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13-016

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ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD  
APPLICATION FOR PERMIT

RECEIVED

MAR 27 2013

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

HEALTH FACILITIES &  
SERVICES REVIEW BOARD

This Section must be completed for all projects.

Facility/Project Identification

Facility Name:	Advocate Good Shepherd Hospital		
Street Address:	450 W. Highway 22		
City and Zip Code:	Barrington, IL 60010-1901		
County:	Lake	Health Service Area 8	Health Planning Area: A-09

Applicant /Co-Applicant Identification

[Provide for each co-applicant [refer to Part 1130.220].

Exact Legal Name:	Advocate Health and Hospitals Corporation d/b/a Advocate Good Shepherd Hospital		
Address:	2025 Windsor Drive, Oak Brook, Illinois 60523		
Name of Registered Agent:	Gail D. Hasbrouck		
Name of Chief Executive Officer:	Karen A. Lambert, President, Advocate Good Shepherd Hospital		
CEO Address:	450 W. Highway 22, Barrington, IL 60010-1901		
Telephone Number:	(847) 842-4005		

Type of Ownership of Applicant/Co-Applicant

<input checked="" type="checkbox"/> Non-profit Corporation	<input type="checkbox"/> Partnership
<input type="checkbox"/> For-profit Corporation	<input type="checkbox"/> Governmental
<input type="checkbox"/> Limited Liability Company	<input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Other

- o Corporations and limited liability companies must provide an **Illinois certificate of good standing**.
- o Partnerships must provide the name of the state in which organized and the name and address of each partner specifying whether each is a general or limited partner.

APPEND DOCUMENTATION AS ATTACHMENT-1 IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

Primary Contact

[Person to receive all correspondence or inquiries during the review period]

Name:	Trent Gordon, FACHE
Title:	Director, Business Development and Planning
Company Name:	Advocate Good Shepherd Hospital
Address:	450 W. Highway 22, Barrington, IL 60010-1901
Telephone Number:	(847) 842-4259
E-mail Address:	trent.gordon@advocatehealth.com
Fax Number:	(847) 842-4152

Additional Contact

[Person to receive all correspondence or inquiries during the review period]

Name:	Sonja Reece, FACHE
Title:	Director, Health Facilities Planning
Company Name:	Advocate Health Care
Address:	1304 Franklin Avenue, Normal, IL 61761
Telephone Number:	(309) 268-5482
E-mail Address:	sonja.reece@advocatehealth.com
Fax Number:	(309) 888-0961

**Additional Contact**

[Person who is also authorized to discuss the application for permit]

Name:	Jeffrey So
Title:	Director, Business Development/Community Relations
Company Name:	Advocate Christ Medical Center
Address:	9401 S. Pulaski, Suite 201, Evergreen Park, IL 60805
Telephone Number:	(708) 684-5763
E-mail Address:	jeffrey.so@advocatehealth.com
Fax Number:	(708) 684-5707

**Additional Contact**

[Person who is also authorized to discuss the application for permit]

Name:	Joe Ourth
Title:	Attorney
Company Name:	Arnstein & Lehr, LLP
Address:	120 S. Riverside Plaza, Suite 1200, Chicago, IL 60606-3910
Telephone Number:	(312) 876-7815
E-mail Address:	jourth@arnstein.com
Fax Number:	(312) 876-6215

**ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD  
APPLICATION FOR PERMIT**

**SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION**

**This Section must be completed for all projects.**

**Facility/Project Identification**

Facility Name:	Advocate Good Shepherd Hospital		
Street Address:	450 W. Highway 22		
City and Zip Code:	Barrington, IL 60010-1901		
County:	Lake	Health Service Area	8 Health Planning Area: A-09

**Applicant /Co-Applicant Identification**

**[Provide for each co-applicant [refer to Part 1130.220].**

Exact Legal Name:	Advocate Health Care Network		
Address:	2025 Windsor Drive, Oak Brook, IL 60423		
Name of Registered Agent:	Gail D. Hasbrouck		
Name of Chief Executive Officer:	James Skogsbergh		
CEO Address:	2025 Windsor Drive, Oak Brook, IL 60423		
Telephone Number:	(630) 990-5008		

**Type of Ownership of Applicant/Co-Applicant**

<input checked="" type="checkbox"/>	Non-profit Corporation	<input type="checkbox"/>	Partnership	
<input type="checkbox"/>	For-profit Corporation	<input type="checkbox"/>	Governmental	
<input type="checkbox"/>	Limited Liability Company	<input type="checkbox"/>	Sole Proprietorship	<input type="checkbox"/> Other

- Corporations and limited liability companies must provide an **Illinois certificate of good standing**.
- Partnerships must provide the name of the state in which organized and the name and address of each partner specifying whether each is a general or limited partner.

**APPEND DOCUMENTATION AS ATTACHMENT-1 IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

**Primary Contact**

[Person to receive all correspondence or inquiries during the review period]

Name:	Trent Gordon, FACHE
Title:	Director, Business Development and Planning
Company Name:	Advocate Good Shepherd Hospital
Address:	450 W. Highway 22, Barrington, IL 60010-1901
Telephone Number:	(847) 842-4259
E-mail Address:	trent.gordon@advocatehealth.com
Fax Number:	(847) 842-4152

**Additional Contact**

[Person to receive all correspondence or inquiries during the review period]

Name:	Sonja Reece, FACHE
Title:	Director, Health Facilities Planning
Company Name:	Advocate Health Care
Address:	1304 Franklin Avenue, Normal, IL 61761
Telephone Number:	(309) 268-5482
E-mail Address:	sonja.reece@advocatehealth.com
Fax Number:	(309) 888-0961

**Additional Contact**

[Person who is also authorized to discuss the application for permit]

Name:	Jeffrey So
Title:	Director, Business Development/Community Relations
Company Name:	Advocate Christ Medical Center
Address:	9401 S. Pulaski, Suite 201, Evergreen Park, IL 60805
Telephone Number:	(708) 684-5763
E-mail Address:	jeffrey.so@advocatehealth.com
Fax Number:	(708) 684-5707

**Additional Contact**

[Person who is also authorized to discuss the application for permit]

Name:	Joe Ourth
Title:	Attorney
Company Name:	Arnstein & Lehr, LLP
Address:	120 S. Riverside Plaza, Suite 1200, Chicago, IL 60606-3910
Telephone Number:	(312) 876-7815
E-mail Address:	jourth@arnstein.com
Fax Number:	(312) 876-6215

**Post Permit Contact**

[Person to receive all correspondence subsequent to permit issuance-THIS PERSON MUST BE EMPLOYED BY THE LICENSED HEALTH CARE FACILITY AS DEFINED AT 20 ILCS 3960]

Name:	Albert Manshum
Title:	Vice President, Facilities & Construction
Company Name:	Advocate Health Care
Address:	2025 Windsor Drive, Oak Brook, IL 60523
Telephone Number:	(630) 990-5546
E-mail Address:	Albert.Manshum@advocatehealth.com
Fax Number:	(630) 990-4798

**Site Ownership**

[Provide this information for each applicable site]

Exact Legal Name of Site Owner:	Advocate Health and Hospitals Corporation
Address of Site Owner:	2025 Windsor Drive, Oak Brook, IL 60523
Street Address or Legal Description of Site:	450 W. Highway 22, Barrington, Illinois 60010-1901
Proof of ownership or control of the site is to be provided as Attachment 2. Examples of proof of ownership are property tax statement, tax assessor's documentation, deed, notarized statement of the corporation attesting to ownership, an option to lease, a letter of intent to lease or a lease.	
APPEND DOCUMENTATION AS ATTACHMENT-2, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.	

**Operating Identity/Licensee**

[Provide this information for each applicable facility, and insert after this page.]

Exact Legal Name:	Advocate Health and Hospitals Corporation d/b/a Advocate Good Shepherd Hospital		
Address:	450 W. Highway 22, Barrington, IL 60010-1901		
<input checked="" type="checkbox"/>	Non-profit Corporation	<input type="checkbox"/>	Partnership
<input type="checkbox"/>	For-profit Corporation	<input type="checkbox"/>	Governmental
<input type="checkbox"/>	Limited Liability Company	<input type="checkbox"/>	Sole Proprietorship
		<input type="checkbox"/>	Other
<ul style="list-style-type: none"> <li>o Corporations and limited liability companies must provide an Illinois Certificate of Good Standing.</li> <li>o Partnerships must provide the name of the state in which organized and the name and address of each partner specifying whether each is a general or limited partner.</li> <li>o <b>Persons with 5 percent or greater interest in the licensee must be identified with the % of ownership.</b></li> </ul>			
APPEND DOCUMENTATION AS ATTACHMENT-3, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.			

**Organizational Relationships**

Provide (for each co-applicant) an organizational chart containing the name and relationship of any person or entity who is related (as defined in Part 1130.140). If the related person or entity is participating in the development or funding of the project, describe the interest and the amount and type of any financial contribution.

APPEND DOCUMENTATION AS ATTACHMENT-4, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

**Flood Plain Requirements**

[Refer to application instructions.]

Provide documentation that the project complies with the requirements of Illinois Executive Order #2005-5 pertaining to construction activities in special flood hazard areas. As part of the flood plain requirements please provide a map of the proposed project location showing any identified floodplain areas. Floodplain maps can be printed at [www.FEMA.gov](http://www.FEMA.gov) or [www.illinoisfloodmaps.org](http://www.illinoisfloodmaps.org). **This map must be in a readable format.** In addition please provide a statement attesting that the project complies with the requirements of Illinois Executive Order #2005-5 (<http://www.hfsrb.illinois.gov>).

APPEND DOCUMENTATION AS **ATTACHMENT -5**, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

**Historic Resources Preservation Act Requirements**

[Refer to application instructions.]

Provide documentation regarding compliance with the requirements of the Historic Resources Preservation Act.

APPEND DOCUMENTATION AS **ATTACHMENT-6**, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

**DESCRIPTION OF PROJECT**

**1. Project Classification**

[Check those applicable - refer to Part 1110.40 and Part 1120.20(b)]

<p>Part 1110 Classification:</p> <p><input type="checkbox"/> Substantive</p> <p><input checked="" type="checkbox"/> Non-substantive</p>	<p>Part 1120 Applicability or Classification: [Check one only.]</p> <p><input type="checkbox"/> Part 1120 Not Applicable</p> <p><input type="checkbox"/> Category A Project</p> <p><input checked="" type="checkbox"/> Category B Project</p> <p><input type="checkbox"/> DHS or DVA Project</p>
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## 2. Narrative Description

Provide in the space below, a brief narrative description of the project. Explain **WHAT** is to be done in **State Board defined terms**, **NOT WHY** it is being done. If the project site does NOT have a street address, include a legal description of the site. Include the rationale regarding the project's classification as substantive or non-substantive.

Advocate Health and Hospitals Corporation d/b/a Advocate Good Shepherd Hospital (AGSH, the Hospital) and Advocate Health Network, the applicants, propose a Modernization Project for the Hospital located at 450 West Highway 22, Barrington, Illinois, 60010. The Project will add space to increase the number of intensive care beds, consolidate the surgical/interventional suite and accommodate single occupancy, private medical-surgical beds. Most clinical departments will be updated, reconfigured and/or relocated to meet current industry standards. Although not typically requiring a CON permit, information technology and equipment replacement for most clinical areas are also included in this CON.

The Hospital currently has 113 medical-surgical beds and 14 pediatric beds. After this Project, there will be 112 medical/surgical beds and 8 pediatric beds resulting in a reduction of seven medical-surgical-pediatrics beds. (The 24 obstetrics beds will remain and are not included in this Project.)

The proposed Project increases the intensive care bed (ICU) inventory from 18 to 32 beds for an addition of 14 ICU beds, which helps meet the calculated shortage of ICU beds in the Hospital's planning area.

The Project also expands the perioperative area, co-locating operating rooms with cardiac catheterization and interventional radiology into a novel interventional platform. There are currently 11 Class C operating rooms and one Class B cystoscopy procedure room. The Project proposes to have 15 Class C operating rooms and one Class B cystoscopy procedure room. The net effect will be to add four operating rooms.

Four rooms for other interventional procedures are being relocated to new space adjoining surgery. These rooms will be used for cardiac catheterization, electrophysiology, and two interventional radiology units. This Project will provide an 18-bed Phase I post anesthesia care unit (PACU) and a 52-bed Phase II prep/recovery area to support the entire interventional platform.

In the existing separate endoscopy suite one of its five Class B procedure rooms will be modernized and the number of adjoining Phase II prep and recovery rooms will increase from 9 to 15.

In addition to the changes listed above, the Project will significantly modernize other clinical services, including radiology, ambulatory care services, cardiovascular and pulmonary testing, and therapies. Modernized non-clinical areas include administration, public/visitor space, circulation, materials management, chapel, and simulation laboratory. Some non-clinical functions are currently located in leased space and will return to hospital space as a result of the Project.

The Project is expected to cost \$246,841,082 and will involve 389,429 square feet. The building is built for long term durability of infrastructure and systems including upgrading systems encompassing the current and new buildings, improving energy efficiency using LEED guidelines, targeting LEED Gold certification. The Project is classified non-substantive. The Project does not meet the criteria to be substantive because is it not building or replacing the facility, it does not offer a new category of care, and it does not change the bed count by over 20 beds. It is a Category B Project because it costs more than \$2,000,000.

**Advocate Good Shepherd Medical Center**

**Support letters**

Karen Darch  
Barrington Village President

Eugene Dawson  
Barrington Township Supervisor

Carol Nelson  
Volunteer

Dr. Feldman  
President and Chairman, Barrington Anesthesia Associates  
Chair of Department of Anesthesia, Advocate Good Shepherd Hospital

Rev. Jeanne Hanson  
Executive Director  
Samaritan Counseling Center

VILLAGE OF

*a great place to live, work, and play*

# BARRINGTON



February 13, 2013

Dale Galassie, Chair  
Illinois Health Facilities and Services Review Board  
525 West Jefferson Street, Second Floor  
Springfield, Illinois 62761

Chairman Galassie,

As Village President of Barrington, I am please to support the modernization plans of Advocate Good Shepherd Hospital. In the mid-1970s, construction on a new hospital in Barrington began because the area residents recognized the need for inpatient health care services in the region. Since then, Good Shepherd has continually recognized the changing needs of the community and responded to those needs through the addition of new services. In the past ten years, Good Shepherd has opened an ambulatory care pavilion to offer more outpatient services, developed an open heart program that was recently recognized as being one of the 50 best in the country, and expanded its emergency department to meet a growing need.

In addition to these clinical services, Good Shepherd has also been a significant community partner through outreach programs that help keep the community healthy. Since 1995, Advocate Good Shepherd Hospital has led the Healthier Barrington Coalition, which has completed six community health assessments over the past seventeen years. The hospital and coalition also collaborate to address needs indentified in the study. I am personally proud to be part of this coalition and support this initiative wholeheartedly.

The proposed campus modernization project is important in order to continue this tradition of offering excellent clinical services to the Barrington area. Many of the facilities being updated in this project have not been modernized since the hospital opened over 30 years ago. Industry standards and patient expectations have changed over the years and this project will bring the hospital into alignment with current standards. For example, it is well recognized now that patients need their own rooms in order to help the healing process and avoid infection. Most of Good Shepherd's medical/surgical beds are double occupancy, which means patients have roommates throughout their stay.

I'm proud to serve a community that is blessed to have such a rich heritage of quality healthcare. I look forward to partnering with Good Shepherd for many years to come, and I look forward to this project continuing that tradition.

Thank you for your consideration.

Sincerely,

Karen Darch  
Village President

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VILLAGE HALL  
200 S. HOUGH ST.  
BARRINGTON, IL 60010  
(847) 304-3400

PRESIDENT & BOARD  
MANAGER'S OFFICE  
TEL (847) 304-3444  
FAX (847) 304-3490

COMMUNITY AND  
FINANCIAL SERVICES  
TEL (847) 304-3400  
FAX (847) 381-7506

DEVELOPMENT SERVICES  
TEL (847) 304-3460  
FAX (847) 381-1056

PUBLIC WORKS  
300 N. RAYMOND AVE.  
BARRINGTON, IL 60010  
TEL (847) 381-7903  
FAX (847) 382-3030

PUBLIC SAFETY  
400 N. NORTHWEST HWY.  
BARRINGTON, IL 60010

POLICE  
TEL (847) 304-3300  
FAX (847) 381-2165

FIRE  
TEL (847) 304-3600  
FAX (847) 381-1889

**BARRINGTON TOWNSHIP**  
**COOK COUNTY**

602 SOUTH HOUGH STREET • BARRINGTON, ILLINOIS 60010-4499 • (847) 381-5632 FAX (847) 381-0623 e-mail: genedawson2003@yahoo.com

EUGENE R. "GENE" DAWSON  
Supervisor

D. ROBERT ALBERDING  
Clerk

AMY P. NYKAZA  
Assessor

LINDA POST  
Collector

**BOARD OF TRUSTEES**

DANIEL P. FITZGERALD

ROBERT A. NYKAZA JR.

MICHAEL W. RYAN

RONALD F. SZYMANSKI

March 15, 2013

Chair Galassie:

As Barrington Township Supervisor for 12 years, I've seen Advocate Good Shepherd Hospital evolve over the years to meet the changing needs of the community. As the number of ambulatory patients has grown, the hospital responded by adding an Outpatient Pavilion and as the Emergency Department's volume was increasing, the hospital updated and improved their Emergency Department to meet the needs of the community. The hospital is now at another crucial crossroad and needs to change and update its facility to meet the health care needs of the surrounding communities. As public documents point out, the hospital's intensive care beds are at a critical point and need to be expanded to meet these patients' needs. The operating rooms are also at the breaking point and need to be expanded and right sized to accommodate new technology and the surgical needs of a growing population. Finally, the hospital was cutting-edge when it was built in the late 1970s but health care has endured many changes in delivery and technology and must respond to these changes. The original inpatient floors are in need of enhancement and patients deserve and demand privacy while they are at the hospital. Having multiple patients in one room is not the optimal way to receive care for both quality and satisfaction.

My constituents continually tell me that they appreciate and value the care they receive at the hospital, not only the high-technology care but also the compassionate care that distinguishes Good Shepherd from other hospitals. I'm also supportive of this plan because of how thoughtful it addresses resident's needs. Rather than simply adding beds, the Good Shepherd team recognizes the changing landscape of health care and only adds critical care beds and operating rooms that are necessary. Thoughtful approaches to health care delivery is how we can continue to provide high-quality care, while at the same time addressing the rising cost of health care.

I fully support the hospital's plans and I encourage you to do the same. I would welcome the opportunity to speak to you about my support.

Sincerely,



Eugene R. "Gene" Dawson  
Barrington Township Supervisor

//

Mrs. Carol Nelson  
1000 Garlands #1138  
Barrington, IL 60010

To whom it may concern,

I was really excited to learn that Good Shepherd in Barrington is going through a big construction project. I think I bring a unique voice to this discussion. You see, I've been volunteering at the hospital ever since it opened in 1979, that's over 30 years! The hospital has changed a lot since then and I'm thrilled about the changes now being discussed.

What I'm most anticipating is making sure that all the patients at the hospital will have their own room once construction is finished. It's hard being a patient in any hospital, but it's really hard having another patient in the same room. You can't sleep as well at night and you're worried about having private conversations with your doctor and family when someone else is just a few feet away.

I'm looking forward to volunteering for many more years at Good Shepherd, especially with all changes in this project.

I hope that you share my excitement for the patients at this great hospital.

Sincerely,

  
Carol Nelson

Barrington Anesthesia Associates  
450 West Hwy 22  
Barrington, IL 60010

March 10, 2013

Chairman Galassie:

My name is Dean Feldman, MD, and I am the President of Barrington Anesthesia Associates as well as the Chair of the Department of Anesthesia at Advocate Good Shepherd Hospital. I have been an active member of my community since 1989 and have been able to serve on many local community committee's and boards. I have been a practicing physician at the hospital since 1989, and I've seen firsthand the growth in the number of surgical cases over the years. I feel that our hospital has served the community well over the years and has been exemplar at acquiring new and cutting edge services. It's been exciting to be part of such a fast growing part of the hospital, but in order to continue to grow; we need to make some physical changes to Good Shepherd's perioperative area. Our problems are twofold: the number of operating rooms and the size of the operating rooms.

From 2004 to 2011 our surgical hours have increased at an annual rate of six percent per year. Our current volumes demonstrate that we are over extended in terms of the number of procedures we do per room. When an outside master facility planning consulting group, Kurt Salmon Associates, reviewed our 2009 volumes, it was determined that we were 20 percent over industry norms. The ORs were over extended back then and continue to be today.

As operating room technology has been enhanced, it has created logistical problems for how we treat patients. Several of our operating rooms were built in 1978. With the advent and acquisition of more modern technologies we have found it difficult to accommodate the space requirements for surgeries such as Robotics, not to mention the newer anesthesia care delivery systems. Of the twelve rooms in the perioperative area, only two are appropriately-sized to perform complex orthopedic procedures.

Because of a limited number of post-anesthesia care beds (PACU and phase II recovery beds), it is not uncommon to hold a patient in the OR until a bed opens in PACU or phase II recovery. Holding a patient in an operating room impedes the surgical throughput process and is not best practice for our patients. Due to the growing volume of surgical cases and the limited recovery beds, it is becoming a pattern for PACU to be open until 10:00-11:00 pm to finish the care of the surgical cases of the day.

The proposed plans in front of you will correct all of these issues. I hope you will vote yes and approve them.

Thank you.

Sincerely,



Dean Feldman, MD

President and Chairman

Barrington Anesthesia Associates

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# SAMARITAN COUNSELING CENTER

EMBRACING FAITH, HOPE AND WHOLENESS

**Board of Directors**

**David Nelson**  
President  
**Nancy Nadig**  
Vice-President  
**Patrick Mitten**  
Treasurer  
**Betty Kilgore**  
Secretary

**David Albanese**  
**Jeff Arnett**  
**Karen Darch**  
**Rev. Carol Gates**  
**Rev. Zina Jacque**  
**Sam Oliver**  
**Rev. Fred Rajan**  
**Harry Semerjian**  
**Starr Shum**  
**Norval Stephens**  
**Dr. Peter Wuertz, M.D.**

**Rev. Jeanne Hanson**  
Executive Director  
**J. Scott Campbell, ACSW, LCSW**  
Clinical Director

March 18, 2013

To whom it may concern:

I'm writing to voice my support for Advocate Good Shepherd Hospital's campus modernization plans. I was excited to learn about the hospital's plans for their main campus and am thrilled about the ways that their plans for the future will shape a healthy community.

The hospital has a rich history of community support and my organization represents a prime example of this support. Good Shepherd was one of the founding members of Samaritan Counseling Center and continues to provide us support in a number of different ways. The Samaritan Counseling Center of the Northwest Suburbs began in response to the growing need among local clergy and their congregations for additional pastoral counseling. As ministers looked for experts to turn to when individuals and families under their care required ongoing therapy, they discovered a critical lack of faith-based counseling services. They wanted to retain the essential spiritual dimension of the healing process. This process includes congregants continuing with counseling outside the church. The Samaritan Center fills this gap by providing professional psychotherapy from a Christian perspective.

Recognizing the mental health needs in our community, Good Shepherd reached out to Samaritan Counseling and offered us office space in one of their offices in Algonquin so we could do some outreach efforts that would not have been possible without their assistance. We're grateful for Good Shepherd's presence in the community and the support that they've provided to us over the years.

When you hear about their plans I'm confident that you'll confirm this project and help solidify the future of not only the hospital but also the surrounding community.

Sincerely,



Rev. Jeanne Hanson  
Executive Director

**Project Costs and Sources of Funds**

Complete the following table listing all costs (refer to Part 1120.110) associated with the project. When a project or any component of a project is to be accomplished by lease, donation, gift, or other means, the fair market or dollar value (refer to Part 1130.140) of the component must be included in the estimated project cost. If the project contains non-reviewable components that are not related to the provision of health care, complete the second column of the table below. Note, the use and sources of funds must equal.

