGNANT NEOPLASM SPLENIC FLEXURE
153.8	OTHER SPECIFIED SITES OF LARGE INTESTINE
153.9	MALIGNANT NEOPLASM COLON NOS
154.0	MALIGNANT NEOPLASM RECTOSIGMOID JUNCTION
154.1	MALIGNANT NEOPLASM RECTUM
154.2	MALIGNANT NEOPLASM ANAL CANAL
154.3	MALIGNANT NEOPLASM ANUS NOS
162.0	MALIGNANT NEOPLASM TRACHEA

(continued)

**Table CC-3 (continued)**  
**Diagnosis Codes to Identify Patients with Cancer**

ICD-9-CM CODE	ICD-9-CM CODE DESCRIPTION
162.2	MALIGNANT NEOPLASM MAIN BRONCHUS
162.3	MALIGNANT NEOPLASM UPPER LOBE BRONCHUS/LUNG
162.4	MALIGNANT NEOPLASM MIDDLE LOBE BRONCHUS/LUNG
162.5	MALIGNANT NEOPLASM LOWER BRONCHUS/LUNG
162.8	MALIGNANT NEOPLASM BRONCHUS/LUNG NEC
174.0	MALIGNANT NEOPLASM FEMALE NIPPLE/AREOLA
174.1	MALIGNANT NEOPLASM CENTRAL FEMALE BREAST
174.2	MALIGNANT NEOPLASM FEMALE BREAST UPPER-INNER
174.3	MALIGNANT NEOPLASM FEMALE BREAST LOWER-INNER
174.4	MALIGNANT NEOPLASM FEMALE BREAST UPPER-OUTER
174.5	MALIGNANT NEOPLASM FEMALE BREAST LOWER-OUTER
174.6	MALIGNANT NEOPLASM FEMALE BREAST AXILLARY TAIL
174.8	OTHER SPECIFIED SITES OF FEMALE BREAST
175.0	MALIGNANT NEOPLASM MALE NIPPLE/AREOLA
185	MALIGNANT NEOPLASM OF PROSTATE
186.0	MALIGNANT NEOPLASM UNDESCENDED TESTIS
186.9	MALIGNANT NEOPLASM TESTIS NEC/NOS
187.1	MALIGNANT NEOPLASM PREPUCE
187.2	MALIGNANT NEOPLASM GLANS PENIS
187.3	MALIGNANT NEOPLASM BODY OF PENIS
187.4	MALIGNANT NEOPLASM PENIS NOS
187.5	MALIGNANT NEOPLASM EPIDIDYMIS
187.6	MALIGNANT NEOPLASM SPERMATIC CORD
187.7	MALIGNANT NEOPLASM SCROTUM
187.8	OTHER SPECIFIED SITES OF MALE GENITAL ORGANS
187.9	MALIGNANT NEOPLASM MALE GENITAL ORGAN NOS

**Table CC-4**  
**Diagnosis Codes to Identify Patients with Chronic Obstructive Pulmonary Disease**

ICD-9-CM Diagnosis Codes	ICD-9-CM Diagnosis Codes Description
491.20	OBSTRUCTIVE CHRONIC BRONCHITIS, WITHOUT EXACERBATION
491.21	OBSTRUCTIVE CHRONIC BRONCHITIS, WITH (ACUTE) EXACER
491.22	OBSTRUCTIVE CHRONIC BRONCHITIS WITH ACUTE BRONCHITIS
492.0	EMPHYSEMATOUS BLEB
492.8	OTHER EMPHYSEMA
493.20	CHRONIC OBSTRUCTIVE ASTHMA, UNSPECIFIED
493.21	CHR OBSTRUCT ASTHMA W STATUS ASTHMATICUS
493.22	CHRONIC OBSTRUCTIVE ASTHMA, WITH (ACUTE) EXACERBATION
494.0	BRONCHIECTASIS WITHOUT ACUTE EXACERBATION (EFF. 10/00)
494.1	BRONCHIECTASIS WITH ACUTE EXACERBATION (EFF. 10/00)
495.0	FARMERS' LUNG
495.1	BAGASSOSIS
495.2	BIRD-FANCIERS' LUNG
495.3	SUBEROSIS
495.4	MALT WORKERS' LUNG
495.5	MUSHROOM WORKERS' LUNG
495.6	MAPLE BARK-STRIPPERS' LUNG
495.7	VENTILATION PNEUMONITIS
495.8	OTHER SPECIFIED ALLERGIC ALVEOLITIS AND PNEUMONITIS
495.9	UNSPECIFIED ALLERGIC ALVEOLITIS AND PNEUMONITIS
496	CHRONIC AIRWAY OBSTRUCTION, NOT ELSEWHERE CLASSIFIED

**Table CC-5**  
**Diagnosis Codes to Identify Patients with Disease of the Nervous System**

ICD-9-CM Diagnosis Codes	ICD-9-CM Diagnosis Codes Description
332.0	PARKINSON'S DISEASE
331.0	ALZHEIMER'S DISEASE
331.1	FRONTOTEMPORAL DEMENTIA
331.2	SENILE DEGENERATION OF BRAIN
340	MULTIPLE SCLEROSIS: DISSEMINATED OR MULTIPLE SCLEROSIS: NOS, BRAIN STEM, CORD, GENERALIZED
335.20	AMYOTROPHIC LATERAL SCLEROSIS
340	MULTIPLE SCLEROSIS: DISSEMINATED OR MULTIPLE SCLEROSIS: NOS, BRAIN STEM, CORD, GENERALIZED