COSTS	CLINICAL	NONCLINICAL	TOTAL
Preplanning Costs	\$ 555,900	\$ 534,100	\$ 1,090,000
Site Survey and Soil Investigation	\$ 33,544	\$ 36,456	\$ 70,000
Site Preparation	\$ 2,300,000	\$ 7,900,000	\$ 10,200,000
Off Site Work	\$ -	\$ -	\$ -
New Construction Contracts	\$ 44,038,600	\$ 50,061,443	\$ 94,100,043
Modernization Contracts	\$ 26,221,260	\$ 17,232,750	\$ 43,454,010
Contingencies	\$ 6,065,278	\$ 5,616,447	\$ 11,681,725
Architectural/Engineering Fees	\$ 4,182,000	\$ 4,018,000	\$ 8,200,000
Consulting and Other Fees	\$ 1,045,970	\$ 1,004,951	\$ 2,050,921
Movable or Other Equipment (not in construction contracts)	\$ 43,618,736	\$ 1,359,650	\$ 44,978,386
Bond Issuance Expense (project related)	\$ 935,042	\$ 649,775	\$ 1,584,817
Net Interest Expense During Construction (project related)	\$ 14,270,416	\$ 9,916,729	\$ 24,187,145
Fair Market Value, Leased Space, Equipment	\$ -	\$ -	\$ -
Other Costs To Be Capitalized	\$ 2,512,972	\$ 2,731,063	\$ 5,244,035
Acquisition of Building or Other Property (excluding land)	\$ -	\$ -	\$ -
<b>TOTAL USES OF FUNDS</b>	<b>\$ 145,779,718</b>	<b>\$ 101,061,364</b>	<b>\$ 246,841,082</b>
<b>SOURCE OF FUNDS</b>	<b>CLINICAL</b>	<b>NONCLINICAL</b>	<b>TOTAL</b>
Cash and Securities			\$ 88,359,421
Pledges			\$ -
Gifts and Bequests			\$ -
Bond Issues (project related)			\$ 158,481,661
Mortgages			
Leases (fair market value)			
Governmental Appropriations			
Grants			
Other Funds and Sources			
<b>TOTAL SOURCES OF FUNDS</b>			<b>\$ 246,841,082</b>

**NOTE: ITEMIZATION OF EACH LINE ITEM MUST BE PROVIDED AT ATTACHMENT-7, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

**Related Project Costs**

Provide the following information, as applicable, with respect to any land related to the project that will be or has been acquired during the last two calendar years:

<p>Land acquisition is related to project <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Purchase Price: \$ _____</p> <p>Fair Market Value: \$ _____</p>
<p>The project involves the establishment of a new facility or a new category of service <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, provide the dollar amount of all <b>non-capitalized</b> operating start-up costs (including operating deficits) through the first full fiscal year when the project achieves or exceeds the target utilization specified in Part 1100.</p> <p>Estimated start-up costs and operating deficit cost is \$ _____.</p>

**Project Status and Completion Schedules**

<p>Indicate the stage of the project's architectural drawings:</p> <p><input type="checkbox"/> None or not applicable <input type="checkbox"/> Preliminary</p> <p><input checked="" type="checkbox"/> Schematics <input type="checkbox"/> Final Working</p>
<p>Anticipated project completion date (refer to Part 1130.140): <u>December 31, 2017</u></p>
<p>Indicate the following with respect to project expenditures or to obligation (refer to Part 1130.140):</p> <p><input type="checkbox"/> Purchase orders, leases or contracts pertaining to the project have been executed.</p> <p><input type="checkbox"/> Project obligation is contingent upon permit issuance. Provide a copy of the contingent "certification of obligation" document, highlighting any language related to CON Contingencies</p> <p><input checked="" type="checkbox"/> Project obligation will occur after permit issuance.</p>
<p>APPEND DOCUMENTATION AS <u>ATTACHMENT-8</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.</p>

**State Agency Submittals**

<p>Are the following submittals up to date as applicable:</p> <p><input type="checkbox"/> ** Cancer Registry</p> <p><input checked="" type="checkbox"/> APORS</p> <p><input checked="" type="checkbox"/> All formal document requests such as IDPH Questionnaires and Annual Bed Reports been submitted</p> <p><input checked="" type="checkbox"/> All reports regarding outstanding permits</p> <p><b>Failure to be up to date with these requirements will result in the application for permit being deemed incomplete.</b></p>
--

\*\*Advocate Good Shepherd Hospital and all other Advocate hospitals are up to date on all submittals. One freestanding imaging center (High Tech Medical Park) affiliated with Advocate Medical Group is actively working with IDPH to resolve a cancer registry backlog. This imaging center is not connected or part of any licensed hospital.

### Cost Space Requirements

Provide in the following format, the department/area **DGSF** or the building/area **BGSF** and cost. The type of gross square footage either **DGSF** or **BGSF** must be identified. The sum of the department costs **MUST** equal the total estimated project costs. Indicate if any space is being reallocated for a different purpose. Include outside wall measurements plus the department's or area's portion of the surrounding circulation space. **Explain the use of any vacated space.**

Dept. / Area	Cost	Gross Square Feet		Amount of Proposed Total Gross Square Feet That Is:			
		Existing	Proposed	New Const.	Modernized	As Is	Vacated Space
<b>REVIEWABLE</b>							
Medical Surgical							
Intensive Care							
Diagnostic Radiology							
MRI							
Total Clinical							
<b>NON REVIEWABLE</b>							
Administrative							
Parking							
Gift Shop							
Total Non-clinical							
<b>TOTAL</b>							
<p>APPEND DOCUMENTATION AS <u>ATTACHMENT-9</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.</p>							

**Facility Bed Capacity and Utilization**

Complete the following chart, as applicable. Complete a separate chart for each facility that is a part of the project and insert following this page. Provide the existing bed capacity and utilization data for the latest **Calendar Year for which the data are available**. **Include observation days in the patient day totals for each bed service**. Any bed capacity discrepancy from the Inventory will result in the application being deemed **incomplete**.

<b>FACILITY NAME: Advocate Good Shepherd Hospital</b>			<b>CITY: Barrington, IL</b>		
<b>REPORTING PERIOD DATES: From: 1/1/11 to: 12/31/11</b>					
<b>Category of Service</b>	<b>Authorized Beds</b>	<b>Admissions</b>	<b>Patient Days</b>	<b>Bed Changes</b>	<b>Proposed Beds</b>
Medical/Surgical	113	7,890	32,743	-1	112
Obstetrics	24	1,577	3,965	0	24
Pediatrics	14	248	1,754	-6	8
Intensive Care	18	1,102	5,653	+14	32
Comprehensive Physical Rehabilitation	0	0	0	0	0
Acute/Chronic Mental Illness	0	0	0	0	0
Neonatal Intensive Care	0	0	0	0	0
General Long Term Care	0	0	0	0	0
Specialized Long Term Care	0	0	0	0	0
Long Term Acute Care	0	0	0	0	0
Other (Identify)	0	0	0	0	0
<b>TOTALS:</b>	<b>169</b>	<b>10,817</b>	<b>44,115</b>	<b>+7</b>	<b>176</b>



# Advocate Good Shepherd Hospital

450 West Highway 22 || Barrington, IL 60010 || T 847.381.0123 || advocatehealth.com

## CERTIFICATION

The application must be signed by the authorized representative(s) of the applicant entity. The authorized representative(s) are:

- o in the case of a corporation, any two of its officers or members of its Board of Directors;
- o in the case of a limited liability company, any two of its managers or members (or the sole manager or member when two or more managers or members do not exist);
- o in the case of a partnership, two of its general partners (or the sole general partner, when two or more general partners do not exist);
- o in the case of estates and trusts, two of its beneficiaries (or the sole beneficiary when two or more beneficiaries do not exist); and
- o in the case of a sole proprietor, the individual that is the proprietor.

**This Application for Permit is filed on the behalf of Advocate Health and Hospitals Corporation d/b/a Advocate Good Shepherd Hospital in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this application for permit on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the permit application fee required for this application is sent herewith or will be paid upon request.**

*Karen A Lambert*  
SIGNATURE

Karen A. Lambert  
PRINTED NAME

President Advocate Good Shepherd Hospital  
PRINTED TITLE

*William Santulli*  
SIGNATURE

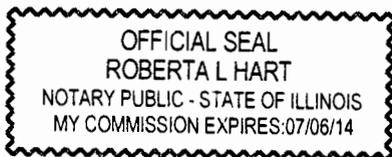
William Santulli  
PRINTED NAME

Executive Vice President/COO  
PRINTED TITLE

Notarization:  
Subscribed and sworn to before me  
this 18 day of February 2013

*Robert L Hart*  
Signature of Notary

Seal



Notarization:  
Subscribed and sworn to before me  
this 25 day of February 2013

*Cristin G Foster*  
Signature of Notary

Seal



**CERTIFICATION**

The application must be signed by the authorized representative(s) of the applicant entity. The authorized representative(s) are:

- o in the case of a corporation, any two of its officers or members of its Board of Directors;
- o in the case of a limited liability company, any two of its managers or members (or the sole manager or member when two or more managers or members do not exist);
- o in the case of a partnership, two of its general partners (or the sole general partner, when two or more general partners do not exist);
- o in the case of estates and trusts, two of its beneficiaries (or the sole beneficiary when two or more beneficiaries do not exist); and
- o in the case of a sole proprietor, the individual that is the proprietor.

This Application for Permit is filed on the behalf of Advocate Health Care Network\* in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this application for permit on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the permit application fee required for this application is sent herewith or will be paid upon request.

James H. Skogsbergh  
SIGNATURE

James H. Skogsbergh  
PRINTED NAME

President and CEO  
PRINTED TITLE

William Santulli  
SIGNATURE

William Santulli  
PRINTED NAME

Executive Vice President/COO  
PRINTED TITLE

Notarization:  
Subscribed and sworn to before me  
this 14 day of February 2013

Cristin G. Foster  
Signature of Notary

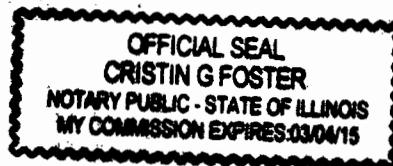
Seal



Notarization:  
Subscribed and sworn to before me  
this 12<sup>th</sup> day of February 2013

Cristin G. Foster  
Signature of Notary

Seal



\*Insert EXACT legal name of the applicant

### SECTION III – BACKGROUND, PURPOSE OF THE PROJECT, AND ALTERNATIVES - INFORMATION REQUIREMENTS

This Section is applicable to all projects except those that are solely for discontinuation with no project costs.

#### Criterion 1110.230 – Background, Purpose of the Project, and Alternatives

READ THE REVIEW CRITERION and provide the following required information:

##### BACKGROUND OF APPLICANT

1. A listing of all health care facilities owned or operated by the applicant, including licensing, and certification if applicable.
2. A certified listing of any adverse action taken against any facility owned and/or operated by the applicant during the three years prior to the filing of the application.
3. Authorization permitting HFSRB and DPH access to any documents necessary to verify the information submitted, including, but not limited to: official records of DPH or other State agencies; the licensing or certification records of other states, when applicable; and the records of nationally recognized accreditation organizations. **Failure to provide such authorization shall constitute an abandonment or withdrawal of the application without any further action by HFSRB.**
4. If, during a given calendar year, an applicant submits more than one application for permit, the documentation provided with the prior applications may be utilized to fulfill the information requirements of this criterion. In such instances, the applicant shall attest the information has been previously provided, cite the project number of the prior application, and certify that no changes have occurred regarding the information that has been previously provided. The applicant is able to submit amendments to previously submitted information, as needed, to update and/or clarify data.

**APPEND DOCUMENTATION AS ATTACHMENT-11, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM. EACH ITEM (1-4) MUST BE IDENTIFIED IN ATTACHMENT 11.**

##### PURPOSE OF PROJECT

1. Document that the project will provide health services that improve the health care or well-being of the market area population to be served.
2. Define the planning area or market area, or other, per the applicant's definition.
3. Identify the existing problems or issues that need to be addressed, as applicable and appropriate for the project. [See 1110.230(b) for examples of documentation.]
4. Cite the sources of the information provided as documentation.
5. Detail how the project will address or improve the previously referenced issues, as well as the population's health status and well-being.
6. Provide goals with quantified and measurable objectives, with specific timeframes that relate to achieving the stated goals **as appropriate.**

For projects involving modernization, describe the conditions being upgraded if any. For facility projects, include statements of age and condition and regulatory citations if any. For equipment being replaced, include repair and maintenance records.

**NOTE: Information regarding the "Purpose of the Project" will be included in the State Agency Report. APPEND DOCUMENTATION AS ATTACHMENT-12, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM. EACH ITEM (1-6) MUST BE IDENTIFIED IN ATTACHMENT 12.**

**ALTERNATIVES**

- 1) Identify **ALL** of the alternatives to the proposed project:

Alternative options **must** include:

- A) Proposing a project of greater or lesser scope and cost;
  - B) Pursuing a joint venture or similar arrangement with one or more providers or entities to meet all or a portion of the project's intended purposes; developing alternative settings to meet all or a portion of the project's intended purposes;
  - C) Utilizing other health care resources that are available to serve all or a portion of the population proposed to be served by the project; and
  - D) Provide the reasons why the chosen alternative was selected.
- 2) Documentation shall consist of a comparison of the project to alternative options. The comparison shall address issues of total costs, patient access, quality and financial benefits in both the short term (within one to three years after project completion) and long term. This may vary by project or situation. **FOR EVERY ALTERNATIVE IDENTIFIED THE TOTAL PROJECT COST AND THE REASONS WHY THE ALTERNATIVE WAS REJECTED MUST BE PROVIDED.**
- 3) The applicant shall provide empirical evidence, including quantified outcome data that verifies improved quality of care, as available.

**APPEND DOCUMENTATION AS ATTACHMENT-13. IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

**SECTION IV - PROJECT SCOPE, UTILIZATION, AND UNFINISHED/SHELL SPACE**

**Criterion 1110.234 - Project Scope, Utilization, and Unfinished/Shell Space**

READ THE REVIEW CRITERION and provide the following information:

**SIZE OF PROJECT:**

1. Document that the amount of physical space proposed for the proposed project is necessary and not excessive. **This must be a narrative.**
2. If the gross square footage exceeds the BGSF/DGSF standards in Appendix B, justify the discrepancy by documenting one of the following:
  - a. Additional space is needed due to the scope of services provided, justified by clinical or operational needs, as supported by published data or studies;
  - b. The existing facility's physical configuration has constraints or impediments and requires an architectural design that results in a size exceeding the standards of Appendix B;
  - c. The project involves the conversion of existing space that results in excess square footage.

Provide a narrative for any discrepancies from the State Standard. A table must be provided in the following format with Attachment 14.

SIZE OF PROJECT				
DEPARTMENT/SERVICE	PROPOSED BGSF/DGSF	STATE STANDARD	DIFFERENCE	MET STANDARD?

APPEND DOCUMENTATION AS ATTACHMENT-14, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

**PROJECT SERVICES UTILIZATION:**

This criterion is applicable only to projects or portions of projects that involve services, functions or equipment for which HFSRB has established utilization standards or occupancy targets in 77 Ill. Adm. Code 1100.

Document that in the second year of operation, the annual utilization of the service or equipment shall meet or exceed the utilization standards specified in 1110.Appendix B. A narrative of the rationale that supports the projections must be provided.

A table must be provided in the following format with Attachment 15.

UTILIZATION					
	DEPT./ SERVICE	HISTORICAL UTILIZATION (PATIENT DAYS) (TREATMENTS) ETC.	PROJECTE D UTILIZATIO N	STATE STANDAR D	MET STANDARD?
YEAR 1					
YEAR 2					

APPEND DOCUMENTATION AS ATTACHMENT-15, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

**SECTION VII - SERVICE SPECIFIC REVIEW CRITERIA**

This Section is applicable to all projects proposing establishment, expansion or modernization of categories of service that are subject to CON review, as provided in the Illinois Health Facilities Planning Act [20 ILCS 3960]. It is comprised of information requirements for each category of service, as well as charts for each service, indicating the review criteria that must be addressed for each action (establishment, expansion and modernization). After identifying the applicable review criteria for each category of service involved, read the criteria and provide the required information, AS APPLICABLE TO THE CRITERIA THAT MUST BE ADDRESSED:

**A. Criterion 1110.530 - Medical/Surgical, Obstetric, Pediatric and Intensive Care**

- Applicants proposing to establish, expand and/or modernize Medical/Surgical, Obstetric, Pediatric and/or Intensive Care categories of service must submit the following information:
- Indicate bed capacity changes by Service: Indicate # of beds changed by action(s):

Category of Service	# Existing Beds	# Proposed Beds
<input checked="" type="checkbox"/> Medical/Surgical/Peds	127	120
<input checked="" type="checkbox"/> Intensive Care	18	32

- READ the applicable review criteria outlined below and **submit the required documentation for the criteria:**

APPLICABLE REVIEW CRITERIA	Establish	Expand ICU	Modernize M/S, Peds
1110.530(b)(1) - Planning Area Need - 77 Ill. Adm. Code 1100 (formula calculation)			
1110.530(b)(2) - Planning Area Need - Service to Planning Area Residents		X	
1110.530(b)(3) - Planning Area Need - Service Demand - Establishment of Category of Service			
1110.530(b)(4) - Planning Area Need - Service Demand - Expansion of Existing Category of Service		X	
1110.530(b)(5) - Planning Area Need - Service Accessibility			
1110.530(c)(1) - Unnecessary Duplication of Services			
1110.530(c)(2) - Maldistribution			
1110.530(c)(3) - Impact of Project on Other Area Providers			
1110.530(d)(1) - Deteriorated Facilities			X
1110.530(d)(2) - Documentation			X
1110.530(d)(3) - Documentation Related to Cited Problems			X
1110.530(d)(4) - Occupancy			X
1110.530(e) - Staffing Availability		X	
1110.530(f) - Performance Requirements		X	X
1110.530(g) - Assurances		X	
<b>APPEND DOCUMENTATION AS ATTACHMENT-20, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.</b>			

**F. Criterion 1110.1330 - Cardiac Catheterization**

This section is applicable to all projects proposing to establish or modernize a cardiac catheterization category of service or to replace existing cardiac catheterization equipment.

**1. Criterion 1110.1330(a), Peer Review**

Read the criterion and submit a detailed explanation of your peer review program.

**2. Criterion 1110.1330(b), Establishment or Expansion of Cardiac Catheterization Service**

Read the criterion and, if applicable, submit the following information:

- a. A map (8 1/2" x 11") showing the location of the other hospitals providing cardiac catheterization service within the planning area.
- b. The number of cardiac catheterizations performed for the last 12 months at each of the hospitals shown on the map.
- c. Provide the number of patients transferred directly from the applicant's hospital to another facility for cardiac catheterization services in each of the last three years.

**3. Criterion 1110.1330(c), Unnecessary Duplication of Services**

Read the criterion and, if applicable, submit the following information.

- a. Copies of the letter sent to all facilities within 90 minutes travel time which currently provide cardiac catheterization. This letter must contain a description of the proposed project and a request that the other facility quantify the impact of the proposal on its program.
- b. Copies of the responses received from the facilities to which the letter was sent.

**4. Criterion 1110.1330(d), Modernization of Existing Cardiac Catheterization Laboratories**

Read the criterion and, if applicable, submit the number of cardiac catheterization procedures performed for the latest 12 months.

**5. Criterion 1110.1330(e), Support Services**

Read the criterion and indicate on a service by service basis which of the listed services are available on a 24 hour basis and explain how any services not available on a 24 hour basis will be available when needed.

**6. Criterion 1110.1330(f), Laboratory Location**

Read the criterion and, if applicable, submit line drawings showing the location of the proposed laboratories. If the laboratories are not in close proximity explain why.

**7. Criterion 1110.1330(g), Staffing**

Read the criterion and submit a list of names and qualifications of those who will fill the positions detailed in this criterion. Also provide staffing schedules to show the coverage required by this criterion.

**8. Criterion 1110.1330(h), Continuity of Care**

Read the criterion and submit a copy of the fully executed written referral agreement(s).

**9. Criterion 1110.1330(i), Multi-institutional Variance**

Read the criterion and, if applicable, submit the following information:

- a. A copy of a fully executed affiliation agreement between the two facilities involved.
- b. Names and positions of the shared staff at the two facilities.
- c. The volume of open heart surgeries performed for the latest 12-month period at the existing operating program.
- d. A cost comparison between the proposed project and expansion at the existing operating program.
- e. The number of cardiac catheterization procedures performed in the last 12 months at the operating program.
- f. The number of catheterization laboratories at the operating program.
- g. The projected cardiac catheterization volume at the proposed facility annually for the next 2 years.
- h. The basis for the above projection.

APPEND DOCUMENTATION AS ATTACHMENT-25 IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

**R. Criterion 1110.3030 - Clinical Service Areas Other than Categories of Service**

1. Applicants proposing to establish, expand and/or modernize Clinical Service Areas Other than Categories of Service must submit the following information:
2. Indicate changes by Service: Indicate # of key room changes by action(s):

Service	# Existing Key Rooms	# Proposed Key Rooms
<input checked="" type="checkbox"/> Surgery Operating Rooms (Class C)	11*	15
<input checked="" type="checkbox"/> Surgery Procedure Rooms (Cysto)	1*	1
<input checked="" type="checkbox"/> Phase 1 Recovery (PACU)	14	18
<input checked="" type="checkbox"/> Phase 2 Recovery (Prep & Recovery)	10	52
<input checked="" type="checkbox"/> Interventional Radiology	1	2
<input checked="" type="checkbox"/> Surgery Procedure Rooms (Endoscopy)	5	5
<input checked="" type="checkbox"/> Phase 2 Recovery (Endo Prep & Recovery)	9	15
<input checked="" type="checkbox"/> General Radiology/Fluoroscopy	8**	8
<input checked="" type="checkbox"/> Magnetic Resonance Imaging	3	3
<input checked="" type="checkbox"/> Nuclear Medicine	4	2
<input checked="" type="checkbox"/> Ultrasound	8	9
<input checked="" type="checkbox"/> Mammography	5	6
<input checked="" type="checkbox"/> Computed Tomography	5	4

\*Was reported as 12 in Annual Hospital Questionnaire and amended report has been submitted to show 11 ORs plus 1 Cysto Procedure Room.

\*\*In the Annual Hospital Questionnaire, 3 DEXA units have been reported with the 8 general radiology and fluoroscopy units for a total of 11.

3. READ the applicable review criteria outlined below and **submit the required documentation for the criteria:**

PROJECT TYPE	REQUIRED REVIEW CRITERIA	
New Services or Facility or Equipment	(b) -	Need Determination - Establishment
Service Modernization	(c)(1) -	Deteriorated Facilities
		and/or
	(c)(2) -	Necessary Expansion
		PLUS
	(c)(3)(A) -	Utilization - Major Medical Equipment
		Or
	(c)(3)(B) -	Utilization - Service or Facility
<p><b>APPEND DOCUMENTATION AS ATTACHMENT-37, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.</b></p>		

The following Sections **DO NOT** need to be addressed by the applicants or co-applicants responsible for funding or guaranteeing the funding of the project if the applicant has a bond rating of A- or better from Fitch's or Standard and Poor's rating agencies, or A3 or better from Moody's (the rating shall be affirmed within the latest 18 month period prior to the submittal of the application):

- Section 1120.120 Availability of Funds – Review Criteria
- Section 1120.130 Financial Viability – Review Criteria
- Section 1120.140 Economic Feasibility – Review Criteria, subsection (a)

**VIII. - 1120.120 - Availability of Funds**

**This section is not applicable. Advocate Health Care Network bonds have been rated as AA/Stable by Fitch, Aa2 by Moody's, and AA/Stable by Standard & Poor's, which qualifies the applicants for the waiver.**

The applicant shall document that financial resources shall be available and be equal to or exceed the estimated total project cost plus any related project costs by providing evidence of sufficient financial resources from the following sources, as applicable: **Indicate the dollar amount to be provided from the following sources:**

_____	a)	Cash and Securities – statements (e.g., audited financial statements, letters from financial institutions, board resolutions) as to: <ol style="list-style-type: none"> <li>1) the amount of cash and securities available for the project, including the identification of any security, its value and availability of such funds; and</li> <li>2) interest to be earned on depreciation account funds or to be earned on any asset from the date of applicant's submission through project completion;</li> </ol>
_____	b)	Pledges – for anticipated pledges, a summary of the anticipated pledges showing anticipated receipts and discounted value, estimated time table of gross receipts and related fundraising expenses, and a discussion of past fundraising experience.
_____	c)	Gifts and Bequests – verification of the dollar amount, identification of any conditions of use, and the estimated time table of receipts;
_____	d)	Debt – a statement of the estimated terms and conditions (including the debt time period, variable or permanent interest rates over the debt time period, and the anticipated repayment schedule) for any interim and for the permanent financing proposed to fund the project, including: <ol style="list-style-type: none"> <li>1) For general obligation bonds, proof of passage of the required referendum or evidence that the governmental unit has the authority to issue the bonds and evidence of the dollar amount of the issue, including any discounting anticipated;</li> <li>2) For revenue bonds, proof of the feasibility of securing the specified amount and interest rate;</li> <li>3) For mortgages, a letter from the prospective lender attesting to the expectation of making the loan in the amount and time indicated, including the anticipated interest rate and any conditions associated with the mortgage, such as, but not limited to, adjustable interest rates, balloon payments, etc.;</li> <li>4) For any lease, a copy of the lease, including all the terms and conditions, including any purchase options, any capital improvements to the property and provision of capital equipment;</li> <li>5) For any option to lease, a copy of the option, including all terms and conditions.</li> </ol>
_____	e)	Governmental Appropriations – a copy of the appropriation Act or ordinance accompanied by a statement of funding availability from an official of the governmental unit. If funds are to be made available from subsequent fiscal years, a copy of a resolution or other action of the governmental unit attesting to this intent;
_____	f)	Grants – a letter from the granting agency as to the availability of funds in terms of the amount and time of receipt;
_____	g)	All Other Funds and Sources – verification of the amount and type of any other funds that will be used for the project.
		<b>TOTAL FUNDS AVAILABLE</b>

**APPEND DOCUMENTATION AS ATTACHMENT-39, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

**IX. 1120.130 - Financial Viability**

**This section is not applicable. Advocate Health Care Network bonds have been rated as AA/Stable by Fitch, Aa2 by Moody's, and AA/Stable by Standard & Poor's, which qualifies the applicants for the waiver.**

All the applicants and co-applicants shall be identified, specifying their roles in the project funding or guaranteeing the funding (sole responsibility or shared) and percentage of participation in that funding.

**Financial Viability Waiver**

The applicant is not required to submit financial viability ratios if:

1. All of the projects capital expenditures are completely funded through internal sources
2. The applicant's current debt financing or projected debt financing is insured or anticipated to be insured by MBIA (Municipal Bond Insurance Association Inc.) or equivalent
3. The applicant provides a third party surety bond or performance bond letter of credit from an A rated guarantor.

See Section 1120.130 Financial Waiver for information to be provided

**APPEND DOCUMENTATION AS ATTACHMENT-40, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

The applicant or co-applicant that is responsible for funding or guaranteeing funding of the project shall provide viability ratios for the latest three years for which audited financial statements are available and for the first full fiscal year at target utilization, but no more than two years following project completion. When the applicant's facility does not have facility specific financial statements and the facility is a member of a health care system that has combined or consolidated financial statements, the system's viability ratios shall be provided. If the health care system includes one or more hospitals, the system's viability ratios shall be evaluated for conformance with the applicable hospital standards.

Provide Data for Projects Classified as:	Category A or Category B (last three years)			Category B (Projected)
Enter Historical and/or Projected Years:				
Current Ratio				
Net Margin Percentage				
Percent Debt to Total Capitalization				
Projected Debt Service Coverage				
Days Cash on Hand				
Cushion Ratio				

Provide the methodology and worksheets utilized in determining the ratios detailing the calculation and applicable line item amounts from the financial statements. Complete a separate table for each co-applicant and provide worksheets for each.

**2. Variance**

Applicants not in compliance with any of the viability ratios shall document that another organization, public or private, shall assume the legal responsibility to meet the debt obligations should the applicant default.

**APPEND DOCUMENTATION AS ATTACHMENT 41, IN NUMERICAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

**X. 1120.140 - Economic Feasibility**

**Part A of this section is not applicable. Advocate Health Care Network bonds have been rated as AA/Stable by Fitch, Aa2 by Moody's, and AA/Stable by Standard & Poor's, which qualifies the applicants for the waiver.**

**This section is applicable to all projects subject to Part 1120.**

**A. Reasonableness of Financing Arrangements**

The applicant shall document the reasonableness of financing arrangements by submitting a notarized statement signed by an authorized representative that attests to one of the following:

- 1) That the total estimated project costs and related costs will be funded in total with cash and equivalents, including investment securities, unrestricted funds, received pledge receipts and funded depreciation; or
- 2) That the total estimated project costs and related costs will be funded in total or in part by borrowing because:
  - A) A portion or all of the cash and equivalents must be retained in the balance sheet asset accounts in order to maintain a current ratio of at least 2.0 times for hospitals and 1.5 times for all other facilities; or
  - B) Borrowing is less costly than the liquidation of existing investments, and the existing investments being retained may be converted to cash or used to retire debt within a 60-day period.

**B. Conditions of Debt Financing**

This criterion is applicable only to projects that involve debt financing. The applicant shall document that the conditions of debt financing are reasonable by submitting a notarized statement signed by an authorized representative that attests to the following, as applicable:

- 1) That the selected form of debt financing for the project will be at the lowest net cost available;
- 2) That the selected form of debt financing will not be at the lowest net cost available, but is more advantageous due to such terms as prepayment privileges, no required mortgage, access to additional indebtedness, term (years), financing costs and other factors;
- 3) That the project involves (in total or in part) the leasing of equipment or facilities and that the expenses incurred with leasing a facility or equipment are less costly than constructing a new facility or purchasing new equipment.

**C. Reasonableness of Project and Related Costs**

Read the criterion and provide the following:

1. Identify each department or area impacted by the proposed project and provide a cost and square footage allocation for new construction and/or modernization using the following format (insert after this page).

COST AND GROSS SQUARE FEET BY DEPARTMENT OR SERVICE												
Department (list below)	A	B	C		D		E		F	G	H	Total Cost (G + H)
	Cost/Square Foot New	Mod.	Gross Sq. Ft. New	Circ.*	Gross Sq. Ft. Mod.	Circ.*	Const. \$ (A x C)	Mod. \$ (B x E)				
Contingency												
TOTALS												

\* Include the percentage (%) of space for circulation

**D. Projected Operating Costs**

The applicant shall provide the projected direct annual operating costs (in current dollars per equivalent patient day or unit of service) for the first full fiscal year at target utilization but no more than two years following project completion. Direct cost means the fully allocated costs of salaries, benefits and supplies for the service.

**E. Total Effect of the Project on Capital Costs**

The applicant shall provide the total projected annual capital costs (in current dollars per equivalent patient day) for the first full fiscal year at target utilization but no more than two years following project completion.

APPEND DOCUMENTATION AS ATTACHMENT -42, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

**XI. Safety Net Impact Statement**

**While the following Safety Net Impact information is NOT required of non-substantive projects, some information has been included to give the reader a better understanding of the hospital and the many ways it serves its community.**

**SAFETY NET IMPACT STATEMENT that describes all of the following must be submitted for ALL SUBSTANTIVE AND DISCONTINUATION PROJECTS:**

1. The project's material impact, if any, on essential safety net services in the community, to the extent that it is feasible for an applicant to have such knowledge.
2. The project's impact on the ability of another provider or health care system to cross-subsidize safety net services, if reasonably known to the applicant.
3. How the discontinuation of a facility or service might impact the remaining safety net providers in a given community, if reasonably known by the applicant.

**Safety Net Impact Statements shall also include all of the following:**

1. For the 3 fiscal years prior to the application, a certification describing the amount of charity care provided by the applicant. The amount calculated by hospital applicants shall be in accordance with the reporting requirements for charity care reporting in the Illinois Community Benefits Act. Non-hospital applicants shall report charity care, at cost, in accordance with an appropriate methodology specified by the Board.
2. For the 3 fiscal years prior to the application, a certification of the amount of care provided to Medicaid patients. Hospital and non-hospital applicants shall provide Medicaid information in a manner consistent with the information reported each year to the Illinois Department of Public Health regarding "Inpatients and Outpatients Served by Payor Source" and "Inpatient and Outpatient Net Revenue by Payor Source" as required by the Board under Section 13 of this Act and published in the Annual Hospital Profile.
3. Any information the applicant believes is directly relevant to safety net services, including information regarding teaching, research, and any other service.

**A table in the following format must be provided as part of Attachment 43.**

Safety Net Information per PA 96-0031			
CHARITY CARE			
Charity (# of patients)	Year	Year	Year
Inpatient			
Outpatient			
<b>Total</b>			
Charity (cost in dollars)	Year	Year	Year
Inpatient			
Outpatient			
<b>Total</b>			
MEDICAID			
Medicaid (# of patients)	Year	Year	Year
Inpatient			
Outpatient			
<b>Total</b>			
Medicaid (revenue)	Year	Year	Year
Inpatient			
Outpatient			
<b>Total</b>			

**APPEND DOCUMENTATION AS ATTACHMENT-43, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

**XII. Charity Care Information**

Charity Care information **MUST** be furnished for **ALL** projects.

1. All applicants and co-applicants shall indicate the amount of charity care for the latest three audited fiscal years, the cost of charity care and the ratio of that charity care cost to net patient revenue.
2. If the applicant owns or operates one or more facilities, the reporting shall be for each individual facility located in Illinois. If charity care costs are reported on a consolidated basis, the applicant shall provide documentation as to the cost of charity care; the ratio of that charity care to the net patient revenue for the consolidated financial statement; the allocation of charity care costs; and the ratio of charity care cost to net patient revenue for the facility under review.
3. If the applicant is not an existing facility, it shall submit the facility's projected patient mix by payer source, anticipated charity care expense and projected ratio of charity care to net patient revenue by the end of its second year of operation.

Charity care" means care provided by a health care facility for which the provider does not expect to receive payment from the patient or a third-party payer. (20 ILCS 3960/3) Charity Care **must** be provided at cost.

A table in the following format must be provided for all facilities as part of Attachment 44.

CHARITY CARE			
	Year	Year	Year
Net Patient Revenue			
Amount of Charity Care (charges)			
Cost of Charity Care			

APPEND DOCUMENTATION AS **ATTACHMENT-44**, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

After paginating the entire, completed application, indicate in the chart below, the page numbers for the attachments included as part of the project's application for permit:

<b>INDEX OF ATTACHMENTS</b>		
<b>ATTACHMENT NO.</b>		<b>PAGES</b>
1	Applicant/Coapplicant Identification including Certificate of Good Standing	34-36
2	Site Ownership	37-38
3	Persons with 5 percent or greater interest in the licensee must be identified with the % of ownership.	39-41
4	Organizational Relationships (Organizational Chart) Certificate of Good Standing Etc.	42-43
5	Flood Plain Requirements	44-45
6	Historic Preservation Act Requirements	46-47
7	Project and Sources of Funds Itemization	48-49
8	Obligation Document if required	50
9	Cost Space Requirements	51-53
10	Discontinuation	NA
11	Background of the Applicant	54-58
12	Purpose of the Project	59-66
13	Alternatives to the Project	67-73
14	Size of the Project	74-82
15	Project Service Utilization	83-84
16	Unfinished or Shell Space	NA
17	Assurances for Unfinished/Shell Space	NA
18	Master Design Project	NA
19	Mergers, Consolidations and Acquisitions	NA
	<b>Service Specific:</b>	
20	Medical Surgical Pediatrics, Obstetrics, ICU	85-103
21	Comprehensive Physical Rehabilitation	NA
22	Acute Mental Illness	NA
23	Neonatal Intensive Care	NA
24	Open Heart Surgery	NA
25	Cardiac Catheterization	104-111
26	In-Center Hemodialysis	NA
27	Non-Hospital Based Ambulatory Surgery	NA
28	General Long Term Care	NA
29	Specialized Long Term Care	NA
30	Selected Organ Transplantation	NA
31	Kidney Transplantation	NA
32	Subacute Care Hospital Model	NA
33	Post Surgical Recovery Care Center	NA
34	Children's Community-Based Health Care Center	NA
35	Community-Based Residential Rehabilitation Center	NA
36	Long Term Acute Care Hospital	NA
37	Clinical Service Areas Other than Categories of Service	112-182
38	Freestanding Emergency Center Medical Services	NA
	<b>Financial and Economic Feasibility:</b>	
39	Availability of Funds	183-198
40	Financial Waiver	199
41	Financial Viability	199
42	Economic Feasibility	200-204
43	Safety Net Impact Statement	205-209
44	Charity Care Information	210-211

**Type of Ownership of Applicant/Co-Applicant**

- |                                     |                           |                          |                     |                          |       |
|-------------------------------------|---------------------------|--------------------------|---------------------|--------------------------|-------|
| <input checked="" type="checkbox"/> | Non-profit Corporation    | <input type="checkbox"/> | Partnership         |                          |       |
| <input type="checkbox"/>            | For-profit Corporation    | <input type="checkbox"/> | Governmental        |                          |       |
| <input type="checkbox"/>            | Limited Liability Company | <input type="checkbox"/> | Sole Proprietorship | <input type="checkbox"/> | Other |

- Corporations and limited liability companies must provide an **Illinois certificate of good standing**.
- Partnerships must provide the name of the state in which organized and the name and address of each partner specifying whether each is a general or limited partner.

APPEND DOCUMENTATION AS ATTACHMENT #1 IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

See Attachment 1, Exhibits 1 and 2.

File Number 1004-695-5



To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that

ADVOCATE HEALTH AND HOSPITALS CORPORATION, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON SEPTEMBER 12, 1906, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE GENERAL NOT FOR PROFIT CORPORATION ACT OF THIS STATE, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.

In Testimony Whereof, I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this 4TH day of MAY A.D. 2012



Authentication #: 1212501084  
Authenticate at: <http://www.cyberdriveillinois.com>

Jesse White

SECRETARY OF STATE

File Number 1707-692-2



To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that

ADVOCATE HEALTH CARE NETWORK, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON JUNE 14, 1923, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE GENERAL NOT FOR PROFIT CORPORATION ACT OF THIS STATE, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.

In Testimony Whereof, I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this 14TH day of MAY A.D. 2012



Authentication #: 1213501096  
Authenticate at: <http://www.cyberdriveillinois.com>

Jesse White

SECRETARY OF STATE

**Site Ownership**

[Provide this information for each applicable site]

Exact Legal Name of Site Owner: Advocate Health and Hospitals Corporation
Address of Site Owner: 2025 Windsor Drive, Oak Brook, IL 60523
Street Address or Legal Description of Site: 450 W. Highway 22, Barrington, Illinois 60010-1901
Proof of ownership or control of the site is to be provided as Attachment 2. Examples of proof of ownership are property tax statement, tax assessor's documentation, deed, notarized statement of the corporation attesting to ownership, an option to lease, a letter of intent to lease or a lease.
APPEND DOCUMENTATION AS <u>ATTACHMENT-2</u> , IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.



2025 Windsor Drive | Oak Brook, Illinois 60523 | T 630.572.9393 | www.advocatehealth.com

February 12, 2013

Mr. Dale Galassie, Chairman  
Illinois Health Facilities and Services Review Board  
525 W. Jefferson Street--2<sup>nd</sup> Floor  
Springfield, IL 62761

Re: Advocate Good Shepherd Hospital  
Hospital Modernization Project

Dear Chairman Galassie:

This attestation letter is submitted to indicate that Advocate Health and Hospitals Corporation owns the Good Shepherd Hospital site.

We trust it complies with the State Agency Proof of Ownership requirement indicated in the May 2010 Permit Application Edition.

Respectfully,

A handwritten signature in cursive script, appearing to read "William Santulli".

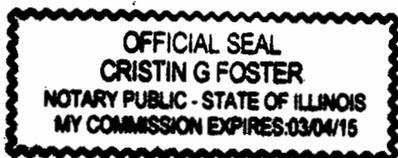
William Santulli  
Executive Vice President/COO

Notarization:

Subscribed and sworn to before me  
This 12<sup>th</sup> day of February 2013

A handwritten signature in cursive script, appearing to read "Cristin G. Foster".

Signature of Notary



[Provide this information for each applicable facility, and insert after this page.]

Exact Legal Name: Advocate Health and Hospitals Corporation d/b/a Advocate Good Shepherd Hospital

Address: 450 W. Highway 22, Barrington, IL 60010-1901

- |                                     |                           |                          |                     |                                |
|-------------------------------------|---------------------------|--------------------------|---------------------|--------------------------------|
| <input checked="" type="checkbox"/> | Non-profit Corporation    | <input type="checkbox"/> | Partnership         |                                |
| <input type="checkbox"/>            | For-profit Corporation    | <input type="checkbox"/> | Governmental        |                                |
| <input type="checkbox"/>            | Limited Liability Company | <input type="checkbox"/> | Sole Proprietorship | <input type="checkbox"/> Other |

- Corporations and limited liability companies must provide an Illinois Certificate of Good Standing.
- Partnerships must provide the name of the state in which organized and the name and address of each partner specifying whether each is a general or limited partner.
- **Persons with 5 percent or greater interest in the licensee must be identified with the % of ownership.**

APPEND DOCUMENTATION AS ATTACHMENT-3, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

File Number 1004-695-5



To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that

ADVOCATE HEALTH AND HOSPITALS CORPORATION, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON SEPTEMBER 12, 1906, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE GENERAL NOT FOR PROFIT CORPORATION ACT OF THIS STATE, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.

In Testimony Whereof, I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this 4TH day of MAY A.D. 2012



Authentication #: 1212501084  
Authenticate at: <http://www.cyberdriveillinois.com>

Jesse White

SECRETARY OF STATE

File Number 1707-692-2



To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that

ADVOCATE HEALTH CARE NETWORK, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON JUNE 14, 1923, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE GENERAL NOT FOR PROFIT CORPORATION ACT OF THIS STATE, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.

In Testimony Whereof, I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this 14TH day of MAY A.D. 2012



Authentication #: 1213501096  
Authenticate at: <http://www.cyberdriveillinois.com>

Jesse White

SECRETARY OF STATE

**Organizational Relationships**

Provide (for each co-applicant) an organizational chart containing the name and relationship of any person or entity who is related (as defined in Part 1130.140). If the related person or entity is participating in the development or funding of the project, describe the interest and the amount and type of any financial contribution.

**APPEND DOCUMENTATION AS ATTACHMENT 4 IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

Attachment 4, Exhibit 1, is an organization chart of Advocate Health Care that shows all of the relevant organizations including Advocate Health and Hospitals Corporation and Advocate Health Care Network.



**Flood Plain Requirements**

[Refer to application instructions.]

Provide documentation that the project complies with the requirements of Illinois Executive Order #2005-5 pertaining to construction activities in special flood hazard areas. As part of the flood plain requirements please provide a map of the proposed project location showing any identified floodplain areas. Floodplain maps can be printed at [www.FEMA.gov](http://www.FEMA.gov) or [www.illinoisfloodmaps.org](http://www.illinoisfloodmaps.org). **This map must be in a readable format.** In addition please provide a statement attesting that the project complies with the requirements of Illinois Executive Order #2005-5 (<http://www.hfsrb.illinois.gov>).

APPEND DOCUMENTATION AS ATTACHMENT -5, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

By their signatures on the Certification, the applicants certify that the site for the proposed Project is not in a flood plain, as identified by the most recent FEMA Flood Insurance Rate Map for this location, Attachment 5, Exhibit 1. Because the Project is not in a Special Flood Hazard Area, it complies with Illinois Executive Order #2006-5.



**Historic Resources Preservation Act Requirements**

[Refer to application instructions.]

Provide documentation regarding compliance with the requirements of the Historic Resources Preservation Act.

APPEND DOCUMENTATION AS ATTACHMENT-6, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

Attachment 6, Exhibit 1, is a letter from the Illinois Historic Preservation Agency which documents that no historic, architectural, or archaeological sites exist within the Project area.



**Illinois Historic  
Preservation Agency**

FEB 18 2013

FAX (217) 782-8161

1 Old State Capitol Plaza • Springfield, Illinois 62701-1512 • [www.illinois-history.gov](http://www.illinois-history.gov)

Lake County  
Barrington

CON - New Construction/Modernization, Advocate Good Shepherd Hospital  
450 W. Highway 22  
IHPA Log #005012913

February 14, 2013

Janet Hood  
Advocate BroMenn Medical Center  
Advocate Eureka Hospital  
P.O. Box 2850  
Bloomington, IL 61702-2850

Dear Ms. Hood:

This letter is to inform you that we have reviewed the information provided concerning the referenced project.

Our review of the records indicates that no historic, architectural or archaeological sites exist within the project area.

Please retain this letter in your files as evidence of compliance with Section 4 of the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/1 et. seq.). This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please contact me at 217/785-5027.

Sincerely,

Anne E. Haaker  
Deputy State Historic  
Preservation Officer

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**Project Costs and Sources of Funds**

Complete the following table listing all costs (refer to Part 1120.110) associated with the project. When a project or any component of a project is to be accomplished by lease, donation, gift, or other means, the fair market or dollar value (refer to Part 1130.140) of the component must be included in the estimated project cost. If the project contains non-reviewable components that are not related to the provision of health care, complete the second column of the table below. Note, the use and sources of funds must equal.

COSTS	CLINICAL	NONCLINICAL	TOTAL
Preplanning Costs	\$ 555,900	\$ 534,100	\$ 1,090,000
Site Survey and Soil Investigation	\$ 33,544	\$ 36,456	\$ 70,000
Site Preparation	\$ 2,300,000	\$ 7,900,000	\$ 10,200,000
Off Site Work	\$ -	\$ -	\$ -
New Construction Contracts	\$ 44,038,600	\$ 50,061,443	\$ 94,100,043
Modernization Contracts	\$ 26,221,260	\$ 17,232,750	\$ 43,454,010
Contingencies	\$ 6,065,278	\$ 5,616,447	\$ 11,681,725
Architectural/Engineering Fees	\$ 4,182,000	\$ 4,018,000	\$ 8,200,000
Consulting and Other Fees	\$ 1,045,970	\$ 1,004,951	\$ 2,050,921
Movable or Other Equipment (not in construction contracts)	\$ 43,618,736	\$ 1,359,650	\$ 44,978,386
Bond Issuance Expense (project related)	\$ 935,042	\$ 649,775	\$ 1,584,817
Net Interest Expense During Construction (project related)	\$ 14,270,416	\$ 9,916,729	\$ 24,187,145
Fair Market Value, Leased Space, Equipment	\$ -	\$ -	\$ -
Other Costs To Be Capitalized	\$ 2,512,972	\$ 2,731,063	\$ 5,244,035
Acquisition of Building or Other Property (excluding land)	\$ -	\$ -	\$ -
<b>TOTAL USES OF FUNDS</b>	<b>\$ 145,779,718</b>	<b>\$ 101,061,364</b>	<b>\$ 246,841,082</b>
<b>SOURCE OF FUNDS</b>	<b>CLINICAL</b>	<b>NONCLINICAL</b>	<b>TOTAL</b>
Cash and Securities			\$ 88,359,421
Pledges			\$ -
Gifts and Bequests			\$ -
Bond Issues (project related)			\$ 158,481,661
Mortgages			
Leases (fair market value)			
Governmental Appropriations			
Grants			
Other Funds and Sources			
<b>TOTAL SOURCES OF FUNDS</b>			<b>\$ 246,841,082</b>

**NOTE: ITEMIZATION OF EACH LINE ITEM MUST BE PROVIDED AT ATTACHMENT-7, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

Itemization	Cost
<b>Pre-Planning</b>	\$ 1,090,000
Site and Facility Planning	220,537
Lean, Programming, Concept Design	869,463
<b>Site survey (investigation, traffic)</b>	\$ 70,000
<b>Site Preparation</b>	\$ 10,200,000
Prep Work (Demo, clearing, grading, shoring)	2,150,000
Earthwork, drainage, retention pond, stone, foundation prep	6,500,000
Utility Rerouting	1,550,000
<b>OFF-Site Work</b>	\$ -
<b>New Construction</b>	\$ 94,100,043
<b>Modernization</b>	\$ 43,454,010
<b>Contingencies</b>	\$ 11,681,725
<b>Architect/Eng Fees</b>	\$ 8,200,000
<b>Consulting and Other Fees</b>	\$ 2,050,921
Admin & Misc Consultants	467,000
Operational Consultants / Misc Analysis	226,200
Reimbursables / Renderings / Misc Support	272,000
Envelope, Commissioning	463,950
Miscellaneous	621,771
<b>Movable / Equipment</b>	\$ 44,978,386
Surgical	13,203,571
Sterile Processing	1,000,000
Imaging	10,691,937
Interventional (Cardiac Cath./EP/Interventional Radiology)	7,536,111
Endoscopy	1,010,130
Medical Surgical	4,261,653
Intensive Care	2,724,565
Miscellaneous equipment	4,550,419
<b>Bond Issuance / Finance Expense</b>	\$ 1,584,817
<b>Net Interest</b>	\$ 24,187,145
<b>Fair Market Value of Lease</b>	\$ -
<b>Other Costs to be Capitalized</b>	\$ 5,244,035
Wayfinding Signage (interior/exterior)	942,671
Regulatory / Permitting	1,609,062
Miscellaneous other costs	2,692,302
<b>TOTAL</b>	\$ 246,841,082
<b>Source of Funds</b>	
Cash and Securities	\$ 88,359,421
Bond Issues (project related)	158,481,661
Grants	0
Other Funds and Sources	0
<b>TOTAL</b>	\$ 246,841,082

**Project Status and Completion Schedules**

Indicate the stage of the project's architectural drawings:

- |   |  |
|---|--|
| <input type="checkbox"/> None or not applicable | <input type="checkbox"/> Preliminary   |
| <input checked="" type="checkbox"/> Schematics  | <input type="checkbox"/> Final Working |

Anticipated project completion date (refer to Part 1130.140): December 31, 2017

Indicate the following with respect to project expenditures or to obligation (refer to Part 1130.140):

- Purchase orders, leases or contracts pertaining to the project have been executed.
- Project obligation is contingent upon permit issuance. Provide a copy of the contingent "certification of obligation" document, highlighting any language related to CON Contingencies
- Project obligation will occur after permit issuance.

**APPEND DOCUMENTATION AS ATTACHMENT-8, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

No further documentation needed.

**Cost Space Requirements**

Dept. / Area	Cost	Gross Square Feet		Amount of Proposed Total Gross Square Feet That Is:			
		Existing	Proposed	New Const.	Modernized	As Is	Vacated Space
<b>REVIEWABLE</b>							
Medical Surgical							
Intensive Care							
Diagnostic Radiology							
MRI							
Total Clinical							
<b>NON REVIEWABLE</b>							
Administrative							
Parking							
Gift Shop							
Total Non-clinical							
<b>TOTAL</b>							
APPEND DOCUMENTATION AS ATTACHMENT-9, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.							

## Cost Space Requirements

CLINICAL	Total Cost	Existing	Proposed	New Const.	Modernized	As Is	Vacated Space
<b>Beds</b>							
Med/Surg & Peds	\$ 36,896,464	52,787	74,166	53,320	0	20,846	0
ICU	\$ 10,526,133	12,181	20,753	11,849	0	8,904	0
<b>Cardiac Catheterization</b>							
Cardiac Cath/EP	\$ 6,322,664	1,584	3,594	3,594	0		
<b>Surgery &amp; Interventional Services</b>							
Surgery Operating Rooms	\$ 32,566,592	19,352	34,729	16,275	14,693	3,761	0
Surgical Procedure Room - Cysto	\$ 466,607	298	942	0	942	0	0
Phase I Recovery (PACU)	\$ 2,005,731	2,853	4,080	0	4,080	0	0
Phase II Prep/Recovery	\$ 10,271,222	10,132	20,681	1,726	18,955	0	0
Central Sterile Processing	\$ 5,850,666	5,002	10,508	4,457	4,163	1,888	0
Interventional Radiology	\$ 6,322,664	408	3,594	3,594	0		0
<b>Endoscopy</b>							
Surgery Procedure Rooms- Endo	\$ 1,340,563	2,528	2,528	0	612	1,916	0
Phase II Prep/Recovery - Endo	\$ 2,819,887	3,038	5,791	0	5,791	0	0
<b>Ambulatory Care Services</b>							
Chronic Care (Diab., Anticoag, CHF)	\$ 1,167,873	2,775	3,207	0	3,207	0	0
Infusion Therapy	\$ 1,469,715	2,620	3,014	0	3,014	0	0
<b>Outpatient Testing</b>							
Cardio-Diagnostics (Echo, Echo stress)	\$ 899,133	1,025	1,742	0	1,742	0	0
Pre-Admission, Spec, Collection & EKG	\$ 777,663	715	1,679	0	1,679	0	0
Pulmonary Function	\$ 340,385	290	724	0	724	0	0
<b>Diagnostic Radiology</b>							
General Radiology & Fluoroscopy	\$ 4,513,260	6,841	7,560	0	4,497	3,063	0
Magnetic Resonance Imaging	\$ 3,425,513	3,616	5,113		2,662	2,451	0
Nuclear Medicine	\$ 2,195,460	3,932	2,112	0	2,112	0	1,820
Ultrasound	\$ 4,558,970	4,593	6,436	267	4,258	1,911	0
Pain Treatment	\$ 1,254,921	393	1,249		1,249		0
Mammography	\$ 2,883,527	3,467	4,846	356	2,415	2,075	0
Bone Density	\$ 716,976	464	692	89	603	0	0
Computed Tomography	\$ 1,951,029	4,150	4,150		1,944	2,206	0
<b>Therapies</b>							
Physical Therapy	\$ 1,835,508	2,528	4,493	879	3,614	0	0
Occupational Therapy	\$ 348,722	763	954	0	954	0	0
Speech	\$ 85,170	126	233	0	233	0	0
Cardiopulmonary Rehabilitation	\$ 1,385,889	4,108	2,932	0	2,932	0	1,176
<b>Pharmacy</b>							
Pharmacy	\$ 580,812	2,576	2,576	0	304	2,272	0
<b>Total Clinical</b>	\$145,779,718	155,145	235,078	96,406	87,379	51,293	2,996

NON CLINICAL – NON REVIEWABLE	Total Cost	Existing	Proposed	New Const.	Modernized	As Is	Vacated Space
Administration	\$ 18,266,782	38,701	59,354	13,387	30,633	15,334	0
Visitor/Public Support	\$ 12,452,565	12,046	22,732	17,467	5,081	184	0
Circulation	\$ 22,525,968	45,672	75,528	28,377	22,716	24,435	0
Materials Management	\$ 3,315,709	13,358	15,205	5,586	2,444	7,175	0
Building Systems	\$ 34,932,443	8,151	51,875	44,340	3,971	3,564	0
Crawl Area	\$ 8,564,185	0	23,450	23,450	0	0	0
Chapel	\$ 763,768	1,284	1,736	0	1,736	0	0
Simulation Lab	\$ 239,943	1,267	1,443	0	547	896	0
Total Non-Clinical	\$ 101,061,364	120,479	251,323	132,607	67,128	51,588	0
TOTAL, Clinical and Non Reviewable	\$ 246,841,082	275,624	486,401	229,013	154,507	102,881	2,996

Vacated 2,996 sf will be used by Administration.