**Table CC-6**  
**Diagnosis Codes to Identify Patients with Cerebrovascular Disease**

ICD-9-CM Diagnosis Codes	ICD-9-CM Diagnosis Codes Description
342	Hemiplegia and Hemiparesis
430	Subarachnoid hemorrhage
431	Intracerebral hemorrhage
432	Other and unspecified intracranial hemorrhage
433	Occlusion and stenosis of precerebral arteries
434	Occlusion of cerebral arteries
435	Transient cerebral ischemia
436	Acute, but ill-defined cerebrovascular disease
437	Other and ill-defined cerebrovascular disease
438	Late effects of cerebrovascular disease

**Table CC-7  
Office Visit Encounter Codes**

CPT Codes	Description
99201–99205	OFFICE OR OP <sup>A</sup> VISIT E&M <sup>B</sup> , NEW PATIENT
99211–99215	OFFICE OR OP VISIT E&M, ESTABLISHED PATIENT
99241–99245	OFFICE OR OTHER OP CONSULTATIONS
99271–99275	CONFIRMATORY CONSULTATIONS (NOTE: CODES DELETED JANUARY 1, 2006)
99384–99387	INITIAL PREVENTIVE MEDICINE E&M <sup>B</sup>
99394–99397	PERIODIC PREVENTIVE MEDICINE E&M <sup>B</sup>
99401–99404	PREVENTIVE MEDICINE COUNSELING
99411	PREVENTIVE MEDICINE COUNSELING, GROUP
99412	PREVENTIVE MEDICINE COUNSELING, GROUP
99420	RISK ASSESSMENT, ADMIN AND INTERPRETATION
99429	UNLISTED PREVENTIVE MEDICINE SERVICE
99499	UNLISTED E&M <sup>B</sup>

<sup>A</sup> outpatient

<sup>B</sup> evaluation and management

**Table CC-8  
Emergency Room Encounter Codes**

CPT Codes	CPT Code Description
99281	EMERGENCY DEPARTMENT VISIT
99282	EMERGENCY DEPARTMENT VISIT
99283	EMERGENCY DEPARTMENT VISIT
99284	EMERGENCY DEPARTMENT VISIT
99285	EMERGENCY DEPARTMENT VISIT
99288	PHYSICIAN DIRECTION OF EMERGENCY MEDICAL SYSTEMS

**Table CC-9  
Inpatient Hospital Care Codes**

CPT Codes	Description
99221	INITIAL HOSPITAL CARE
99222	INITIAL HOSPITAL CARE
99223	INITIAL HOSPITAL CARE
99231	SUBSEQUENT HOSPITAL CARE
99232	SUBSEQUENT HOSPITAL CARE
99233	SUBSEQUENT HOSPITAL CARE
99251	INPATIENT CONSULTATION
99252	INPATIENT CONSULTATION
99253	INPATIENT CONSULTATION
99254	INPATIENT CONSULTATION
99255	INPATIENT CONSULTATION

**Table CC-10  
Nursing Facility Services**

CPT Codes	Description
99304	INITIAL NURSING FACILITY CARE
99305	INITIAL NURSING FACILITY CARE
99306	INITIAL NURSING FACILITY CARE
99307	SUBSEQUENT NURSING FACILITY CARE
99308	SUBSEQUENT NURSING FACILITY CARE
99309	SUBSEQUENT NURSING FACILITY CARE
99310	SUBSEQUENT NURSING FACILITY CARE
99318	SUBSEQUENT NURSING FACILITY CARE

**APPENDIX C:  
PERFORMANCE MEASURES**



**Medicare Demonstration Project 646  
Gundersen Lutheran Quality Measures**

**Year 1 Measures**

Measure	Numerator
Communication	#/% patients who have had monthly communication to assess contentment with current symptom management
DS-PCACP (Next Steps Conversation)	#/% patients who have documentation of completion of the DS-PCACP intervention by the end of the first month of care in Late Life Primary Care service
Power of Attorney	#/% patients who have power of attorney within 6 months of death
Access to Care	#/% patients with symptom management problem / active symptoms offered a visit within 1 week
Hospice Discussion	#/% patients who have hospice discussion 6 months prior to death

**Year 2 Measures**

Measure	Numerator
POLST	#/% patients with a Physician Orders for Life Sustaining Treatment (POLST) completed 2 months before death.
Depression assessment	#/% patients who had depression and anxiety symptoms assessed on initial evaluation and at routine follow-up.
Depression treatment	#/% patients with treatment plan developed and followed
Pain assessment	#/% patients with regular pain assessment
Pain treatment	#/% patients who screen positive for pain who have treatment plans in place
Dyspnea assessment	#/% patients with regular dyspnea assessment
Dyspnea treatment	#/% patients who screen positive for dyspnea and have treatment plans in place
Spiritual support	#/% patients who are not part of the hospice program will be asked about the need for spiritual support and life-review. In the last 3 months of life.
Patients who elect to have hospice care will have quality of care assessed using the PEACE tool.	<ul style="list-style-type: none"> <li>Pain</li> <li>Shortness of breath</li> <li>Symptoms</li> <li>Comprehensive assessment within 5 days</li> <li>Hospice attended to family needs</li> <li>Family informed always</li> <li>Pain (moderate to severe in last weeks of life)</li> <li>Preference of life-sustaining treatment documented</li> <li>Documentation of advance directive</li> <li>Surrogate decision maker documented</li> </ul>
Symptom Control Plan	#/% patients who have symptom control plan developed
Advance Care Plans	%/# patients who died who had advance directive available at place of death.
Treatment Plan and Goals of Care	<p>#/% patients (and/or surrogate) with whom current standards of care including evaluations, medications, screenings and follow-up have been discussed with patient or activated surrogate,</p> <p>#/% patients (and/or surrogate) with whom a mutual decision regarding following the standard or not based on which decision will achieve the patient's goals of care</p>