**Criterion 1110.230 – Background, Purpose of the Project, and Alternatives**

READ THE REVIEW CRITERION and provide the following required information:

**BACKGROUND OF APPLICANT**

5. A listing of all health care facilities owned or operated by the applicant, including licensing, and certification if applicable.
6. A certified listing of any adverse action taken against any facility owned and/or operated by the applicant during the three years prior to the filing of the application.
7. Authorization permitting HFSRB and DPH access to any documents necessary to verify the information submitted, including, but not limited to: official records of DPH or other State agencies; the licensing or certification records of other states, when applicable; and the records of nationally recognized accreditation organizations. **Failure to provide such authorization shall constitute an abandonment or withdrawal of the application without any further action by HFSRB.**
8. If, during a given calendar year, an applicant submits more than one application for permit, the documentation provided with the prior applications may be utilized to fulfill the information requirements of this criterion. In such instances, the applicant shall attest the information has been previously provided, cite the project number of the prior application, and certify that no changes have occurred regarding the information that has been previously provided. The applicant is able to submit amendments to previously submitted information, as needed, to update and/or clarify data.

**APPEND DOCUMENTATION AS ATTACHMENT-11, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM. EACH ITEM (1-4) MUST BE IDENTIFIED IN ATTACHMENT 11.**

**1. The listing of all health care facilities owned or operated by the applicant, including licensing, and certification if applicable.**

Attachment 11, Exhibit 1 is the listing of all the facilities owned by Advocate Health Care Network. Exhibit 2 is the current state hospital license for Advocate Health and Hospitals, d/b/a Advocate Good Shepherd Hospital. The most recent DNV accreditation certificate for the Hospital is included as Attachment 11, Exhibit 3.

**2. Certified Listing of Any Adverse Action Against Any Facility Owned or Operated by the Applicant**

By the signatures on the Certification pages, the applicants attest there have been no adverse actions against any facility owned and/or operated by Advocate Health Care Network or Advocate Health and Hospitals Corporation, as demonstrated by compliance with the CMS Conditions of Participation with Medicare and Medicaid, during the three years prior to the filing of this application.

**3. Authorization Permitting IHFPB and DPH to Access Necessary Documentation**

By the signatures on the Certification pages, the applicants hereby authorize the Illinois Health Facilities and Services Review Board and the Illinois Department of Public Health to access information in order to verify any documentation or information submitted in response to the requirements of this subsection, or to obtain any documentation or information which the State Board or Department of Public Health find pertinent to this subsection.

**4. Exception for Filing Multiple Certificates of Need in One Year**

Not applicable. This is the first certificate of need filed by Advocate Good Shepherd Hospital in 2013.

1. The licensing, certification, and accreditation numbers of each organization owned or operated by Advocate Health and Hospitals Corporation, along with relevant identification numbers, are listed below.

Facility	Location	License No.	Joint Commission Accreditation No.	DNV Accreditation No.
Advocate Good Shepherd Hospital	450 W. Highway, #22 Barrington, IL	0003475	N/A	114892-2012- AHC-USA- NIAHO

Additional hospitals owned and operated as a part of Advocate Health Care Network:

Facility	Location	License No.	Joint Commission Accreditation No.	DNV Accreditation No.
Advocate BroMenn Medical Center	1304 Franklin Ave. Normal, IL	0005645	N/A	127532-2012- AHC-USA- NIAHO
Advocate Christ Medical Center	4440 W. 95 <sup>th</sup> St. Oak Lawn, IL	0000315	7397	N/A
Advocate Condell Medical Center	801 S. Milwaukee Ave., Libertyville, IL	0005579	7372	N/A
Advocate Eureka Hospital	101 S. Major Eureka, IL	0005652	N/A	127988-2012- AHC-USA- NIAHO
Advocate Good Samaritan Hospital	3815 Highland Ave. Downers Grove, IL	0003384	N/A	115804-2012- AHC-USA- NIAHO
Advocate Illinois Masonic Medical Center	836 W. Wellington Chicago, IL	0005165	4068	N/A
Advocate Lutheran General Hospital	1775 Dempster Park Ridge, IL	0004796	N/A	117368-2012- AHC-USA- NIAHO
Advocate South Suburban Hospital	17800 S. Kedzie Ave Hazel Crest, IL	0004697	7356	N/A
Advocate Trinity Hospital	2320 E. 93 <sup>rd</sup> St. Chicago, IL	0004176	N/A	120735-2012- AHC-USA- NIAHO



**State of Illinois 2114547**  
**Department of Public Health**

**LICENSE, PERMIT, CERTIFICATION, REGISTRATION**

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois Statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

Issued under the authority of  
the State of Illinois  
Department of Public Health

**LA MAR HASBROUCK, MD, MPH**  
**DIRECTOR**

<small>EXPIRATION DATE</small> <b>12/31/13</b>	<small>CATEGORY</small> <b>BG8D</b>	<small>I.D. NUMBER</small> <b>0003475</b>
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**FULL LICENSE**  
**GENERAL HOSPITAL**  
**EFFECTIVE: 01/01/13**

**BUSINESS ADDRESS**

**ADVOCATE HEALTH AND HOSPITALS CORP**  
**D/B/A GOOD SHEPHERD HOSPITAL**  
**450 WEST HIGHWAY 22**  
**BARRINGTON IL 60010**

The face of this license has a colored background. Printed by Authority of the State of Illinois • 4/97 •



**DNV HEALTHCARE INC.**  
**CERTIFICATE OF ACCREDITATION**

Certificate No. 114892-2012-AHC-USA-NIAHO

*This is to certify that*

**Advocate Good Shepherd Hospital**

450 West Highway 22, Barrington, IL 60010

*Complies with the requirements of the:*

**NIAHO<sup>®</sup> Hospital Accreditation Program**

Pursuant to the authority granted to Det Norske Veritas Healthcare, Inc. by the U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, this organization is deemed in compliance with the Medicare Conditions of Participation for Hospitals (42 C.F.R. §482). This certificate is valid for a period of three (3) years from the Effective Date of Accreditation.

*Effective Date of Accreditation:*

March 22, 2012

*for the Accreditation Body:*

**DET NORSKE VERITAS  
HEALTHCARE, INC.  
HOUSTON, TEXAS**

**Patrick Horins**  
*Executive Vice President, Accreditation*



**Yehuda Dror**  
*President*

Lack of continual fulfillment of the conditions set out in the Certification/Accreditation Agreement may render this Certificate invalid.  
ACCREDITED UNIT: DNV HEALTHCARE INC., 400 TECHNECENTER DRIVE, SUITE 100 MILFORD, OHIO 45150, OH, UNITED STATES, TEL: 513-947-8334  
WWW.DNVACCREDITATION.COM

### SECTION III – BACKGROUND, PURPOSE OF THE PROJECT, AND ALTERNATIVES - INFORMATION REQUIREMENTS

This Section is applicable to all projects except those that are solely for discontinuation with no project costs.

#### Criterion 1110.230 – Background, Purpose of the Project, and Alternatives

READ THE REVIEW CRITERION and provide the following required information

##### PURPOSE OF PROJECT

1. Document that the project will provide health services that improve the health care or well-being of the market area population to be served.
2. Define the planning area or market area, or other, per the applicant's definition.
3. Identify the existing problems or issues that need to be addressed, as applicable and appropriate for the project. [See 1110.230(b) for examples of documentation.]
4. Cite the sources of the information provided as documentation.
5. Detail how the project will address or improve the previously referenced issues, as well as the population's health status and well-being.
6. Provide goals with quantified and measurable objectives, with specific timeframes that relate to achieving the stated goals as appropriate.

For projects involving modernization, describe the conditions being upgraded if any. For facility projects, include statements of age and condition and regulatory citations if any. For equipment being replaced, include repair and maintenance records.

**NOTE: Information regarding the "Purpose of the Project" will be included in the State Agency Report. APPEND DOCUMENTATION AS ATTACHMENT-12, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM. EACH ITEM (1-6) MUST BE IDENTIFIED IN ATTACHMENT 12.**

The purpose of the Project is to modernize by updating and reconfiguring Hospital facilities to industry standards, to meet community needs, and to provide cost effective care. The Project will also adjust capacity in key areas where current demand exceeds facility capacity, principally increasing intensive care unit (ICU) and surgery capacity while reducing capacity in areas with diminishing demand, principally decreasing medical-surgical-pediatrics beds and select imaging procedure rooms. Most of the original hospital facility has undergone little modernization since being constructed over three decades ago, including the inpatient medical/surgical units, most of the surgical suite, and many ancillary departments.

The Project will provide single occupancy rather than the current predominantly dual occupancy inpatient rooms. Single occupancy rooms have been demonstrated previously to the Board as being advantageous in limiting the spread of infection, enhancing patient privacy, and promoting an environment of healing. As more patients shift to outpatient care, the mix of remaining inpatients becomes more complex requiring additional intensive care beds. The Project will also correct the inadequate ICU and medical-surgical room sizes and bring them up to current industry standards. The Project realigns the inpatient bed configuration with patient needs by decreasing the number of medical-surgical-pediatric beds and increasing the number of ICU beds. The inpatient bed realignment supports shifts in utilization trends and reflects the IHFSRB calculated bed need in the planning area by reducing excess of medical-surgical-pediatric beds and increasing ICU beds.

The new facilities will offer updated technology, which is difficult to provide in a facility designed 40 years ago. The proposed inpatient units are designed with work stations and supply storage in each patient room, increasing time spent by physicians, nurses and staff with the patients at the bedside.

Key departments are co-located to better coordinate care and reduce duplication and increase effectiveness of departmental resources. As an example, the interventional platform will accommodate surgical procedures as well as cardiac catheterization and interventional radiology procedures, sharing prep/recovery space, equipment, and staff. This will enhance safety as more staff will be around the patient during critical recovery times than when these departments are in distinct locations. Diagnostic testing services (such as lab, imaging, and cardiac testing) will be co-located for patient convenience, service coordination, and elimination of redundant resources. Cardiac rehabilitation and physical therapy will share space and equipment to provide patients with a broader range of resources while containing costs.

The goal to keep patients healthy and out of inpatient beds is reflected in the Project, which will offer a coordinated clinic to monitor and support patients with chronic illnesses, such as congestive heart failure and diabetes.

The Project will meet the community need for additional capacity in surgery, ICU, and other areas where need exceeds available resources. The number of operating rooms is inadequate to meet the demand of current medical staff with growing practices and cannot accommodate additional surgeons joining the Advocate Good Shepherd Hospital medical staff. This capacity has occurred despite the exemplary speed of surgical staff in turning over the operating rooms between cases. Intensive Care occupancy has been above the State target occupancy of 60% for the last 7 years, exceeding 100% on several occasions, requiring patients to be cared for with ICU-competent staff but in less desirable locations such as the emergency department and PACU. The Project will accommodate the expected growth in ICU and surgery. In 2011, Advocate Good Shepherd had the second highest ICU occupancy in the state among hospitals with more than 10 ICU beds.

This major modernization Project updates almost all clinical areas with the exception of the emergency department, laboratory, and mother-child services. This comprehensive approach to modernization significantly reduces the total capital cost compared to a piecemeal approach of numerous small capital improvement projects. It also limits service disruption and inconveniences to the patient. The project also includes upgrades to building systems and designed using LEED guidelines, targeting LEED Gold certification, improving energy efficiency and sustainability.

**1. Define the planning area or market area, or other, per the applicant's definition.**

Advocate Good Shepherd Hospital is the major provider of health care to the residents of Barrington, and surrounding cities and villages. The Hospital was planned by volunteers who saw a need in the late 1960s. Through donations, a site was secured outside the city limits of Barrington. The hospital opened in 1979. From that early vision, the Hospital expanded the campus to provide office buildings for physicians to see their patients while allowing the physicians to remain close to inpatients. The need for additional outpatient services was later

identified in surrounding communities which led to off campus outpatient centers being opened in Lake Zurich, Crystal Lake, Algonquin, and Barrington.

Prudent Hospital expansion occurred as the population grew in the northwest suburbs. Today, the Hospital's primary and secondary service areas encompass parts of four counties (Lake, McHenry, Kane, and Cook). As the population has grown, so has the demand for quality healthcare close to home. See Attachment 12, Exhibit 1 for a map of the area.

The population of the service area is expected to continue to grow.

DEMOGRAPHIC CHARACTERISTICS	Service Area	USA
2000 Total Population	465,477	281,421,906
2012 Total Population	563,279	313,095,504
2017 Total Population	595,271	325,256,835
% Change 2012 – 2017	5.7%	3.9%

Source: The Nielsen Company, and Thomson Reuters

The demographics of the service area are typical of rural and suburban Illinois with significant growth in the 55-64 and 65+ age cohorts. With this Project, the Hospital is preparing for the increased utilization for healthcare that accompanies these aging demographics.

Age Group	Age Distribution				USA 2012 % of Total
	AGSH 2012	AGSH 2012 % of Total	AGSH 2017	AGSH 2017 - % of Total	
0-14	126,979	22.5%	128,465	21.6%	20.2%
15-17	27,439	4.9%	28,300	4.8%	4.3%
18-24	46,991	8.3%	55,527	9.3%	9.7%
25-34	65,201	11.6%	67,053	11.3%	13.5%
35-54	177,396	31.5%	167,783	28.2%	28.1%
55-64	62,406	11.1%	78,141	13.1%	11.4%
65+	56,867	10.1%	70,002	11.8%	12.9%
Total	563,279	100.0%	595,271	100.0%	100.0%

Source: The Nielsen Company, and Thomson Reuters

**2. Identify the existing problems or issues that need to be addressed, as applicable and appropriate for the project. [See 1110.230(b) for examples of documentation.]**

The Project addresses the need to provide for the care of acutely ill patients. A pressing concern is the need for more intensive care beds. The Hospital has operated ICU at over 80% occupancy for seven years while the state standard for utilization is 60%. Good Shepherd operates with the second highest ICU occupancy in the state, among hospitals with more than a 10 bed ICU. The unit has been so full it is a challenge for staff to manage the patients. The need for beds at times limits the ability to move patients from the emergency department and surgery to intensive care nursing units which can optimize their care. The lack of available ICU beds not only adversely affects the patients needing the optimal level of care but also serves as an unnecessary bottleneck for surgery, emergency department and other areas holding patients who are waiting for an ICU bed.

The current medical-surgical ICU unit does not have the space needed today for the high amount of equipment or controls that surround a modern intensive care bed. The expectation of patients, families, and staff is to offer a setting where privacy is valued, which is challenging in the current small-sized unit.

A further need is for additional operating rooms, particularly those sized to meet current industry standards, and sufficient capacity for preparation and recovery space for surgery and interventional patients. The current arrangement has 11 operating rooms, most of which are smaller than current industry standards.

A third need is related to the number and size of the dual occupancy, semiprivate inpatient rooms. At Advocate Good Shepherd Hospital, more than 50% of the beds are in dual occupancy, semiprivate rooms, and there is even one three-bed ward. The literature is clear about the disadvantages of dual occupancy rooms. Infection control is a major concern, especially when patients share a bathroom. Privacy is another major concern as patients and their families find it difficult to discuss their illness with the physician or nurse, while a stranger is a few feet away separated by only a curtain.

Other key needs being addressed through this Project are listed below.

- **Provide facilities that meet current industry standards and are right-sized to accommodate patient demand** in physical therapy/occupational therapy/speech, cardiac diagnostic testing, imaging, electrophysiology, interventional radiology, pain treatment, endoscopy, infusion, cardiopulmonary rehabilitation, and Phase I/Phase II recovery with their related support and administrative spaces.
- **Optimize staff effectiveness and opportunities** to spend more time in direct patient care and at the patient bedside
- **Share resources between departments** enhancing patient care coordination, eliminating redundancies and reducing costs
- **Improve patient access**, reducing distance patients need to travel and avoiding co mingling of frail inpatients with relatively healthy outpatients.
- **Offer facilities to support patients to remain healthy and out of the hospital**
- **Address DNV survey citations regarding the endoscopy suite**

The need to be cost effective, maximizing the use of limited resources to provide optimal care is an overarching need being addressed in this Project.

### 3. Cite the sources of the information provided as documentation.

- Advocate Good Shepherd Hospital Modernization Feasibility Study
- Illinois Department of Public Health Hospital Licensing Code
- Illinois Health Facilities and Services Review Board (HFSRB) Administrative Rules
- IHA COMPdata
- AIA/FGI Guidelines for Design and Construction of Health Care Facilities
- US Pharmacopoeia 797 Code
- HealthStream 2011 Survey
- Advocate Good Shepherd Hospital Financial Data
- Claritas and the US Census Bureau
- The Nielsen Company and Thompson Reuters
- CHIS Patient Satisfaction data
- Sg2
- HFSRB Hospital Profiles

- HFSRB Inventories and Data
- HFSRB State Agency Reports
- Health care literature regarding current trends re patient needs
- Advocate Good Shepherd Hospital Public Relations archives
- Lake County and the Village of Barrington building codes

**4. Detail how the project will address or improve the previously referenced issues, as well as the population's health status and well-being.**

At the completion of this Project the Hospital will have 32 intensive care beds to meet the needs of the acutely ill patients that are coming to Advocate Good Shepherd Hospital. There will be larger rooms meeting current industry standards providing the necessary space for staff to care for patients, with some equipped with the appropriate controls integrated into the room to safely lift and manage the position of patients. Having an appropriate number of intensive care beds will allow for the timely placement of patients needing critical care. Appropriate family-visitor space has been designed in each room to accommodate the patient's need for the healing aspect of personal support. All rooms will be sized and configured to meet the current Advocate standards, which have been developed and improved with each construction Project. Projects using the Advocate standards have been approved by the CON Board in the past.

The expansion of the surgical interventional platform will result in 15 operating rooms and maintaining one dedicated cystoscopy room (allowing cases to be performed in a timely manner).

The third major care issue addressed by the Project is the conversion to all private rooms. The practice of sharing a room with another patient is counter to the best practices today. Private rooms protect the patient from possible exposure to an infection from another patient or their visitors. Providing the privacy that is expected under HIPAA rules will be much easier with patients in private rooms. Private rooms also provide a quiet place for better rest and faster healing.

Additional needs will be met through:

- **Providing facilities that meet current industry standards and are right-sized to accommodate patient demand for other key areas including**, physical therapy, occupational therapy, speech, cardio-diagnostic testing, imaging, electrophysiology, interventional radiology, pain treatment, endoscopy, cardiopulmonary rehabilitation, infusion therapy, Phase I/Phase II recovery, plus the related support and administrative areas.
- **Redesigning space to accommodate staff work flow** to spend more time at the patient bedside, within immediate proximity of the patient, and reduce costs.
- **Relocating departments to share resources**, streamlining patient care coordination, eliminating redundancies, and reducing costs including :
  - Cardiac rehabilitation co-located with physical therapy, occupational therapy, and speech;
  - Surgery co-located with other interventional procedures – cardiac catheterization, electrophysiology, and interventional radiology;

- Co-locating diagnostic testing, imaging, cardiac diagnostics, pulmonary function, laboratory, specimen collection, and pre-admission nurse consultation.
- **Streamlining patient access**, by reducing distance patients need to travel and avoiding comingling of frail inpatients with relatively healthy outpatients.
- **Offering facilities to support patients to remain healthy and out of the hospital**, by developing a coordinated chronic care clinic, expanding the breast center with its prevention services, and accommodating technology which offers the current industry standards to optimize early diagnosis, while using low radiation dose options.
- **Addressing the DNV survey citations in the endoscopy suite**. The Hospital has been advised by DNV, the hospital's accrediting body, in its 2012 site visit survey, that a better physical separation must occur in the endoscope cleaning area, so that clean and dirty processing events each has its own room. The need for a separate clean scope storage room was also noted. All of these deficiencies will be corrected in this Project. A temporary solution acceptable to DNV has been implemented, with the knowledge that a permanent solution will be forthcoming.

Other more detailed needs being addressed through this Project are referenced in the narrative section for each service.

**5. Provide goals with quantified and measurable objectives, with specific time frames that relate to achieving the stated goals as appropriate.**

This will be a complex Project to manage; phasing of every step will be planned to limit service interruption. Completion and operation of the 28 clinical departmental components in this Project will meet the larger goal of improving service to patients of Advocate Good Shepherd Hospital.

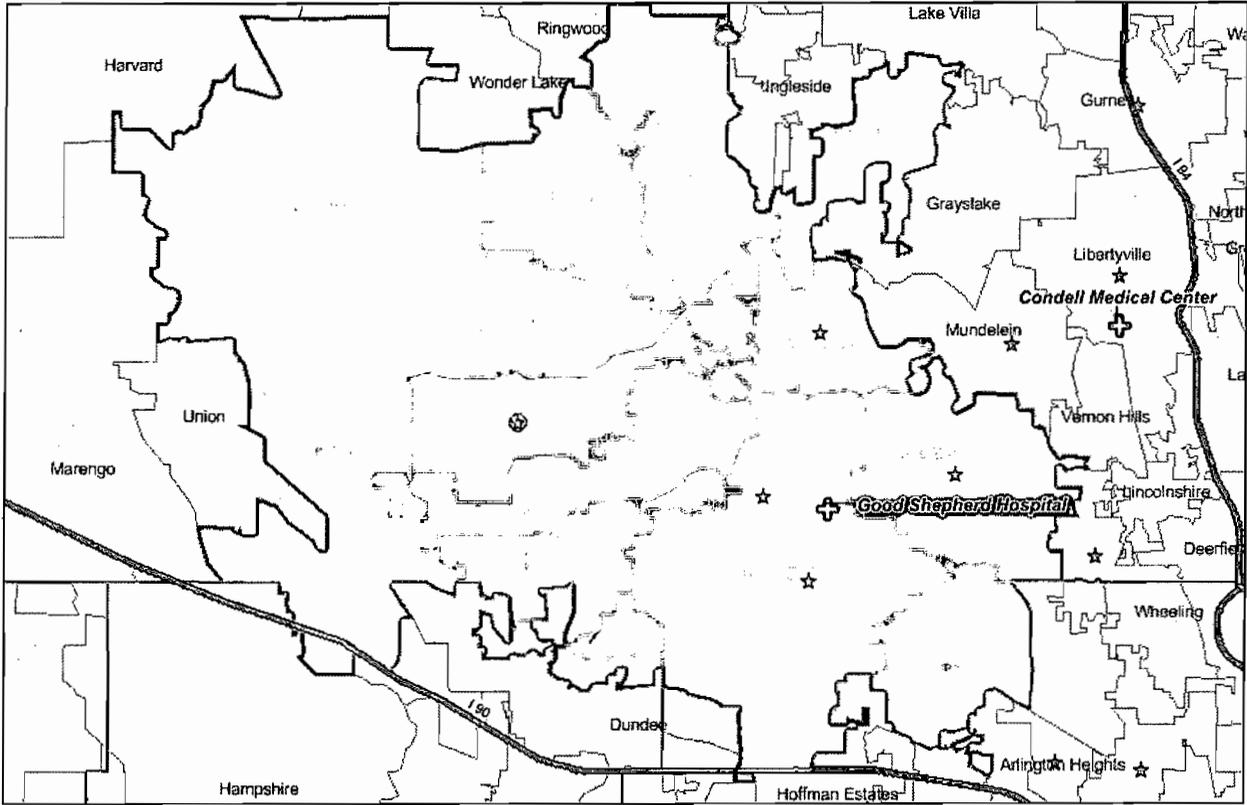
The early goal is to relocate the cardio-diagnostics and nuclear medicine service to an area near radiology, freeing space to expand the Phase II prep and recovery for the endoscopy surgical procedure suite and to modernize one of the endoscopy procedure rooms. This phase is targeted to be operational in 2015.

The development of the new south entry pavilion will provide improved patient, staff, and visitor access as well as an improved healing environment. This phase is targeted to be operational by in 2016.

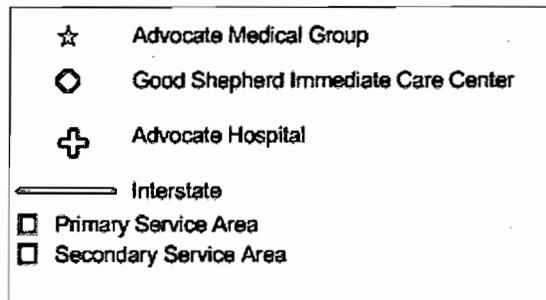
The proposed four-story tower will provide new and replacement intensive care beds which are critically needed. The patient tower will also contain new medical/surgical beds all in private rooms and new ORs, cardiac catheterization, interventional radiology, and electrophysiology all incorporated into the new interventional platform. The new four-story tower is targeted for operation in 2016.

The final goal is to finish the modernization of the existing surgery space, relocation of therapies, and modernization of each of the remaining departments which are targeted for completion in December 2017.

### Advocate Good Shepherd Hospital — Service Area Map



Source: Advocate Records



**Advocate Good Shepherd Hospital Patient Origin by Zip Code**

<b>PRIMARY SERVICE AREA</b>		
<b>Zip Code</b>	<b>Inpatient Admissions</b>	<b>% of Total</b>
60010	1,855	17.2%
60047	1,350	12.5%
60013	1,119	10.3%
60014	884	8.2%
60084	829	7.7%
60102	558	5.2%
60042	374	3.5%
60156	320	3.0%
60021	302	2.8%
60050	254	2.4%
60051	261	2.4%
<b>Primary Service Area Total</b>	<b>8,107</b>	<b>74.9%</b>
<b>SECONDARY SERVICE AREA</b>		
60012	166	1.5%
60060	82	0.8%
60073	160	1.5%
60098	163	1.5%
60110	133	1.2%
<b>Secondary Service Area Total</b>	<b>703</b>	<b>6.5%</b>
<b>OUTSIDE OF SERVICE AREA (OTHER)</b>		
<b>Other Total</b>	<b>2,007</b>	<b>18.6%</b>
<b>Patient Origin Total</b>	<b>10,817</b>	<b>100.0%</b>

Source: Advocate records

### SECTION III – BACKGROUND, PURPOSE OF THE PROJECT, AND ALTERNATIVES - INFORMATION REQUIREMENTS

This Section is applicable to all projects except those that are solely for discontinuation with no project costs.

#### Criterion 1110.230 – Background, Purpose of the Project, and Alternatives

READ THE REVIEW CRITERION and provide the following required information:

<b>ALTERNATIVES</b>	
1)	Identify <b>ALL</b> of the alternatives to the proposed project: Alternative options <b>must</b> include: A) Proposing a project of greater or lesser scope and cost; B) Pursuing a joint venture or similar arrangement with one or more providers or entities to meet all or a portion of the project's intended purposes; developing alternative settings to meet all or a portion of the project's intended purposes; C) Utilizing other health care resources that are available to serve all or a portion of the population proposed to be served by the project; and D) Provide the reasons why the chosen alternative was selected.
2)	Documentation shall consist of a comparison of the project to alternative options. The comparison shall address issues of total costs, patient access, quality and financial benefits in both the short term (within one to three years after project completion) and long term. This may vary by project or situation. <b>FOR EVERY ALTERNATIVE IDENTIFIED THE TOTAL PROJECT COST AND THE REASONS WHY THE ALTERNATIVE WAS REJECTED MUST BE PROVIDED.</b>
3)	The applicant shall provide empirical evidence, including quantified outcome data that verifies improved quality of care, as available.
<b>APPEND DOCUMENTATION AS ATTACHMENT-13, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.</b>	

1) All alternatives considered

**Alternative 1: Larger Project scope.** In 2010, Advocate Good Shepherd Hospital engaged Kurt Salmon Associates (KSA) to develop a Strategic Facility Master Plan. The master plan determined the need for a \$274M Project, including an additional 56 beds. This larger Project scope alternative is considered less appropriate than the proposed Project for the following reasons:

- A. **Increased medical-surgical-pediatric bed count.** The larger Project scope alternative increased the medical-surgical-pediatric bed count at AGSH by 44, which is inconsistent with the IHFSRB bed need and more current utilization trends. Updated inpatient volume trends and forecasts no longer support additional medical-surgical-pediatric inpatient beds. Advocate, a national leader in Accountable Care Organization (ACO) development, is focused on the goal of providing the community with resources to remain healthy, limiting the need for inpatient admission. Advocate and Good Shepherd are focused on increasing value to the patients and communities served rather than increasing inpatient volume.
- B. **Excessive cost.** As responsible stewards over health care resources, Advocate Good Shepherd Hospital seeks cost savings opportunities. The larger Project alternative results in a higher capital cost.
- C. **Did not maximize Lean principles or operational effectiveness.** While the larger Project alternative incorporated some opportunities to increase operational effectiveness, Lean principles (streamlined processes) were not the basis for the Project design. As an

example, opportunities to co-locate services to promote patient access, enhance clinical collaboration and reduce cost were not maximized.

This alternative was rejected because it resulted in unneeded cost, excessive medical-surgical-pediatric beds, and did not optimize operational effectiveness.

**Cost: \$274,000,000**

**Alternative 2: Construction of a new replacement hospital.**

In evaluating facility options, construction of a new hospital was explored. The cost to build a new replacement hospital similar to the proposed Project in size and service capabilities is estimated to be \$339M, escalated to the same construction start as the proposed Project. The Project to replace the Hospital would include 176 single occupancy patient rooms, an interventional platform of 15 ORs, a cystoscopy procedure room, 2 cardiac catheterization/electrophysiology rooms, 2 interventional radiology rooms, 18 bed post anesthesia care unit, 52 Phase II prep-recovery rooms, 5 OR endoscopy suite, 15 bed Phase II prep-recovery for endoscopy, 5 radiology/fluoroscopy units, 1 MRI units, 2 nuclear medicine units, 6 ultrasound units, 3 mammography units, 2 CT units, PT-OT-speech therapies, cardiopulmonary rehabilitation, radiation oncology, chronic care, chemotherapy/ infusion, emergency department, laboratory, and labor & delivery. It would also include all the non-clinical areas including administrative, visitor support, facilities/engineering, materials management, and such. To be similar, the new facility would be constructed with durable infrastructure to last over the long term, with sustainable and energy efficient systems.

This alternative was rejected due to the higher capital cost.

**Cost: \$339,000,000**

**Alternative 3: Joint venture with a physician group to establish an ambulatory surgery center.**

In 2008, a certificate of need application was submitted for a joint venture between a physician group on staff at Good Shepherd and Advocate Good Shepherd Hospital. Good Shepherd and the physician group proposed to establish a single specialty, ambulatory surgery treatment center in Lake Barrington. The Project cost of \$2.6M provided for two surgical operating rooms which would have alleviated capacity constraints related to endoscopy at the Hospital. The certificate of need application was approved by the Board but later withdrawn when the physician group chose not to continue with the joint venture.

This alternative was dismissed due to lack of physician interest and because it would have addressed only a small portion of the capacity constraint issues.

**Cost: \$2,600,000**

**Alternative 4: Piecemeal, smaller Project approach.** Some organizations choose to upgrade and modernize their facilities with several smaller projects each year. While Advocate Good Shepherd has modernized and expanded in a few targeted clinical areas, the original medical-surgical units have not been modernized since original construction, over thirty years ago.

As an alternative to implementing the comprehensive proposed Project, the Hospital considered dividing the Project into several smaller projects. As an example, endoscopy

could be upgraded as one Project. Multiple smaller projects create excessive costs, inefficiency and disruption to patient care. This piecemeal alternative would cost an estimated \$300M. This higher Project cost is due to repeated mobilization and demobilization of construction equipment and staff, loss of economies of scale, lost negotiating leverage of a larger Project with subcontractors for discounts, escalation in labor and materials cost, and the increased cost of capital.

This alternative was rejected due to the higher cost and greater disruption to patient care.

**Cost: \$300,000,000**

**Alternative 5: Utilize other health care resources and do nothing at the Hospital.** The option of continuing to operate with the existing facility and rely on other health care resources was considered, but rejected for several reasons. In a metropolitan area such as where Advocate Good Shepherd Hospital is located, current industry standards indicate that transferring patients in the course of their admission for intensive care would jeopardize their continuity of care. For patients who present needing critical care, the Emergency Medical Treatment & Labor Act (EMTALA) requires Hospitals to provide stabilizing treatment for patients within its capability. Furthermore, in the Planning Area the average utilization of ICU is already 76.7%, significantly greater than the State target of 60%. Utilizing other health care resources is not a long-range solution. As a result, doing nothing at the Hospital is not an option. The main reasons are outlined below.

- A. Facility needs updating to be consistent with current clinical practices and patient delivery models.** Advocate Good Shepherd has undergone only limited modernization or expansion since opening in 1979. As healthcare practices, federal regulations and patient expectations have changed over the years, Advocate Good Shepherd needs to modernize its facility to meet community needs and current models of care. As an example, the three medical-surgical inpatient units have not undergone any renovation since being constructed more than 33 years ago. Half of the medical-surgical beds are in two bed rooms, and there is even a three bed ward.

Federal regulations on privacy, Medicare reimbursement dependence on patient satisfaction, infection control mitigation, shifts in industry standards and improved healing in quiet environments all suggest the importance of private rooms. Another example is the current inadequately-sized operating rooms. Current surgical procedures call for larger operating rooms to accommodate the additional and larger equipment. Advocate Good Shepherd Hospital has only two large, general operating rooms and needs more to accommodate demand. Patient flow needs to be updated and streamlined, improving outpatient access, avoiding co-mingling of outpatients with the very ill inpatients, and protecting patient privacy.

- B. Facility cannot accommodate current and forecasted demand.** The existing facility cannot accommodate current or forecasted demand in several key areas including ICU, surgery and several outpatient services. Good Shepherd has the second highest ICU occupancy in the state among hospitals with more than 10 ICU beds and exceeds the state target occupancy for ICU for each of the last seven years. The current operating room

capacity limits the ability of Advocate Good Shepherd Hospital to accommodate new surgeons who are interested in joining the medical staff.

This alternative was primarily rejected because the alternative: (1) does not provide the modernized facilities needed to be consistent with current industry standards and delivery models; and (2) does not accommodate current and future forecast demand.

**Cost: \$ 0**

### **Proposed Project**

The proposed Project is superior to the alternatives, for many reasons detailed throughout this application. Key reasons the proposed Project is superior to the alternatives are highlighted below.

- A. Capital cost is lower than the options considered, except the joint venture Ambulatory Surgery Center, which only addresses one small part of the Project (endoscopy) and did not resolve issues in the main operating rooms or on the inpatient units.
- B. Bed count reflects current inpatient trends and the calculated bed need, reducing medical-surgical-pediatric beds and increasing intensive care beds.
- C. Patient access is expanded by addressing facility constraints in key areas such as ICU and surgery and also enhances access to integrated, chronic care services. The planning area need for additional ICU beds will be partially addressed with this Project.
- D. The proposed Project takes advantage of operational efficiency, with a design developed based on Lean principles. As an example the nursing unit design allows physicians and staff to spend more time in the patient room in direct patient care.
- E. Opportunities to assure high quality care are implemented with facilities which promote clinical collaboration and which accommodate newer, advanced technology, and offer private patient rooms.
- F. Financial benefit to both the provider and the community served is maximized through right-sizing the facility, realigning the mix of inpatient beds with current needs, operating cost reductions through Lean planning principles, and through moving the Project forward with a timely schedule avoiding disruption to patient care and unnecessary price increases with inflation over time.

**Cost: \$246,841,082**

2. Alternatives

Alternative	Description	Patient Access	Quality	Cost	Financial Benefit, Short Range	Financial Benefit, Long Range	Conclusion
1.	Addition of 56 beds including 44 M.S./Peds beds	Lack of focus on outpatients	Lack of focus on chronic and preventive care	\$274,000,000	Limited marginal benefit as it would not use capital prudently.	Benefit does not outweigh higher financial cost.	Rejected
2.	Construct a new replacement hospital	Improved, with a wide range of areas addressed	Improved	\$339,000,000	Not a prudent use of capital	Would have totally new facilities but at considerable cost.	Rejected
3.	Joint venture on ambulatory surgery treatment center	Limited improvement as it only was for GI Endo patients and didn't address other patient areas.	The alternative could have been good for GI Endo patients but no improvement for other patient areas.	\$2,600,000	Would have cost much less upfront expense	Would still need expenditure for replacement of beds and interventional services while inflation would affect future project	Rejected
4.	Phased, smaller approach by dividing into several projects	Improved in segments, but too long to get access for all identified needs	Improvement limited to the sections addressed, while making the rest of the patients wait for improvements to other areas	\$300,000,000	Would have less upfront expense but repeated mobilization would add to the cost.	The cost of ongoing disruption and the repeated mobilization over many years would be costly, could impact patient satisfaction.	Rejected
5.	Utilize other health care resources and do nothing at the Hospital	Not improved. The other hospitals in Planning Area have limited capacity	Not improved. Would mean patients were not promptly admitted, or had to be transferred.	\$ 0	Would continue to see growing need while inflation would affect future project cost.	Failure to address would add operational costs of an older facility and facility value would depreciate.	Rejected
6.	Proposed Project	Improved especially for ICU, M.S. and surgical interventional patients	Improved with private rooms and lean approach in surgical interventional unit.	\$246,841,082	Build on synergy of clinical services being sized and located properly.	Structure and departments positioned for more efficient operation. Addresses patients with all acuties.	Approved ✓

3. The applicant shall provide empirical evidence including quantified outcome data that verifies improved quality of care, as available.

### **Quality of Care Monitored**

Advocate Health and Hospitals Corporation (AHHC) is committed to evidence based performance improvement and is well known for providing the best care. The organization is steeped in a culture of continual improvement to enhance patient safety, health outcomes, service and operational excellence from the patient's perspective. Accountability for performance improvement is addressed through an objective leadership evaluation system in which management performance objectives are directly aligned to the organization's key performance improvement initiatives.

AHHC has established a system-wide monitoring mechanism to the quality of care provided and performance improvement demonstrated by each of the Advocate hospitals. Advocate Good Shepherd Hospital takes full advantage of the many available measures to learn about the care given at its site, and to explore ways across the system of 10 hospitals to implement the best demonstrated practices.

In tracking quality from month to month, Advocate measures indicators including, but not limited to, the following:

- Advocate Care Index
- Complications Index
- Mortality Index
- Health Outcomes Composite
- Length of Stay Days
- Acute Care Readmission Rate
- Unassisted Falls Score
- Central Line Bloodstream Infection Ratios
- Ventilator Days
- Clinical Integration PHO Score
- AHRQ Culture of Safety Survey Performance

As an example of the detail in each of the indicators above, the Inpatient Core Measure Composite score is made up of the following measures:

#### Treatment for Heart Attack

- Aspirin prescribed at discharge
- PCI within 90 min of arrival
- Statin prescribed at discharge

#### Treatment of Heart Failure

- All discharge instructions
- LVEF assessment
- ACEI for LVSD

#### Treatment of Pneumonia

- Blood culture in ED prior to antibiotic
- Appropriate antibiotic selection

#### Surgical Care Improvement

- Antibiotic within 1 hr of incision
- Appropriate antibiotic selection
- Antibiotic discontinued within 24 hrs
- Cardiac patients' serum glucose levels
- Appropriate beta blocker therapy
- Appropriate VTE prophylaxis
- Timely urinary catheter removal
- Perioperative temperature management

Each month's results are reviewed at the corporate level, then at the hospital level with administration. The results are shared with the management team and staff to determine how to further improve on the outcomes.

The programs that are involved in the proposed Modernization Project will be monitored with the same intense scrutiny to assure the best care is given.

**SECTION IV - PROJECT SCOPE, UTILIZATION, AND UNFINISHED/SHELL SPACE**

**Criterion 1110.234 - Project Scope, Utilization, and Unfinished/Shell Space**

READ THE REVIEW CRITERION and provide the following information:

**SIZE OF PROJECT**

- 3. Document that the amount of physical space proposed for the proposed project is necessary and not excessive. **This must be a narrative**
- 4. If the gross square footage exceeds the BGSF/DGSF standards in Appendix B, justify the discrepancy by documenting one of the following:
  - a. Additional space is needed due to the scope of services provided, justified by clinical or operational needs, as supported by published data or studies;
  - b. The existing facility's physical configuration has constraints or impediments and requires an architectural design that results in a size exceeding the standards of Appendix B;
  - c. The project involves the conversion of existing space that results in excess square footage.

**Provide a narrative for any discrepancies from the State Standard. A table must be provided in the following format with Attachment 14.**

SIZE OF PROJECT				
DEPARTMENT/SERVICE	PROPOSED BGSF/DGSF	STATE STANDARD	DIFFERENCE	MET STANDARD?

APPEND DOCUMENTATION AS ATTACHMENT-14, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

**Size of the Project**

Document that the amount of physical space for the proposed Project is necessary and not excessive.

The size of the departments shown in the table below demonstrates the proposed Project has met the State standards for clinical space for 17 of the 18 components that have State standards.

SIZE OF PROJECT				
Department/Service	Proposed DGSF	State Standard	Difference	Met Standard
Medical/Surgical & Peds	74,166 dgsf/120 beds = 618 dgsf/bed	500-660 dgsf/Bed	-42	Yes
ICU	20,753 dgsf/32 beds = 649 dgsf/bed	600-685 dgsf/Bed	-36	Yes
Cardiac Catheterization/EP	3,594 dgsf/2 Units = 1,797 dgsf/unit	1,800 dgsf/Unit	-3	Yes
Surgical Operating Suite	34,729 dgsf/15 ORs = 2,315 dgsf/OR	2750 dgsf/OR	-435	Yes
Surgical Procedure (Cysto) Service	942 dgsf/1 Proc Rm	1100 dgsf/Proc Rm	-158	Yes
Phase I Recovery (PACU)	4,080 dgsf/18 Recovery Stations = 227 dgsf/Recovery Station	180 dgsf/Recovery station	+47	No
Phase II Recovery (Interventional Suite)	20,681 dgsf/52 Recovery Stations = 398 dgsf/Station	400 dgsf/Recovery Station	-2	Yes
Intervention Radiology (Angiography)	3,594 dgsf/2 Units= 1,797 dgsf/Unit	1,800 dgsf/Unit	-3	Yes
Surgical Procedure (Endoscopy)	2,528 dgsf/5 Units = 506 dgsf/Unit	1100 dgsf/Proc Rm	-594	Yes
Phase II Recovery (Endoscopy)	5,791 dgsf/15 Recovery Stations = 386 dgsf/Station	400 dgsf/Recovery Station	-14	Yes
Chronic Care (Diabetic, Anticoagulation, CHF)	3,207 dgsf/52,666 visits = 122dgsf/2000 visits	800 dgsf/2,000 visits	-678	Yes
Infusion Therapy	3,014 dgsf/8,343 visits = 722dgsf/2,000 visits	800 dgsf/2,000 visits	-78	Yes
General Radiology/Fluoro	7,560 dgsf/8 Rooms = 945 dgsf/Unit	1,300 dgsf/Unit	-355	Yes
Magnetic Resonance Imaging	5,113 dgsf/3 Units = 1,704 dgsf/Unit	1,800 dgsf/Unit	-96	Yes
Nuclear Medicine	2,112 dgsf/2 Units = 1,056 dgsf/Unit	1,600 dgsf/Unit	-544	Yes
Ultrasound	6,436 dgsf/9 Units = 715 dgsf/Unit	900 dgsf/Unit	-185	Yes
Mammography	4,846 dgsf/6 Units = 808 dgsf/Unit	900 dgsf/Unit	-92	Yes
Computed Tomography	4,150 dgsf/4 Units = 1,038 dgsf/Unit	1,800 dgsf/Unit	-762	Yes

The Project exceeds the standard for only one of the 18 areas: Phase I Recovery (Post Anesthesia Care Unit or PACU). The Project exceeds the PACU standard principally in response to the recent change in IDPH Hospital Licensing Requirements for PACU which allows for visitors and requires additional staff to manage those visitors, both requiring more space in PACU. The IHFSRB PACU standard size has not been revised since the change in the IDPH code for PACU. (The recent revisions to the IDPH code support current industry standards for the use of PACU.) Larger PACUs are also needed to provide more space between patients to better control the spread of infection and to allow more equipment to safely perform procedures without adversely

affecting nearby patients. IHSRB has recently approved several projects with PACUs that are larger than the state standard. The Good Shepherd PACU was designed based on the Advocate PACU standards developed by a large team of clinical and facility experts throughout the Advocate system, based on key considerations of use. These standards have been used in other PACU designs which have been approved by the CON Board.

The Illinois Health and Services Review Board Code, 1110.234 a) 2) notes the following:

*If the project SF is outside the Standard in Appendix B....the applicant shall submit documentation of one or more of the following:*

*A) Additional space is mandated by government or certification agency requirements that were not in existence when the Appendix B standards were adopted.*

In the Hospital Licensing Code, Part 250.1320, effective March 4, 2011, is a revision that now permits visitors in the Phase I PACU while the patient is recovering from a surgical procedure. A copy of the new licensure requirements follows.

With this significant change in the Code, it is essential to have more space available. The Code notes the importance of safeguarding the privacy of other patients and still allowing PACU staff to give constant attention to anesthetized patients. Visitors will need seating, and in some cultures, it is typical to have several visitors at one time.

Additionally, there is a need for better patient visibility by the nursing staff. The use of columns or booms to deliver gases and other utilities to the bedside is typical. Room for nurse charting bedside is also needed. In a May 31, 2007 article by Douglas Gordon, AIA, entitled *Pre-OP, PACU and Stage II Recovery*, as published in HealthcareDesign.com, the author noted:

“The trend has been to design larger bed positions approaching the size for an ICU bed with a headwall of 11-12 feet, despite the lack of change in the codes and guidelines. The Codes have continued to refer to the minimum area for each bed being on 80 square feet. The last two updates of the AIA Guidelines for the Design and Construction of Health Care Facilities added clearance around each bed that result in an average bed position of at least 120 square feet.”

There are several other reasons supporting expanded space in PACU. First, the infection control efforts to manage the risk of a contact infection of Methicillin Resistant Staph Aureus (MRSA) encourage a larger zone to be maintained between beds. The potential for accidental cross contact is greater when the space is confined.

The increase in the use of large equipment and more sophisticated care has resulted in more post surgical x-rays being done, requiring more space to maneuver without exposing nearby patients to the process. More patients are on ventilators coming out of surgery, requiring more space for both the equipment and staff to monitor it.

In view of these significant changes, additional space is essential. The Advocate standard design for the proposed PACU provides the elements that are essential to provide care in a modern facility including meeting recently revised IDPH code.

The change in the Code is shown below:

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## DEPARTMENT OF PUBLIC HEALTH

## NOTICE OF ADOPTED AMENDMENTS

- E) Collaboration with, and an annual report to, the nurse staffing committee;
- F) Procedures for a nurse to refuse to perform or be involved in patient handling or movement that the nurse in good faith believes will expose a patient or nurse or other health care worker to an unacceptable risk of injury;
- G) Submission of an annual report to the hospital's governing body or quality assurance committee on activities related to the identification, assessment, and development of strategies to control risk of injury to patients and nurses and other health care workers associated with the lifting, transferring, repositioning, or movement of a patient; and
- H) Consideration of the feasibility of incorporating patient handling equipment or the physical space and construction design needed to incorporate that equipment when developing architectural plans for construction or remodeling of a hospital or unit of a hospital in which patient handling and movement occurs. (Section 6.25 of the Act)Patient safety.
- 8) Nursing role in other hospital services, including but not limited to such services as dietary, pharmacy and housekeeping.
- 9) Emotional and attitudinal support. (Refer to Section 250.260(b)(1).)
- d) A nursing procedure manual shall be developed and copies shall be available on the patient care units, to the nursing staff and to other services and departments of the hospital, including members of the medical staff and students.
- e) The procedure manual shall provide a ready reference on nursing procedures and a basis for standardization of procedures and equipment in the hospital.

(Source: Amended at 35 Ill. Reg. 4556, effective March 4, 2011)

## SUBPART J: SURGICAL AND RECOVERY ROOM SERVICES

Section 250.1320 Postanesthesia Care Units~~Postoperative Recovery Facilities~~

## DEPARTMENT OF PUBLIC HEALTH

## NOTICE OF ADOPTED AMENDMENTS

- a) Provision and use of Phase 1 Postanesthesia Care Unit (Phase 1 PACU) postoperative recovery facilities
- 1) For the purposes of this Section, Phase 1 of postanesthesia care is the phase immediately following surgery, usually in a recovery room, after which the patient is returned to his or her room.
  - 2) ~~Postanesthesia care units~~ Postoperative recovery facilities shall be provided by all hospitals in which surgery is performed. They shall be in a separate room where patients who have undergone surgical procedures can be immediately observed and receive specialized care by selected and trained personnel; and where, when necessary, prompt emergency care can be initiated.
  - 3) ~~The services of the Phase 1 PACU postoperative recovery room may be used~~ utilized for postpartum care if the delivery room or place of delivery is in proximity to the Phase 1 PACU postoperative recovery room. Only clean (non-infected or non-infectious) postpartum patients may be admitted to the Phase 1 PACU postoperative recovery room and may, after appropriate observation, be returned to the maternity department.
- b) Personnel
- 1) Physician  
A physician shall be responsible for the conduct of the Phase 1 PACU recovery room, for the training of Phase 1 PACU recovery room personnel, and for the establishment of admission, ~~and discharge, and~~ emergency policies and procedures.
  - 2) Nurse
    - A) A registered nurse who has education and experience in Phase 1 postanesthesia postoperative recovery room care shall supervise all personnel performing nursing service functions.
    - B) A registered nurse shall be in attendance at all times when patients are in the Phase 1 PACU recovery room.

## ILLINOIS REGISTER

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## DEPARTMENT OF PUBLIC HEALTH

## NOTICE OF ADOPTED AMENDMENTS

- C) There shall be sufficient nursing personnel to provide the specialized care required for the ~~postsurgical~~~~post-surgical~~ patient. It is recommended that a ratio of one nursing personnel to ~~two~~~~three~~ patients be maintained at all times.
- D) Nursing personnel shall be assigned permanently to the Phase 1 PACU~~postoperative recovery room~~ when patients are present.
- c) Practices for operation of the Phase 1 PACU~~postoperative recovery rooms~~
- 1) Only clean surgical cases shall be admitted to the Phase 1 PACU~~postoperative recovery room~~.
  - 2) Contaminated cases shall be returned to the isolation room or a private room. Contaminated cases may be admitted to the Phase 1 PACU~~when~~~~When~~ a separate isolation facility is within or adjacent to the Phase 1 PACU~~postoperative recovery room~~, ~~contaminated cases may be admitted to it.~~
  - 3) A member of the medical staff shall provide initial orders for the care of each patient upon admission.
  - 4) A member of the medical staff shall be responsible for the patient's discharge from the Phase 1 PACU~~recovery room~~.
  - 5) Anesthetized patients shall be constantly attended. Side rails shall be attached to movable carts and beds and raised above mattress level when occupied by anesthetized patients. Cribs shall be provided for the anesthetized or ~~postsurgical~~~~post-surgical~~ child.
  - 6) Written policies and procedures, which ~~shall be~~~~are~~ reviewed regularly and revised as necessary, shall be established.
  - 7) A complete orientation program and continuing in-service education program shall be provided for all personnel assigned to the Phase 1 PACU~~recovery room~~.
  - 8) Personnel with communicable diseases shall be excluded from the Phase 1 PACU~~recovery room~~.

## ILLINOIS REGISTER

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## DEPARTMENT OF PUBLIC HEALTH

## NOTICE OF ADOPTED AMENDMENTS

- 9) ~~Visitors~~ No visitors shall be permitted in the Phase 1 PACU if postoperative recovery room, except in the case where a hospital has adopted a policy, approved through the Governing Board, that allows for visitation in the Phase 1 PACU while the patient is a parent or guardian, or other individual selected by a child's parent or guardian, of a child 12 years of age or younger to be present with the child in recovering from a surgical procedure. Before allowing individuals to be present in the Phase 1 PACU recovery area with their child, the hospital shall have a policy in place that includes at least the following:
- A) Written consent of an adult patient; both the parent, guardian, or legal representative of a minor or a mentally disabled adult; or other individual and the physician performing the surgery;
  - B) Notation in the patient's medical record of the presence of additional visitors ~~persons~~ in the Phase 1 PACU postoperative recovery room during recovery of the patient ~~child~~ from a surgical procedure;
  - C) Application of safeguards against the introduction of infection or other hazards by the visitor, parent, guardian or other individual including orientation, education and training of the person, preferably prior to the performance of the procedure but at least prior to visitation; this shall include, at minimum, specifics regarding ~~the procedure and recovery,~~ what can be expected, and basic infection control practices expected of the visitor ~~person~~;
  - D) Provision of at least one additional staff person in the Phase 1 PACU recovery room assigned to oversee, supervise and assist the visitors ~~parent, guardian or other designated individual~~ for the period of time the visitors are ~~parent, guardian or designated individual~~ is present;
  - E) Provision of safeguards to ensure the privacy of other patients who may be recovering from surgical procedures, which may include separate rooms or some other type of separation for recovery of patients ~~children~~ who would have a visitor ~~parent~~ present. Privacy safeguards shall allow Phase 1 PACU staff to provide ~~Whatever~~

DEPARTMENT OF PUBLIC HEALTH

NOTICE OF ADOPTED AMENDMENTS

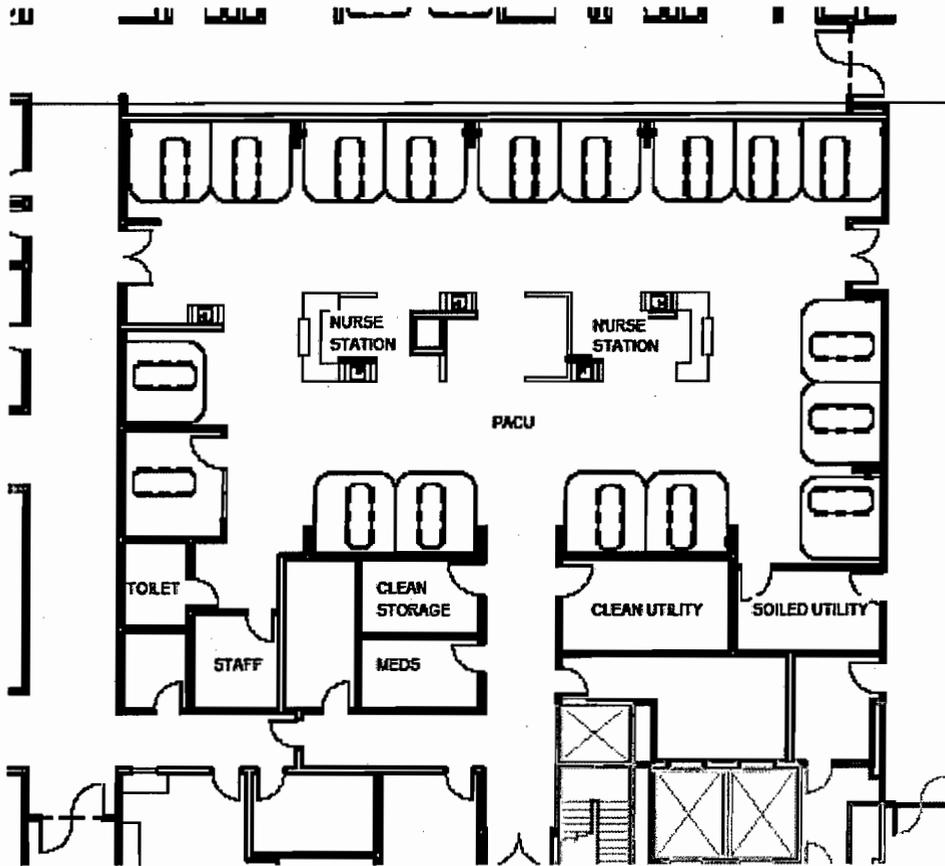
~~method is chosen must allow for constant attention to of~~  
anesthetized patients ~~by recovery room staff~~; and

F) If, at any point during the recovery of the ~~minor patient~~, Phase 1 PACU ~~it is determined by the recovery room personnel~~ determine that the ~~visitor parent, guardian or other individual~~ poses a threat to the safe, therapeutic recovery of the patient, ~~personnel he or she~~ may require the ~~visitor parent, guardian or other individual~~ to leave the Phase 1 PACU recovery room.

- d) **Drugs, supplies and equipment**  
Drugs, supplies and equipment shall be immediately and continually accessible in the Phase 1 PACU unit ~~for postoperative care~~, including emergencies. These shall include cardiac-respiratory monitoring and resuscitation materials.
- e) The Phase 1 PACU post-operative recovery facility ~~shall contain and provide for a~~ drug distribution station, including a secure area, adequate hand-washing ~~handwashing~~ facilities, charting and dictating area, soiled utility area with bedpan flushing device, and adequate storage space for supplies and equipment.

(Source: Amended at 35 Ill. Reg. 4556, effective March 4, 2011)

### Proposed PACU



**Advocate Good Shepherd Hospital**

**PROJECT SERVICES UTILIZATION:**

This criterion is applicable only to projects or portions of projects that involve services, functions or equipment for which HFSRB has established utilization standards or occupancy targets in 77 Ill. Adm. Code 1100.

Document that in the second year of operation, the annual utilization of the service or equipment shall meet or exceed the utilization standards specified in 1110.Appendix B. **A narrative of the rationale that supports the projections must be provided.**

A table must be provided in the following format with Attachment 15.

UTILIZATION					
	DEPT./ SERVICE	HISTORICAL UTILIZATION (PATIENT DAYS) (TREATMENTS) ETC.	PROJECTED UTILIZATION	STATE STANDARD	MET STANDARD?
YEAR 1					
YEAR 2					

APPEND DOCUMENTATION AS ATTACHMENT-15, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

The proposed Project involves 15 components for which the IHFSRB has established utilization standards:

1. Medical-Surgical-Peds beds
2. ICU beds
3. Cardiac Catheterization/Electrophysiology units
4. Surgical Operating rooms
5. Surgical Procedure (Cysto) room
6. Interventional Radiology units
7. Surgical Procedure (Endoscopy) rooms
8. Ambulatory Care - Chronic Care (Diabetic, Anticoagulation, Chronic Heart Failure)
9. Ambulatory Care - Infusion Therapy
10. General Radiology-Fluoroscopy units
11. Magnetic Resonance Imaging units
12. Nuclear Medicine units
13. Ultrasound units
14. Mammography units
15. Computed Tomography units

The utilization of each service has been projected to 2019, two years after the Project is expected to be completed. Chronic Care and Infusion Therapy are not a part of the Annual Hospital Questionnaire so it was necessary to rely on internal sources to show their historic volumes and forecast their utilization. The narrative of the rationale that supports the projected utilization are found in Attachments 20, 25, and 37.

Projected Services Utilization

Department	Historical utilization		Projected Utilization	State Standard	Number Requested	Met Standard?
	2010	2011				
Medical/Surgical & Peds patient days	34,100	33,128	39,110	310.3 days per room = 127 rooms	120 rooms	Yes
ICU patient days	5,565	5,633	9,894	219 days per room = 46 rooms	32 rooms	Yes
Cardiac Cath./Electrophysiology procedures	1,777	1,532	1,997	1,500 procedures per unit = 2 units	2 units	Yes
Surgical Operating hours	19,265	18,865	30,063	1,500 hours per OR = 21 ORs	15 ORs	Yes
Surgical Procedure (Cysto) hours	303	266	320	1,500 hours per room = 1 room	1 room	Yes
Intervention Radiology (Angiography) procedures	2,080	2,060	1,907	1,800 procedures per unit = 2 units	2 units	Yes
Surgical Procedure (Endoscopy) hours	5,147	5,070	8,507	1,500 hours per room = 6 rooms	5 rooms	Yes
Chronic Care (Diabetic, Anticoagulation, CHF) visits	11,627	11,593	52,336	800 dgfsf per 2,000 visits = 20,960 dgfsf	3,207 dgfsf	Yes
Infusion Therapy equivalent visits	8,727	9,044	15,784	800 dgfsf per 2,000 visits = 6,312 dgfsf	3,014 dgfsf	Yes
General Radiology/Fluoroscopy procedures	53,892	53,430	76,195	8,000 procedures per unit = 10 units	8 units	Yes
Magnetic Resonance Imaging procedures	6,137	6,087	25,907	2,500 procedures per unit = 11 units	3 units	Yes
Nuclear Medicine procedures	3,123	3,504	3,845	2,000 procedure per unit = 2 units	2 units	Yes
Ultrasound procedures	17,429	17,409	26,562	3,100 procedures per unit = 9 units	9 units	Yes
Mammography procedures	19,159	19,972	44,024	5,000 procedures per unit = 9 units	6 units	Yes
Computed Tomography procedures	26,448	19,834	23,599	7,000 procedures per unit = 4 units	4 units	Yes

Note 1: See the individual sections for the full history of utilization

Note 2: There are several clinical services that are currently operational and included in the Project that do not have utilization standards. They include Cardio-diagnostics, Pre-Admission Testing, Pulmonary Function, Pain treatment, and Bone Density, as well as Central Sterile Processing.

Note 3: Historically the Breast Ultrasound utilization has been reported in the AHQ with the Mammograms. The volume, size and cost are included with the Ultrasound procedures in this Project.

Advocate Good Shepherd Hospital  
Modernization Project Components

CLINICAL - REVIEWABLE

Attachment 20: Categories of Service  
Medical/Surgical/Pediatric Care  
Intensive Care

Attachment 25: Cardiac Catheterization  
Cardiac Catheterization/Electrophysiology

Attachment 37: Clinical Service Areas

- A. Surgery and Interventional Services
  - 1. Surgery Operating Suite (Class C)
  - 2. Surgical Procedure Room – Cystoscopy (Class B)
  - 3. Phase I Recovery (Post Anesthesia Care Unit, PACU)
  - 4. Phase II Recovery (Prep and Recovery for OR, Interventional Services)
  - 5. Central Sterile Processing
  - 6. Interventional Radiology (Angiography)
- B. Endoscopy
  - 1. Surgical Procedure Suite – Endoscopy (Class B)
  - 2. Phase II Recovery (Prep and Recovery for Endo)
- C. Ambulatory Care Services (Organized as a service)
  - 1. Chronic Care (Diabetes, Anticoagulant Therapy, Chronic Heart Failure)
  - 2. Infusion Therapy
- D. Outpatient Testing
  - 1. Cardio-Diagnostics (Echo, Echo Stress)
  - 2. Pre-Admission, Specimen Collection & Electrocardiograms
  - 3. Pulmonary Function
- E. Diagnostic Radiology
  - 1. General Radiology/Fluoroscopy
  - 2. Magnetic Resonance Imaging
  - 3. Nuclear Medicine
  - 4. Ultrasound
  - 5. Pain Treatment
  - 6. Mammography
  - 7. Bone Density
  - 8. Computed Tomography
- F. Therapies (Inpatient gym and outpatient areas)
  - 1. Physical Therapy
  - 2. Occupational Therapy
  - 3. Speech Therapy
  - 4. Cardiopulmonary Rehabilitation

NON CLINICAL - NON REVIEWABLE

Administration

Visitor/Public Support

Circulation

Materials Management

Building Systems

Crawl Area

Chapel

Simulation Laboratory

**SECTION VII - SERVICE SPECIFIC REVIEW CRITERIA****A. Criterion 1110.530 - Medical/Surgical, Obstetric, Pediatric and Intensive Care**

3. Applicants proposing to establish, expand and/or modernize Medical/Surgical, Obstetric, Pediatric and/or Intensive Care categories of service must submit the following information:
4. Indicate bed capacity changes by Service: Indicate # of beds changed by action(s):

Category of Service	# Existing Beds	# Proposed Beds
<input checked="" type="checkbox"/> Medical/Surgical/Peds	127	120
<input checked="" type="checkbox"/> Intensive Care	18	32

3. READ the applicable review criteria outlined below and **submit the required documentation for the criteria:**

APPLICABLE REVIEW CRITERIA	Establish	Expand ICU	Modernize M/S, Peds
1110.530(b)(1) - Planning Area Need - 77 Ill. Adm. Code 1100 (formula calculation)			
1110.530(b)(2) - Planning Area Need - Service to Planning Area Residents		X	
1110.530(b)(3) - Planning Area Need - Service Demand - Establishment of Category of Service			
1110.530(b)(4) - Planning Area Need - Service Demand - Expansion of Existing Category of Service		X	
1110.530(b)(5) - Planning Area Need - Service Accessibility			
1110.530(c)(1) - Unnecessary Duplication of Services			
1110.530(c)(2) - Maldistribution			
1110.530(c)(3) - Impact of Project on Other Area Providers			
1110.530(d)(1) - Deteriorated Facilities			X
1110.530(d)(2) - Documentation			X
1110.530(d)(3) - Documentation Related to Cited Problems			X
1110.530(d)(4) - Occupancy			X
1110.530(e) - Staffing Availability		X	
1110.530(f) - Performance Requirements		X	X
1110.530(g) - Assurances		X	
<b>APPEND DOCUMENTATION AS ATTACHMENT-20. IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.</b>			

## Section 1110.530 Medical/Surgical, Obstetric, Pediatric and Intensive Care – Review Criteria

## Category of Service

**Medical Surgical Pediatric Beds**

Category of Service Modernization	(d)(1) –	Deteriorated Facilities
	(d)(2)	
	& (3) –	Documentation
	(d)(4) –	Occupancy
	(f) –	Performance Requirements
	(g) –	Assurances

## d) Category of Service Modernization

1) If the Project involves modernization of a category of hospital bed service, the applicant shall document that the inpatient bed areas to be modernized are deteriorated or functionally obsolete and need to be replaced or modernized, due to such factors as, but not limited to:

- A) High cost of maintenance;
- B) Non-compliance with licensing or life safety codes;
- C) Changes in standards of care (e.g., private versus multiple bedrooms); or
- D) Additional space for diagnostic or therapeutic purposes.

The original inpatient medical/surgical units have not been modernized since being built in 1979. The proposed modernization will bring these Advocate Good Shepherd medical-surgical units up to current standards of care, supporting patient safety and quality, enhancing the patient experience, improving staff efficiency, and reducing unnecessary costs. The new medical-surgical units will have all single occupancy, private rooms. Private rooms will be larger to allow staff (physicians, nurses and support staff) to spend more time with the patient in the patient room and to accommodate more equipment and services at the patient bedside. The new larger room will offer the infrastructure for more integrated, advanced information technology to support high quality, effective care, and offer more appropriate space for family and visitors. The layout of the unit is developed using Lean principles with a focus on redesigning staff flow for greater efficiency and more time spent by staff with the patient,

The new units will be located in new construction. Architectural analysis concluded that relocating the inpatient beds in new construction would be less expensive and less disruptive for patient care than renovation of existing units, particularly due to the limited availability of space.

A key element of the improved unit design is conversion to all single occupancy, private rooms. Most of the current beds are located in two bed rooms, and one patient room is even a three-bed ward. The Project will result in all single occupancy, private rooms, by including 84 of the medical-surgical beds in new construction. The remaining 36 medical-surgical and pediatric beds will be located in private rooms in the existing building. In 1979, when the hospital was built, it was typical for hospitals to have two or more patients share a room. Industry standards have changed to all-private rooms. In fact, almost all inpatient rooms among the area hospitals have already been converted to private rooms.

The value of private rooms has been well documented in other projects approved by the IHFSRB. Benefits include improved infection control, more privacy, a quiet and calm environment promoting healing, and capacity for family visitation and even staying comfortably overnight in the patient room.

Private inpatient rooms offer greater flexibility in bed assignment, increasing utilization of available beds. Currently the placement of patients in many semiprivate rooms is limited by gender of patients, presence of a known infection or weakened immune system, or the behavior of the patient. Hospice patients need an extra degree of privacy. For these reasons it is not uncommon for many rooms to be blocked from use by a second patient.

The *2006 Guideline for Design and Construction of Health Care Facilities*, written and published by the American Institute of Architects and Facility Guidelines Institute, states that "a single-bed room is the minimum standard for new construction." This Guideline is updated every four years and the 2010 edition continues this message.

The new larger, private rooms at Advocate Good Shepherd will enhance patient privacy, provide a quiet and calm environment for healing and accommodate families wishing to stay with the patient, even comfortably spending the night in the patient room. The expanded room size accommodates the increasing number of larger equipment needed in the patient rooms. The need for more space in the patient rooms is particularly acute on the orthopedic floor. Many orthopedic patients have large pieces of equipment which must remain with the patient in the room, to assist in rehabilitation. Currently, when both orthopedic patients in a semi private room have equipment, caregivers are challenged to reach the far side of the patient's bed without constantly moving the equipment and creating a safety hazard.

The larger patient rooms will also allow more services to be brought to the patient and provided in the patient's room. As an example, with larger-sized rooms, portable imaging equipment could be used to perform a study in the patient room, eliminating the patient discomfort and inconvenience, as well as the staff time transporting the patient to and from the imaging department.

The rooms are designed according to the Advocate standard developed by a team of clinicians and hospital facility experts from throughout the Advocate System. With standardization, best practices are implemented and clinicians know the exact location and availability of equipment and technology, particularly important when time is critical in an emergency.

The new units are designed to support clinicians, nurses and physicians spending more time with the patient. The private patient room allows physicians and nurses to communicate more openly with patients. The larger patient room provides work space and computers for nurses and physicians to work and document at the patient's bedside. The new medical-surgical units are designed with six clinician workstations (with computers, phones, counter space, etc.) located throughout each 28 bed unit, one of which is located only a short distance from each inpatient room. This proximity allows clinicians to spend less time walking and more

time with the patient and also promotes safety, with more clinicians within earshot of more patients on a regular basis. This proximity of the workstations and the overall design of the units are based on Lean principles, enhancing work flow and staff efficiency.

The units will incorporate infrastructure for smart room technology, supporting both the patient and their clinicians. Smart room technology offers patients ready access to information about their care. Clinicians benefit by improved efficiency in access to information, documentation and communication.

Storage needs have grown since the hospital was built in 1979, with more types of supplies and more and larger equipment. The Project will provide more dedicated space for equipment and supply storage, eliminating the need for the current less desirable hallway storage. Supplies for individual patients will be stored in a patient server, a closet for each patient room stocked from the outside without disturbing the patient or creating opportunities to spread infection. Stocking most patient supplies in each patient room server minimizes the time staff must walk to central supply closets, thus improving staff efficiency and increasing staff time in the patient room, with the patient.

The new unit will provide a safer environment for more physically-challenged or bariatric patients and their caregivers. Several rooms on each floor will be outfitted with modified fixtures (e.g., toilets and grab rails) furniture and in-ceiling lifts to optimize safety.

A key principle in the design is flexibility to meet the changing needs of patients and respond to unforeseen changes in the delivery of care.

2) Documentation shall include the most recent:

- A) IDPH Centers for Medicare and Medicaid Services (CMMS) inspection reports; and
- B) Joint Commission on Accreditation of Healthcare Organizations (JCAHO) reports.

There are no reports that speak to the medical-surgical-pediatric patient rooms.

3) Other documentation shall include the following, as applicable to the factors cited in the application:

- A) Copies of maintenance reports;
- B) Copies of citations for life safety code violations; and
- C) Other pertinent reports and data.

The reason for this modernization is for the changes in standards of care, and not for maintenance or life safety code issues. Therefore, no reports are included.

4) Projects involving the replacement or modernization of a category of service or hospital shall meet or exceed the occupancy standards for the categories of service, as specified in 77 Ill. Adm. Code 1100.

The historical utilization of medical-surgical-pediatric beds and their associated observation days is shown below. The pattern demonstrates a trend of 2.1% annual growth.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Total M/S, peds, obsv days	28,649	31,479	34,386	35,267	36,888	35,788	34,100	33,128	15.6%	2.1%

Source: Annual Hospital Questionnaires and IHFSRB Hospital Profiles as amended in February 2013 letter

The Compound Annual Growth Rate (CAGR) was calculated which indicated that, at the same rate as the past, the demand for those beds would be 39,110 days in 2019.

	CAGR Projected Utilization								
	Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
Total M/S, peds, obsv days	2.1%	33,823	34,532	35,256	35,995	36,750	37,521	38,307	39,110

The target occupancy for modernization of medical surgical beds and pediatric beds is defined in Ill Administrative Code 1100.520 c). When there are 100-199 medical surgical beds, the target is 85%. The target occupancy for pediatric beds is 60%. (However, when both medical-surgical and pediatric beds are being considered, the State staff has reviewed them at the 85% target.)

Converting that target to days of occupancy per year was done as follows:

$$365 \text{ days per year} \times 85\% \text{ target occupancy of beds} = 310.25 \text{ days per bed}$$

To convert that to beds needed, the calculation shown below was made.

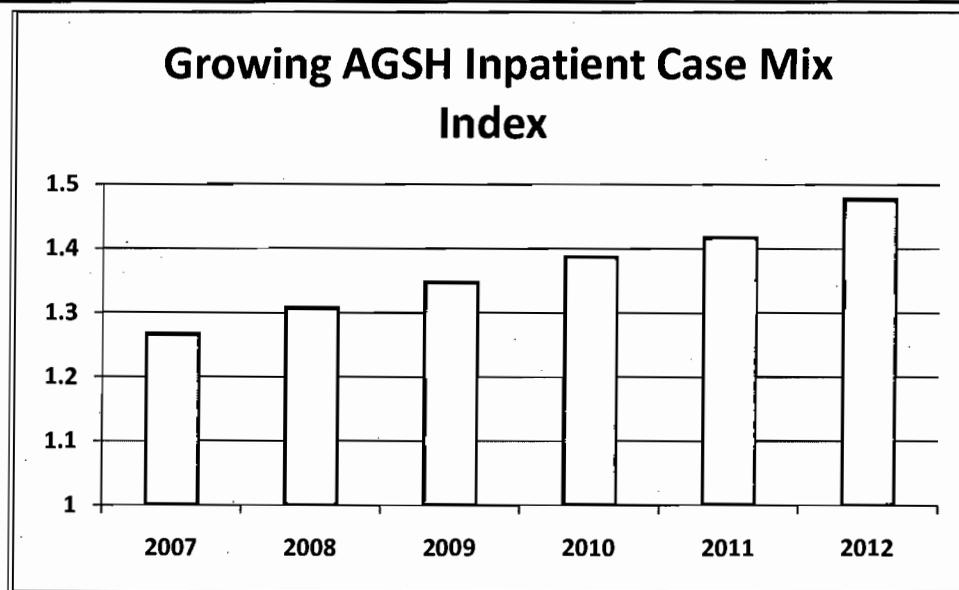
$$39,110 \text{ days in 2019} \div 310.25 \text{ days per bed} = 126.1 \text{ beds, rounded to 127 beds}$$

The Hospital currently has 113 medical-surgical beds and 14 pediatric beds for a combined total of 127 medical-surgical-pediatric beds.

As the Hospital leadership considered the future, they were aware of the trends for a reduction in demand for pediatric beds in the community hospital. As a result, the Hospital is proposing to reduce the bed complement to 120 beds, to be designated as 112 medical-surgical beds and 8 pediatric beds. The reduction in pediatric beds is consistent with national trends for community hospitals. Care for pediatric patients is shifting to outpatient based care or dedicated Children’s hospitals. Most of Advocate Good Shepherd’s pediatric inpatient transfers stay within the Advocate system and are transferred to Advocate Children’s Hospital Park Ridge campus. The same physicians who serve as Good Shepherd’s pediatric hospitalists and neonatologists are also on staff at Advocate Children’s Hospital Park Ridge, thereby providing a seamless transfer of care.

The Project proposes to realign the inpatient bed complement with a reduction in medical-surgical-pediatric beds and an increase in ICU beds. This adjustment in beds is consistent with volume shifts in Illinois. The acuity of inpatients is rising, with an increasing ratio of

ICU to medical-surgical-pediatric days. The table below demonstrates the consistent increase of inpatient acuity at Good Shepherd Hospital from 2007 - 2012, based on the measure of case mix index.



Source: Hospital Records

This trend is expected to continue with a greater shift of low acuity patients to outpatient care, resulting in more of the remaining inpatients having higher average acuity, requiring intensive care. In support of this trend, this Project realigns the mix of inpatient beds, increasing the number to serve high acuity patients (ICU), and reducing the number of medical-surgical-pediatric beds. Advocate Good Shepherd believes that right-sizing its complement of inpatient beds is important to meet community needs and be prudent stewards of health care resources.

This reduction in medical-surgical-pediatric beds will support the reduction in the State's calculated excess medical-surgical-pediatric beds in Planning Area A-09, from 86 down to 79 beds.

f) Performance Requirements – Bed Capacity Minimum

1) Medical-Surgical

*The minimum bed capacity for a medical-surgical category of service within a Metropolitan Statistical Area (MSA) is 100 beds.*

The Hospital will have 112 medical-surgical beds so will be above the State minimum.

4) Pediatrics

*The minimum size for a pediatric unit within an MSA is 4 beds.*

The Hospital will have 8 pediatric beds so will be above the State minimum.

g) Assurances

*The applicant representative who signs the CON application shall submit a signed and dated statement attesting to the applicant's understanding that, by the second year of operation after the project completion, the applicant will achieve and maintain the occupancy standards specified in 77 Ill. Adm. Code 1100 for each category of service involved in the proposal.*



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Assurance of Occupancy Letter

February 25, 2013

Mr. Dale Galassie, Chairman  
Illinois Health Facilities and Services Review Board  
525 West Jefferson Street, Second Floor  
Springfield, Illinois 62761

Dear Mr. Galassie:

This letter is to provide the Illinois Health Facilities and Services Review Board the assurance required with the Certificate of Need application for a modernization project at Advocate Good Shepherd Hospital.

Based on the information available at this time, it is my understanding that by the second year of operations after project completion, Advocate Good Shepherd Hospital reasonably expects to achieve and maintain the occupancy standards for the medical/surgical/pediatric and intensive care beds, as specified in 77 Ill. Administrative code 1100.520 c) and 1100.540 c).

Sincerely,

A handwritten signature in cursive script, appearing to read "Karen Lambert".

Karen A. Lambert  
President

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## Section 1110.530 Medical/Surgical, Obstetric, Pediatric and Intensive Care – Review Criteria

## Category of Service

**Intensive Care Beds**

Expansion of Existing Services	(b)(2) – Planning Area Need – Service to Planning Area Residents
	(b)(4) – Planning Area Need – Service Demand – Expansion of Existing Category of Service
	(e)(1) – Staffing Availability
	(f) – Performance Requirements
	(g) – Assurances
Category of Service Modernization	(d)(1) – Deteriorated Facilities
	(d)(2)
	& (3) – Documentation
	(d)(4) – Occupancy
	(f) – Performance Requirements

## b) Planning Area Need – Review Criterion

*The applicant shall document that the number of beds to be established or added is necessary to serve the planning area's population, based on the following:*

## (b) (2) Service to Planning Area Residents

*A) Applicants proposing to establish or add beds shall document that the primary purpose of the project will be to provide necessary health care to the residents of the area in which the proposed project will be physically located (i.e., the planning or geographical service area, as applicable), for each category of service included in the project.*

Advocate Good Shepherd Hospital (AGSH) is located in the southwest section of Lake County north of Barrington. Critically ill patients are often admitted to the Intensive Care Unit (ICU) as a phase in their stay for other services and programs such as surgery, cardiac care, cancer or trauma. The Hospital has 18 CON authorized ICU beds. This proposed Project would increase that to 32 ICU beds for a net addition of 14 beds.

The proposed Project includes the addition of new Intensive Care beds in order to continue to serve the needs of the communities that surround the Hospital.

The need for 40 additional Intensive Care Beds in Planning Area A-09 is also well documented in the Illinois Health Facilities and Services Review Board "Health Facilities Inventory and Data". The proposed Project would fulfill the need for 14 of the 40 beds.

*B) Applicants proposing to add beds to an existing category of service shall provide patient origin information for all admissions for the last 12-month period, verifying that at least 50% of admissions were residents of the area. For all other projects, applicants shall document that at least 50% of the projected patient volume will be from residents of the area.*

In 2011, 99% of the Intensive Care patients resided in the Hospital's service area. The proposed Project is to continue to serve this population. The table below shows the Intensive Care patients' origin.

Intensive Care Patient Origin 2011

Service Area	Intensive Care Percent
Primary	93.8
Secondary	5.4
Subtotal	99.2
Others	0.8
Total	100

Source: Hospital records

The Hospital does not expect any change in the definition of its service area and expects that at least 50% of the Intensive Care patients will live in the area.

C) Applicants proposing to expand an existing category of service shall submit patient origin information by zip code, based upon the patient's legal residence (other than a health care facility).

Intensive Care Patient origin by zip code for 2011 is shown as Attachment 20, Exhibit 1.

(b)(4) Service Demand – Expansion of Existing Category of Service

*The number of beds to be added for each category of service is necessary to reduce the facility's experienced high occupancy and to meet a projected demand for service. The applicant shall document subsection (b)(4)(A) and either subsection (b)(4)(B) or (C):*

A) Historical Service Demand

i) *An average annual occupancy rate that has equaled or exceeded occupancy standards for the category of service, as specified in 77 Ill. Adm. Code 1100, for each of the latest two years;*

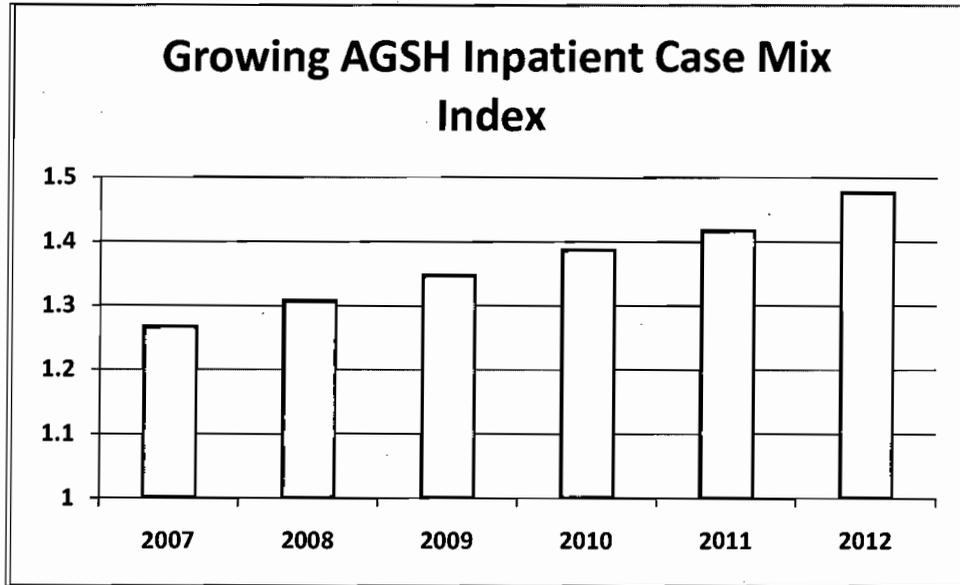
Advocate Good Shepherd has the second highest ICU occupancy among Illinois hospitals with more than 10 ICU beds. The ICU occupancy at Advocate Good Shepherd has exceeded the State Standard minimum of 60% for each of the past seven years.

Intensive Care Bed Utilization 2005-2011

Year	Beds authorized	Peak beds set up	Patient Days	Average Daily Census	CON Occupancy	State occupancy standard
2005	18	21	7,268	19.9	110.6%	60%
2006	18	18	5,312	14.6	80.9%	60%
2007	18	18	5,288	14.5	80.5%	60%
2008	18	18	6,085	16.7	92.6%	60%
2009	18	20	6,642	18.2	101.1%	60%
2010	18	20	5,565	15.2	84.7%	60%
2011	18	20	5,653	15.5	86.0%	60%

Source: Annual Hospital Questionnaire and Hospital Profiles

The continued high ICU occupancy caused the Hospital to consider adjusting the bed capacity to better meet patient needs. Advocate Good Shepherd has experienced an increase in patient complexity.



Source: Hospital Records

This trend is expected to continue with a greater shift of low complexity patients to outpatient care, resulting in more of the remaining inpatients being higher complexity, requiring intensive care. In support of this trend, this Project realigns the mix of inpatient beds, increasing the number to serve high acuity patients (ICU), and reducing the number of medical-surgical-pediatric beds. Advocate Good Shepherd Hospital believes that right-sizing its complement of inpatient beds is important to meet community needs and be prudent stewards of health care resources. Utilization of ICU is also expected to increase due to growth and aging in the population. The population served by Advocate Good Shepherd is growing at a rate faster than the nation.

Population Growth

	2000	2012	2017	Change 2012 to 2017
AGSH Service Area	465,477	563,279	595,271	5.7%
USA	281,421,9006	313,095,504	325,256,835	3.9%

Source: The Nielsen Company, and Thomson Reuters

ii) *If patients have been referred to other facilities in order to receive the subject services, the applicant shall provide documentation of the referrals, including: patient origin by zip code; name and specialty of referring physician; and name and location of the recipient hospital, for each of the latest two years.*

As ICU care is a component of a patient stay, referrals to other facilities for ICU care would affect continuity of care and generally do not occur. In fact, it is the routine practice of the Hospital to admit the patients that present needing inpatient care. No referrals to other facilities have been included.

**B) Projected Referrals**

*The applicant shall provide the following:*

The applicants did not include letters of referral from physicians. The patients are already coming to the hospital as shown by the current demand. The members of the medical staff are sending patients to AGSH, even in times of high occupancy.

Therefore Criterion i) to iv) are not included.

- i) *Physician referral letters that attest to the physician's total number of patients (by zip code of residence) who have received care at existing facilities located in the area during the 12-month period prior to submission of the application*
- ii) *An estimated number of patients the physician will refer annually to the applicant's facility within a 24-month period after project completion. The anticipated number of referrals cannot exceed the physician's experienced caseload. The percentage of project referrals used to justify the proposed expansion cannot exceed the historical percentage of applicant market share within a 24-month period after project completion;*
- iii) *Each referral letter shall contain the physician's notarized signature, the typed or printed name of the physician, the physician's office address and the physician's specialty; and*
- iv) *Verification by the physician that the patient referrals have not been used to support another pending or approved CON application for the subject services.*

**C) Projected Service Demand – Based on Rapid Population Growth:**

*If a projected demand for service is based upon rapid population growth in the applicant facility's existing market area (as experienced annually within the latest 24-month period), the projected service demand shall be determined as follows:*

The growth in population does not meet the criteria for Rapid Growth so criterion i) through vii) are not included.

- i) *The applicant shall define the facility's market area based upon historical patient origin data by zip code or census tract;*
- ii) *Population projections shall be produced, using, as a base, the population census or estimate for the most recent year, for county, incorporated place, township or community area, by the U.S. Census Bureau or IDPH;*
- iii) *Projections shall be for a maximum period of 10 years from the date the application is submitted;*
- iv) *Historical data used to calculate projections shall be for a number of years no less than the number of years projected;*
- v) *Projections shall contain documentation of population changes in terms of births, deaths and net migration for a period of time equal to or in excess of the projection horizon;*

vi) *Projections shall be for total population and specified age groups for the applicant's market area, as defined by HFPB, for each category of service in the application; and*

vii) *Documentation on projection methodology, data sources, assumptions and special adjustments shall be submitted to HFPB.*

d) Category of Service Modernization

1) If the Project involves modernization of a category of hospital bed service, the applicant shall document that the inpatient bed areas to be modernized are deteriorated or functionally obsolete and need to be replaced or modernized, due to such factors as, but not limited to:

- A) *High cost of maintenance;*
- B) *Non-compliance with licensing or life safety codes;*
- C) *Changes in standards of care (e.g., private versus multiple bedrooms); or*
- D) *Additional space for diagnostic or therapeutic purposes.*

The proposed modernization Project addresses many changes in standards of care and space for diagnostic and therapeutic purposes. It will increase the ICU capacity from 18 to 32 by adding 14 ICU beds to its authorized bed count. A new ICU will be constructed and sized according to current industry standards. Some of the existing ICU beds are now too small for the current equipment and method of caring for these patients, and will be replaced with the construction of the new unit. The beds being replaced no longer meet industry standards. For example, two ICU rooms have two beds.

The new unit will provide updated facilities and equipment. The technology demands have changed the way nurses access and use the patient information through systems in the room. Storage of linens, supplies and medications need to be immediately outside the patient's door so they can be replenished without entering the room, and yet accessible to the nurses. The new unit will offer improved lighting and in-ceiling patient lifts in half of the rooms to provide a safer environment for both the patient and staff. The larger unit will provide more storage space for ventilators and other large pieces of equipment.

2) Documentation shall include the most recent:

- A) *IDPH Centers for Medicare and Medicaid Services (CMMS) inspection reports; and*
- B) *Joint Commission on Accreditation of Healthcare Organizations (JCAHO) reports.*

There are no surveyor issues that speak to this need.

3) Other documentation shall include the following, as applicable to the factors cited in the application:

- A) *Copies of maintenance reports;*
- B) *Copies of citations for life safety code violations; and*
- C) *Other pertinent reports and data.*

This proposed modernization Project is not related to the high cost of maintenance, non compliance with life safety codes, or other code issues.

4) Projects involving the replacement or modernization of a category of service or hospital shall meet or exceed the occupancy standards for the categories of service, as specified in 77 Ill. Adm. Code 1100.

#### Projected Bed Need

The projections for demand are driven by the pattern of growth of patients currently admitted to the Intensive Care Unit.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
ICU days	3,464	7,268	5,312	5,288	6,085	6,642	5,565	5,653	63.2%	7.2%

Source: Annual Hospital Questionnaires and IHFSRB Hospital Profiles

The high occupancy level continues to pose challenges to provide efficient, patient-focused care. On days when the ICU is full, patients are required to be cared for with ICU-competent staff but in less desirable locations such as the emergency department and PACU. This further causes a bottleneck in the areas holding these patients. When the ICU is operating at near full capacity, patient placement is frequently changed to accommodate expected and actual demand. The practice of adjusting the patient placement on high capacity days is costly and disruptive, so it is important to develop a better solution to accommodate current and forecast growing demand.

To project the demand for Intensive Care, the Compound Annual Growth Rate (CAGR) was used to see the trend line to 2019.

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
7.2%	6,063	6,502	6,973	7,479	8,021	8,602	9,225	9,894

By the second full year after the proposed Project is completed, the patient days are projected to be 9,894.

The State target of occupancy is 60%. That calculates to:

$$365 \text{ days per year} \times 60\% = 219 \text{ days per bed}$$

$$9,894 \text{ patient days} \div 219 \text{ days per bed} = 45.2, \text{ rounded to 46 beds needed}$$

To be conservative, the Hospital is proposing 32 beds. That would be an increase of 14 beds over the present CON authorized 18 beds. The 14 beds would help address the well documented need for 40 additional ICU beds in the A-09 Health Planning Area, to alleviate the pressure at Advocate Good Shepherd Hospital for ICU beds, and better serve the needs of the patients.

e) Staffing Availability – *Review Criterion*

*The applicant shall document that relevant clinical and professional staffing needs for the proposed project were considered and that licensure and JCAHO staffing requirements can be met. In addition, the applicant shall document that necessary staffing is available by providing letters of interest from prospective staff members, completed applications for employment, or a narrative explanation of how the proposed staffing will be achieved.*

Advocate Good Shepherd (AGSH) has considered the staffing needs of the Hospital and does not expect any issues meeting the licensure and accreditation staffing requirements as a result of this proposed Project. The Hospital's ability to attract and place nurses has historically been strong.

The Hospital has had all nursing positions placed within 46 days. ICU nursing positions were filled within 29 days. The Hospital's overall use of nurse agency has been less than 0.5% for the last 2 years.

The Advocate system uses dedicated staffing consultants. When there is a significant staff need anywhere in the system, resources are shifted to quickly address the situation. The staffing consultants at Advocate Health Care work in a collaborative and agile manner. The strong brand name of Advocate has made its career website a robust source of candidate activity, and is a primary source for filling open needs.

Much of the success can be attributed to a total rewards package which includes base wages, premium pay, benefits, and educational support. Many nurses are interested in working at Advocate Good Shepherd due to its tuition reimbursement, seminars and certificate support, and a strong nurse orientation program. The total of BSN and MSN-prepared nurses is over 60%.

Evidence of success in these areas is found in the turnover and associate satisfaction measures. Turnover is significantly below 2012 regional averages as reported by the Metropolitan Chicago Healthcare Council (MCHC). The Advocate Good Shepherd total staff turnover rate of 8.6% is significantly better than the MCHC regional rates of 10.4%. The difference in nursing turnover is even more dramatic, with AGSH nurse turnover rate of 6.2% compared to 12.4% in MCHC regional average.

Advocate Good Shepherd Hospital (AGSH) has continually benefited from a strong reputation as an excellent place of employment in Lake and McHenry counties. As evidence, AGSH was named by the *Daily Herald* as a "Best Place to Work in 2012."

f) Performance Requirements – Bed Capacity Minimum

3) *Intensive Care*

*The minimum unit size for an intensive care unit is 4 beds.*

The proposed unit will have 32 beds, exceeding the minimum requirements.

g) Assurances

*The applicant representative who signs the CON application shall submit a signed and dated statement attesting to the applicant's understanding that, by the second year of operation after the project completion, the applicant will achieve and maintain the occupancy standards specified in 77 Ill. Adm. Code 1100 for each category of service involved in the proposal.*



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Assurance of Occupancy Letter

February 25, 2013

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Illinois Health Facilities and Services Review Board  
525 West Jefferson Street, Second Floor  
Springfield, Illinois 62761

Dear Mr. Galassie:

This letter is to provide the Illinois Health Facilities and Services Review Board the assurance required with the Certificate of Need application for a modernization project at Advocate Good Shepherd Hospital.

Based on the information available at this time, it is my understanding that by the second year of operations after project completion, Advocate Good Shepherd Hospital reasonably expects to achieve and maintain the occupancy standards for the medical/surgical/pediatric and intensive care beds, as specified in 77 Ill. Administrative code 1100.520 c) and 1100.540 c).

Sincerely,

A handwritten signature in cursive script, appearing to read "Karen Lambert".

Karen A. Lambert  
President

Related to the Evangelical Lutheran Church In America and the United Church of Christ.

ICU Patient Origin by Zip Codes		
Pt Zip	Service Area	Cases
60010	Primary	300
60047	Primary	182
60013	Primary	170
60084	Primary	122
60014	Primary	90
60102	Primary	62
60042	Primary	48
60021	Primary	39
60051	Primary	26
60050	Primary	22
60012	Primary	12
60073	Secondary	14
60110	Secondary	14
60067	Secondary	12
60142	Secondary	12
60074	Secondary	9
	Other	9
Total		1,144

Source: Hospital records

**F. Criterion 1110.1330 - Cardiac Catheterization**

This section is applicable to all projects proposing to establish or modernize a cardiac catheterization category of service or to replace existing cardiac catheterization equipment.

1. **Criterion 1110.1330(a), Peer Review**  
Read the criterion and submit a detailed explanation of your peer review program.
2. **Criterion 1110.1330(b), Establishment or Expansion of Cardiac Catheterization Service**  
Read the criterion and, if applicable, submit the following information:
  - a. A map (8 1/2" x 11") showing the location of the other hospitals providing cardiac catheterization service within the planning area.
  - b. The number of cardiac catheterizations performed for the last 12 months at each of the hospitals shown on the map.
  - c. Provide the number of patients transferred directly from the applicant's hospital to another facility for cardiac catheterization services in each of the last three years.
3. **Criterion 1110.1330(c), Unnecessary Duplication of Services**  
Read the criterion and, if applicable, submit the following information.
  - a. Copies of the letter sent to all facilities within 90 minutes travel time which currently provide cardiac catheterization. This letter must contain a description of the proposed project and a request that the other facility quantify the impact of the proposal on its program.
  - b. Copies of the responses received from the facilities to which the letter was sent.
4. **Criterion 1110.1330(d), Modernization of Existing Cardiac Catheterization Laboratories**  
Read the criterion and, if applicable, submit the number of cardiac catheterization procedures performed for the latest 12 months.
5. **Criterion 1110.1330(e), Support Services**  
Read the criterion and indicate on a service by service basis which of the listed services are available on a 24 hour basis and explain how any services not available on a 24 hour basis will be available when needed.
6. **Criterion 1110.1330(f), Laboratory Location**  
Read the criterion and, if applicable, submit line drawings showing the location of the proposed laboratories. If the laboratories are not in close proximity explain why.
7. **Criterion 1110.1330(g), Staffing**  
Read the criterion and submit a list of names and qualifications of those who will fill the positions detailed in this criterion. Also provide staffing schedules to show the coverage required by this criterion.
8. **Criterion 1110.1330(h), Continuity of Care**  
Read the criterion and submit a copy of the fully executed written referral agreement(s).
9. **Criterion 1110.1330(i), Multi-institutional Variance**  
Read the criterion and, if applicable, submit the following information:
  - a. A copy of a fully executed affiliation agreement between the two facilities involved.
  - b. Names and positions of the shared staff at the two facilities.
  - c. The volume of open heart surgeries performed for the latest 12-month period at the existing operating program.
  - d. A cost comparison between the proposed project and expansion at the existing operating program.
  - e. The number of cardiac catheterization procedures performed in the last 12 months at the operating program.
  - f. The number of catheterization laboratories at the operating program.
  - g. The projected cardiac catheterization volume at the proposed facility annually for the next 2 years.
  - h. The basis for the above projection.

APPEND DOCUMENTATION AS **ATTACHMENT-25** IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

## Section 1110.1330 Cardiac Catheterization – Review Criteria

## Category of Service

**Cardiac Catheterization/Electrophysiology**

## 1. Criterion 1110.1330(a), Peer Review

*Any applicant proposing the establishment or modernization of a cardiac catheterization unit shall detail in its application for permit the mechanism for adequate peer review of the program. Peer review teams will evaluate the quality of studies and related morbidity and mortality of patients and also the technical aspects of providing the services such as film processing, equipment maintenance, etc.*

Cardiovascular Services Peer Review Committee is a representative physician group that meets bi-monthly for the purpose of case review as outlined by Advocate policy. Process, outcome, and appropriate use criteria outliers are reported to the American College of Cardiologists and Society of Thoracic Surgeons national databases, as well as procedure indications per accepted guidelines are reviewed for improvement opportunities. Providers are invited to present their case and are notified regarding identified issues and any required follow-up. Case review information is electronically stored and becomes part of Hospital's focused and ongoing Physician Practice Evaluation reporting for physician privileging. This group also regularly reviews data to identify troublesome trends needing more intensive evaluation.

## 2. Criterion 1110.1330(b), Establishment or Expansion of Cardiac Catheterization Service

*There shall be no additional adult or pediatric catheterization categories of service started in a health planning area unless:*

This Service is established and not being expanded so the criterion does not apply.

- 1) *the standards as outlined in 77 Ill. Adm. Code 1100.620 are met; unless*
- 2) *in the circumstances where area programs have failed to meet those targets, the applicant can document historical referral volume in each of the prior three years for cardiac catheterization in excess of 400 annual procedures (e.g., certification of the number of patients transferred to other service providers in each of the last three years).*

## 3. Criterion 1110.1330(c), Unnecessary Duplication of Services

This Service is established so the criterion does not apply.

- 1) *Any application proposing to establish cardiac catheterization services must indicate if it will reduce the volume of existing facilities below 200 catheterizations.*
- 2) *Any applicant proposing the establishment of cardiac catheterization services must contact all facilities currently providing the service within the*

*planning area in which the applicant facility is located, to determine the impact the project will have on the patient volume at existing services.*

4. Criterion 1110.1330(d), Modernization of Existing Cardiac Catheterization Laboratories

*No proposed project for the modernization of existing equipment providing cardiac catheterization services will be approved unless the applicant documents that the minimum utilization standards (as outlined in 77 Ill. Adm. Code 1100.620) are met.*

b) Utilization Standards:

*There should be a minimum of 200 cardiac catheterization procedures performed annually within two years after initiation.*

The Hospital has performed an average of 1,366 Cardiac Catheterization procedures annually over the past eight years.

The Hospital has performed an average of 267 Electrophysiology procedures annually over the past five full years of operation, and 481 procedures in 2011. An electrophysiology procedure usually takes 3 times as long as a cardiac catheterization procedure.

The demand for Cardiac Catheterization and Electrophysiology at Advocate Good Shepherd Hospital has been demonstrated over the years.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Diagnostic cardiac cath.	1215	1273	906	1148	1073	1150	1022	708		
Interventional cardiac cath.			626	389	360	372	341	343		
Electrophysiology		66	26	108	163	171	414	481		
Total Cardiac Cath. procedures	1,215	1,339	1,558	1,645	1,596	1,693	1,777	1,532	26.1%	3.4%

Source: Annual Hospital Questionnaires and IHFSRB Hospital Profiles

Should the trend continue, the Compound Annual Growth Rate (CAGR) to 2019 would be as follows:

CAGR Projected Utilization									
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019	
3.4%	1,584	1,637	1,692	1,749	1,808	1,869	1,932	1,997	

The state standard for utilization was applied to the volume. The pattern would support two cardiac catheterization units:

1,997 procedures ÷ 1,500 procedures/unit = 1.3, rounded to 2 units

- c) Need Determination – Cardiac Catheterization Programs:  
*No additional cardiac catheterization service shall be started unless each facility in the planning area offering cardiac catheterization services operates at a level of 400 procedures annually.*

This criterion does not apply. This Project is to modernize the existing service, not add an additional service.

5. Criterion 1110.1330(e), Support Services

- 1) *Any applicant proposing the establishment of a dedicated cardiac catheterization laboratory must document the availability of the following support services;*

This is an established service and all of the required support services are available.

- A) *Nuclear medicine laboratory.*
  - B) *Echocardiography service.*
  - C) *Electrocardiography laboratory and services, including stress testing and continuous cardiogram monitoring.*
  - D) *Pulmonary Function unit.*
  - E) *Blood bank.*
  - F) *Hematology laboratory - coagulation laboratory.*
  - G) *Microbiology laboratory.*
  - H) *Blood Gas laboratory.*
  - I) *Clinical pathology laboratory with facilities for blood chemistry.*
- 2) *These support services need not be in operation on a 24 hour basis but must be available when needed.*

6. Criterion 1110.1330(f), Laboratory Location

*Due to safety considerations in the event of technical breakdown it is preferable to group laboratory facilities. Thus in projects proposing to establish additional catheterization laboratories such units must be located in close proximity to existing laboratories unless such location is architecturally infeasible.*

One of the central features of the Project is the development of an interventional platform co-locating surgery and other interventional procedures including cardiac catheterization. Cardiac catheterization (offering both diagnostic and therapeutic)

and electrophysiology is planned to be located in the interventional platform, integrated with interventional radiology and adjacent to the operating rooms. These interventional services will share Phase I recovery (PACU), Phase II preparation and recovery, and support spaces, including family waiting.

This patient care redesign was developed based on Lean principles, allowing for shared resources to improve patient care and staff efficiency. This novel approach enhances the range of support services available for patients and families and effective utilization of equipment and facilities. A broader scope of staff is better able to accommodate the peaks in volumes as well as emergency and unexpected situations. The shared resources also provide backup in case of failure of equipment or systems. The plan is developed to be flexible to meet the changing needs of patients and the industry.

Due to the current age of the equipment and five year duration until the Project is complete, the equipment is anticipated to be replaced or upgraded during the course of the Project. While this equipment would be regularly replaced or updated due to obsolescence or the equipment coming to the end of its normal lifecycle as part of the annual capital process, this routine capital expenditure is included in the CON Project because the equipment touches an area of service included in the modernization Project.

The new procedure rooms will be updated to current industry standards and will be larger, better able to accommodate new larger equipment. The new equipment will offer improved advanced technology including low dose radiation.

Advocate Good Shepherd Hospital has an active program for heart patients. There are 57 cardiologists, 2 cardiac electrophysiologists and 9 cardiovascular surgeons on the staff.

See Attachment 25, Exhibit 1 for a drawing of the area.

#### 7. Criterion 1110.1330(g), Staffing

*It is the policy of the State Board that if cardiac catheterization services are to be offered that a cardiac catheterization laboratory team be established. Any applicant proposing to establish such a laboratory must document that the following personnel will be available:*

Cardiac Catheterization/Electrophysiology is an established service and the following required personnel are available

- 1) *Lab director board-certified in internal medicine, pediatrics or radiology with subspecialty training in cardiology or cardiovascular radiology.*
- 2) *A physician with training in cardiology and/or radiology present during examination with extra physician backup personnel available.*

- 3) *Nurse specially trained in critical care of cardiac patients, knowledge of cardiovascular medication, and understanding of catheterization equipment.*
- 4) *Radiologic technologist highly skilled in conventional radiographic techniques and angiographic principles, knowledgeable in every aspect of catheterization instrumentation, and with thorough knowledge of the anatomy and physiology of the cardiovascular system.*
- 5) *Cardiopulmonary technician for patient observation, handling blood samples and performing blood gas evaluation calculations.*
- 6) *Monitoring and recording technician for monitoring physiologic data and alerting physician to any changes.*
- 7) *Electronic radiologic repair technician to perform systematic tests and routine maintenance; must be immediately available in the event of equipment failure during a procedure.*
- 8) *Darkroom technician well trained in photographic processing and in the operation of automatic processors used for both sheet and cine film.*

8. Criterion 1110.1330(h), Continuity of Care

*Any applicant proposing the establishment, expansion or modernization of a cardiac catheterization service must document that written transfer agreements have been established with facilities with open-heart surgery capabilities for the transfer of seriously ill patients for continuity of care.*

The Hospital provides open heart surgery so no transfer agreement is needed.

9. Criterion 1110.1330(i), Multi-institutional Variance

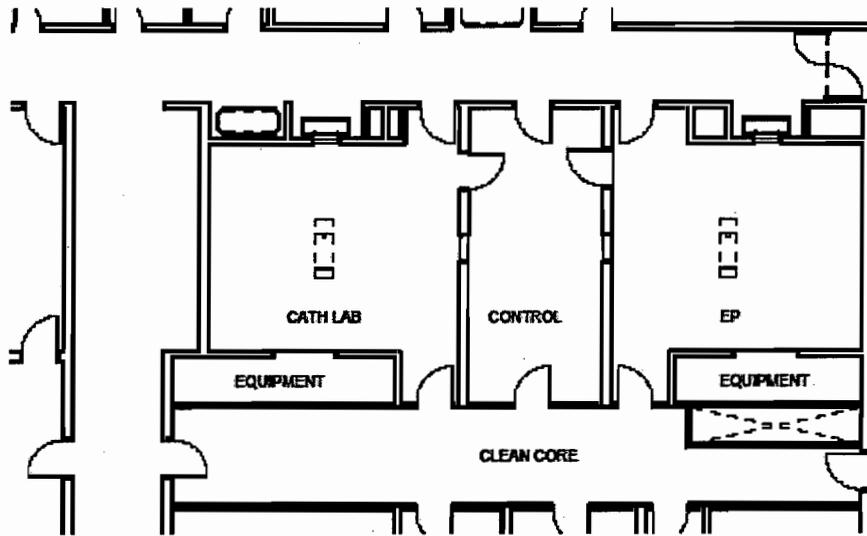
- 1) *A variance to the establishment requirements of 1110.1330(b), "Establishment or Expansion of Cardiac Catheterization Service" shall be granted if the applicant can demonstrate that the proposed new program is necessary to alleviate excessively high demands on an existing operating program's capacity.*

This criterion is not applicable. This is an established service that is not expanding.

- 2) *Each of the following must be documented:*
  - A) *That the proposed unit will be affiliated with the existing operating program. This must be documented by written referral agreements between the facilities, and documentation of shared medical staff;*
  - B) *That the existing operating program provides open heart surgery;*

- C) *That initiation of a new program at the proposed site is more cost effective, based upon a comparison of charges, than expansion of the existing operating program;*
- D) *That the existing operating program currently operates at a level of more than 750 procedures annually per laboratory; and*
- E) *That the proposed unit will operate at the minimum utilization target occupancy and that such unit will not reduce utilization in existing programs below target occupancy (e.g., certification of the number of patients transferred to other service providers in each of the last three years and market studies developed by the applicant indicating the number of potential catheterization patients in the area served by the applicant).*

Proposed Cardiac Catheterization and Electrophysiology Rooms



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**Advocate Good Shepherd Hospital**

**R. Criterion 1110.3030 - Clinical Service Areas Other than Categories of Service**

1. Applicants proposing to establish, expand and/or modernize Clinical Service Areas Other than Categories of Service must submit the following information:
2. Indicate changes by Service: Indicate # of key room changes by action(s):

Service	# Existing Key Rooms	# Proposed Key Rooms
<input checked="" type="checkbox"/> Surgery Operating Rooms (Class C)	11*	15
<input checked="" type="checkbox"/> Surgery Procedure Rooms (Cysto)	1*	1
<input checked="" type="checkbox"/> Phase 1 Recovery (PACU)	14	18
<input checked="" type="checkbox"/> Phase 2 Recovery (Prep & Recovery)	10	52
<input checked="" type="checkbox"/> Interventional Radiology	1	2
<input checked="" type="checkbox"/> Surgery Procedure Rooms (Endoscopy)	5	5
<input checked="" type="checkbox"/> Phase 2 Recovery (Endo Prep & Recovery)	9	15
<input checked="" type="checkbox"/> General Radiology/Fluoroscopy	8**	8
<input checked="" type="checkbox"/> Magnetic Resonance Imaging	3	3
<input checked="" type="checkbox"/> Nuclear Medicine	4	2
<input checked="" type="checkbox"/> Ultrasound	8	9
<input checked="" type="checkbox"/> Mammography	5	6
<input checked="" type="checkbox"/> Computed Tomography	5	4

\*Was reported as 12 in Annual Hospital Questionnaire and amended report has been submitted to show 11 ORs plus 1 Cysto Procedure Room.

\*\*In the Annual Hospital Questionnaire, 3 DEXA units have been reported with the 8 general radiology and fluoroscopy units for a total of 11.

3. READ the applicable review criteria outlined below and **submit the required documentation for the criteria:**

PROJECT TYPE	REQUIRED REVIEW CRITERIA	
New Services or Facility or Equipment	(b) -	Need Determination - Establishment
Service Modernization	(c)(1) -	Deteriorated Facilities
		and/or
	(c)(2) -	Necessary Expansion
		PLUS
	(c)(3)(A) -	Utilization - Major Medical Equipment
		Or
	(c)(3)(B) -	Utilization - Service or Facility
APPEND DOCUMENTATION AS <u>ATTACHMENT-37</u> , IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.		

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Surgical Operating Suite, Class C</b>	A-01

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

The proposed Project will address a number of issues experienced in the 30+ year old surgery suite. Examples include the following:

- The electrical service is not always able to provide the proper amperage that is needed. Inadequate amperage resulted in loss of power four times in ORs 1, 2, 4, 5, and 9 in the past year. This causes delay or cancellation of surgeries and is both a physician and patient dissatisfier.
- There are problems with the cooling system. When the temperature outside reaches 90 degrees, the chiller cannot produce enough air exchanges to sufficiently cool the surgical suite which may cause condensation and potentially contaminate sterile supplies and instruments.
- The two sources that require the use of suction during a surgical procedure are the surgical field and the airways. The current suction system is inadequate to quickly clear the surgical field or suction the airways, creating additional challenges for the staff

The new, modernized systems in the proposed Project will correct these and other issues, and help prepare the Hospital for future systems needs.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

The surgical facilities need more operating rooms (ORs) to provide more capacity to meet demand. Not only are more operating rooms needed, but larger-sized operating rooms are needed to meet current industry standards, to accommodate the latest equipment that is both more abundant and larger in size than when the surgical suite was originally built 34 years ago. For example, the da Vinci robot and intraoperative radiation therapy offer many benefits to patients but are pieces of equipment that require large operating rooms in which to maneuver. The larger rooms will support an increased number of staff within each operating room to manage the more complex procedures and equipment. Larger operating rooms are quickly becoming the industry standard with a minimum of 650 sf per room. Only two of the Hospital's general rooms are more than 450 sf, with the remaining eight general rooms ranging in size from 300-450 sf, far below industry standard of 650 sf.

The current number of operating rooms does not provide enough capacity to meet even the current demand. The limited availability of OR capacity at the Hospital is creating a challenge for physicians with growing practices, especially in view of the increasing demand from the aging population. As there is extremely limited available capacity, it is difficult to accommodate new surgeons expressing an interest in joining the staff and requesting block times.

One approach to addressing inadequate OR capacity is to improve the OR turnaround time. The Hospital has been highly successful in reducing turnaround time. Kurt Salmon Associates, a nationally recognized master facility planning firm, has calculated that the Hospital's OR turnaround time is 20% better than industry benchmarks. Even with this exemplary OR turnaround time, the current operating rooms cannot meet the demand at Advocate Good Shepherd and additional operating rooms are needed to meet current and forecast demand.

Space is an issue in the current ORs. Only four operating rooms are sized for today's industry standard, two of which are dedicated for open heart cases. Thus only two general operating rooms are sized to meet the needs of many of today's procedures. The demand for these two large-sized rooms far exceeds capacity.

Growing demand for larger-sized operating rooms is created by many disciplines. For example, new surgical robotic equipment must be accommodated. Presently, the robotic assisted procedures are performed for urologic, gynecologic and bariatric procedures. The Hospital is seeing evidence of a growing demand for robotic procedures.

Sometimes the procedures with the smallest incision involve the largest equipment as in the case of the new minimally invasive valve cases. Laparoscopic equipment with large lights and cameras require more space in the ORs.

Intraoperative radiation therapy, started in 2012, is another example of a newer procedure requiring a larger room. During the surgical procedure, radiation therapy is performed. Space is needed in the operating room to accommodate the radiation therapy equipment and the staff to perform the radiation therapy including a radiation oncology physician, a radiation therapist, and a physicist. Thus, the operating room needs to be large enough to accommodate the three-member radiation treatment team and equipment in addition to the normal surgical team and equipment.

Orthopedics and other surgical specialties are also using larger and more abundant equipment.

The new operating rooms will integrate state-of-art technology such as video/audio routing and overhead booms for equipment and gases. By having the equipment on the booms, it will assist in reducing all the wires on the floors which promotes staff and patient safety. The new technologies and equipment in the operating room will assist in performing simple to complex surgeries using minimally invasive techniques, which will shorten the recovery time so that the patient can return to their normal life much more quickly.

One of the central features of the Project is the development of an interventional platform co-locating surgery and other interventional procedures including cardiac catheterization, electrophysiology, and interventional radiology (angiography). These interventional services will share Phase I recovery (PACU), Phase II prep and recovery, and support spaces (family waiting, consult rooms, management offices, employee lockers, physician dictation and conference rooms).

This patient care redesign was developed based on Lean principles, allowing for cross-trained staff and shared resources to improve patient care and staff efficiency. The novel design enhances the range of support services available for patients and families and effective utilization of equipment and facilities. A broader scope of staff is better able to accommodate the peaks in volumes as well as emergency and unexpected situations. The shared equipment and resources also provide backup in case of failure of equipment or systems. The plan is developed to be flexible to meet the changing needs of patients and the industry.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

It has recently been noted that the surgical cases reported in the Annual Hospital Questionnaire had combined the Cystoscopy with the rest of the OR volume. A request for the volume to be amended was recently submitted to the IL Health Facilities and Services Review Board.

The corrected volume of OR hours are shown in the historic utilization table below:

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Surgery hours	12,548	13,636	18,689	19,141	18,130	19,150	19,265	18,865	50.3%	6.0%

Source: Annual Hospital Questionnaires and Hospital records

The impact of this growth is defined in the projected volume using the Compound Annual Growth Rate (CAGR) to 2019, two years after the Project's completed.

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
6.0%	19,997	21,196	22,467	23,815	25,243	26,757	28,362	30,063

The implications for that growth suggest that 21 ORs will be needed:

$$30,063 \text{ hours} \div 1,500 \text{ hours per OR} = 20.04 \text{ ORs, rounded to 21 ORs.}$$

The Hospital is choosing to be conservative and is only asking for 15 ORs, which will include 2 open heart rooms and 13 general ORs.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

There are utilization standards and the Hospital meets them.

**Advocate Good Shepherd Hospital has justified the need for 15 Surgical Operating Rooms (Class C). This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Surgical Procedure Suite – Cystoscopy, Class B</b>	A-02

## c) Service Modernization

The applicant shall document that the proposed project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Cystoscopy is a long-established service provided at Advocate Good Shepherd Hospital. There are seven urologists on staff currently who rely on the Hospital and its surgical team.

According to the Bladder Cancer Advocacy Network, it is estimated that annually more than 70,000 new cases of bladder cancer will be diagnosed and nearly 15,000 people will die from the disease. Bladder cancer is the sixth most commonly diagnosed cancer in the U.S. - fourth among men (after prostate, lung and colon) and eleventh among women.

The cystoscopy room within the perioperative area is a dedicated room which is undersized at less than 300 sf and very crowded. The proposed larger, 400 sf room will better accommodate necessary equipment and staff.

## 3) Utilization

## A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

## B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

Cystoscopy cases were historically reported as Urology surgery with the Annual Hospital Questionnaire. When that was recently noted, a letter was sent to the Illinois

Health Facilities and Services Review Board administrator, correcting the reporting to show the number of cystoscopy hours and the urology surgical hours for the past six years.

The following table shows the pattern of utilization

	2006	2007	2008	2009	2010	2011	% change 2006- 2011	Compound Annual Growth Rate
Cysto Hours	237	172	208	255	303	266	12.2%	2.3%

Source: Hospital records

Using that pattern of utilization, the expected volume in 2019 when the Project has been operational for two years, as calculated using the Compound Annual Growth Rate (CAGR), would be as follows:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
2.3%	272	279	285	292	299	306	313	320

The utilization will support 1 room

$$320 \text{ hours} \div 1,500/\text{room} = 0.2 \text{ rooms, rounded to 1 room}$$

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

There are standards for utilization and they are met.

**Advocate Good Shepherd Hospital has justified the need for 1 Surgical Procedure Room - Cystoscopy (Class B). This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Phase I Recovery (Post Anesthesia Care Unit)</b>	A-03

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

With growing surgery volume and greater number of operating rooms in the proposed Project (increasing from 11 to 15), the number of Phase I Recovery (PACU) stations needs to increase, expanding the space needed by PACU.

In Section A-01, Surgery Operating Rooms (Class C), Advocate Good Shepherd Hospital justified the need to increase the number of operating rooms to 15 Class C operating rooms. The 18 Phase I Recovery (PACU) stations are needed to support the greater volume of cases with the operating rooms plus the cardiac catheterization and interventional radiology rooms. The new PACU will provide updated monitoring technology and facilities, critical to care for post surgical patients.

The rooms appear to exceed the State Standard for size. The State Standard size was established prior to IDPH code changes for the PACU.

On March 4, 2011, the Code was changed to allow visitors to be in the PACU. Introducing additional people to the unit required that additional space be available to accommodate each patient having one or two visitors. The Code also required another staff member to oversee and assist the visitors.

The Advocate Good Shepherd Hospital PACU is designed with patient, visitor and safety in mind. Accommodating the visitors is considered a current best practice, requiring additional space not readily available in the current unit or in the current state standards. For these reasons, the PACU space exceeds the pre 2011 State Standards. Similar to this Advocate Good Shepherd CON, in two other recently submitted and approved CON applications, PACU was the only area that exceeded the state standard on space. The CON applications were #11-019 Advocate Christ Medical Center Ambulatory Pavilion and #12-066 Advocate Christ Medical Center Patient Tower. Both applications cite the 2011 change in Code for PACU as the reason for the larger size PACU.

The PACU bays are designed to the Advocate Corporate standard, developed by 45 clinical and facility experts across the Advocate system to enhance patient safety, the patient experience and staff efficiency. With all of the PACU bays designed to the same standard, the layout of each bay is standardized, improving efficiency and safety. In case of an emergency when urgent response is needed, the clinician will immediately know location of the critical technology and facility components.

The new unit will not only provide more space for visitors, now allowed under the recently amended Illinois code, and accommodate the additional staff required by code to manage those visitors, the design will correct several other facility deficiencies. The larger unit will provide more support space for each patient, as well as making it quiet and private, important in a healing environment. The new design provides an improved line of sight with workstations in each bay, enhancing patient safety and more space for staff support.

### 3) Utilization

#### A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

#### B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

There are no utilization standards for PACU stations.

#### C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

IDPH Hospital Licensing Code 250, Section 250.2440, i) 4) b) defines "A minimum of one recovery room bed shall be provided for each operating room". Advocate Good Shepherd Hospital is proposing 15 operating rooms to be supported by 18 PACU stations. The three additional PACU stations are required to support the additional procedural rooms located in the interventional suite for cardiac catheterization, interventional radiology, and electrophysiology services, given the level of anesthesia/sedation that could be anticipated.

**Advocate Good Shepherd Hospital has justified the need for 18 Phase I Recovery (PACU) Stations. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Phase II Recovery (Prep &amp; Recovery)</b>	A-04

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Currently, Advocate Good Shepherd Hospital has three separate pre-procedural preparation/post-procedural recovery areas, one each for (1) surgery, (2) cardiac catheterization, and (3) interventional radiology. These three areas will be integrated in the new Project. Consolidating the three separate areas into one larger area leverages the use of valuable resources, reducing redundant costs. The new larger area will also correct the current inadequate number of bays for surgery patients. Due to the lack of available bays, surgeries are often delayed due to bays not being available to prepare the patient. At the other end of the case, patients are often held in an operating room after surgery waiting for a Phase II recovery bay. Both situations adversely affect patient care and staff efficiency.

Phase II Recovery will be expanded to serve the unmet needs of the current surgery volume, the growing demand from the additional operating rooms as well as accommodate the cardiac catheterization and interventional radiology procedure patients being relocated from locations with their own prep/recovery areas to the interventional platform, to more efficiently use shared space. The area is sized to accommodate the 15 Surgery Operating Rooms (Class C) justified in Section A-01, the one Cystoscopy (Class B) procedure room justified in Section A-02 and the four interventional rooms for cardiac and non cardiac procedures, justified in the Cardiac Catheterization Category of Service, and A-06 Interventional Radiology - Non-Cardiac in the Clinical Service Area.

The current arrangement of curtains separating bays will be replaced with solid walls and a door, providing more privacy and a calmer place for patients to heal. The larger rooms will more easily accommodate family members, wanting to support the patient during the pre procedure preparation or post procedure recovery. The modernized unit will also offer upgraded and more easily accessible workstations for the nurses and support staff, enhancing staff responsiveness, patient safety and staff efficiency. The overall patient and staff flow will be streamlined, improving the patient experience and staff effectiveness.

The area for family waiting will be expanded and updated to provide families with more space and a calmer environment. This will be a vast improvement over the current surgery waiting area, located in a busy corridor and in an elevator vestibule, with a high volume of public traffic.

The area is designed based on Lean principles and will be flexible, to accommodate changing patient needs.

### 3) Utilization

#### A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

#### B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

There are no utilization standards for Phase II Prep-Recovery stations.

#### C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

IDPH Hospital Licensing Code 250, Section 250.2440, i) 4) b) requires a minimum of 4 recovery stations for a surgery operating room that accommodates outpatients. The State has interpreted that to be a combination of one Phase I (PACU) and three Phase II Prep & Recovery rooms.

Advocate Good Shepherd Hospital is proposing 15 Class C surgical operating rooms

15 ORs x 4 recovery rooms = 60 recovery rooms, minimum

The proposed Project will have 18 PACU rooms and 52 Phase II Prep-Recovery rooms for a total of 70 recovery rooms. Therefore, the minimum requirement of 60 rooms has been met.

Of the 10 additional above the 60 minimum required by code, IDPH is requiring an additional three PACU and seven phase II recovery bays to support the cystoscopy room and the four catheterization, EP, and IR procedure rooms located in the interventional suite, all used by outpatients

**Advocate Good Shepherd Hospital has justified the need for  
52 Phase II Recovery rooms.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Central Sterile Processing</b>	A-05

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

In Section A-01, Surgery Operating Rooms (Class C), Advocate Good Shepherd Hospital justified the need for 15 operating rooms. In Section A-02 Surgical Procedure Suite – Cystoscopy (Class B), the Hospital justified the need for one procedure room. In the Cardiac Catheterization Section and A-06 Interventional Radiology, the Hospital justified the need for four interventional rooms for cardiac and non-cardiac procedures. Central Sterile Processing will be used to support these operating and procedure rooms as well as labor and delivery and the emergency department. Furthermore, the department manages all emergency crash carts, emergency airway supply packets, ear nose and throat and genitourinary emergency carts.

As a result of increased number of procedure rooms and volume and the advancements in technology and in clinical practice, the department is inadequate in size to meet the demands of the departments that Central Sterile Processing supports. Advocate Good Shepherd Hospital performs many advanced surgical procedures which not only demand more instrumentation but require additional space to process. The current 5,002 dgsf facility is too small for the current volume of work, and faces a daily challenge over space to store equipment and carts to keep them out of hallways. The proposed department will have 8,620 dgsf with well planned storage.

## 3) Utilization

## A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

**B) Service or Facility**

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

There are no utilization standards for Central Sterile Processing.

**C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.**

IDPH Hospital Licensing Code 250, Section 250.2440 i) 7) requires a central sterilizing and supply room, to be either within the surgical suite or provided as a separate department within the hospital. The service as planned will be a separate department.

The 2010 Facilities Guideline Institute and the American Institute of Architects have provided the guidelines for the design of the proposed Central Sterile Processing department. The guidelines call for space for initial cleaning, sterilization and disinfection of all medical/surgical instruments and equipment. Pass-through doors and washer-sterilizer decontaminators are designed to deliver items into the clean processing area. The department will contain worktables, counters, hand-washing stations, and storage facilities for backup supplies, instrumentation, and carts.

**Advocate Good Shepherd Hospital has justified the need for a Central Sterile Processing department.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Interventional Radiology - Non-Cardiac</b>	A-06

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

One of the central features of the Project is the development of an interventional platform co-locating surgery and other interventional procedures. As the level of complexity increases in both the Cardiac Cath Lab and the Interventional Radiology suites, being in close proximity to the operating suite provides a higher level of safety for the patient, if it becomes necessary to perform an invasive emergency procedure. Interventional radiology is planned to be located in the interventional platform, integrated with electrophysiology and cardiac catheterization and adjacent to the operating rooms. These interventional services will share Phase I Recovery (PACU), Phase II preparation and recovery, and support spaces, including family waiting.

This patient care redesign was developed based on Lean principles, allowing for shared resources to improve patient care and staff efficiency. This novel approach enhances the range of support services available for patients and families and effective utilization of equipment and facilities. A broader scope of staff is better able to accommodate the peaks in volumes as well as emergency and unexpected situations. The shared equipment and resources also provide backup in case of failure of equipment or systems. The plan is developed to be flexible to meet the changing needs of patients and the industry.

Since Advocate Good Shepherd Hospital began offering interventional radiology, it and has received strong patient and referring physician support. The concept of image guided medicine has led to innovative procedures such as the following:

- Diagnostic Arteriography, to identify arterial blockages or abnormalities
- Vascular Recanalization, to reopen vessels
- Vascular Embolization, to treat vascular bleeding
- Tumor Chemoembolization, a treatment for liver cancer
- Preoperative Tumor Embolization, to block blood supply to a tumor

- Biliary Procedures, to visualize and treat the liver and gallbladder
- Hemodialysis management, for patients with kidney failure
- Uterine Fibroid Embolization, to treat fibroid tumors

The procedures are performed by interventional radiologists. Their skill and insight will augment the team in the new interventional platform, by being co-located with surgery and cardiac catheterization.

Due to the current age of the equipment and five year duration until the Project is complete, the equipment in Interventional Radiology is anticipated to be replaced or upgraded during the course of the Project. While this equipment would be regularly replaced or updated due to obsolescence or the equipment coming to the end of its normal lifecycle as part of the annual capital process, this routine capital expenditure is included in the CON Project because the equipment touches an area of service included in the modernization Project. This is particularly important as the function is moving, and relocating older equipment is not cost effective. The new equipment will offer improved advanced technology including low-dose radiation.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

Interventional Radiology was first reported in the Annual Hospital Questionnaire in 2010 (listed as interventional angiography). The demand for the past two years has been very consistent:

	2010	2011	% change 2010-2011	Compound Annual Growth Rate
Interventional Radiology Procedures	2,080	2,060	-1.0%	-1.0%

Source: Annual Hospital Questionnaires and IHFSRB Hospital Profiles

Should the trend continue, the Compound Annual Growth Rate (CAGR) shows the utilization for 2019 as:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
-1.0%	2,040	2,021	2,001	1,982	1,963	1,944	1,925	1,907

The utilization would support two units:

$$1,907 \text{ procedures} \div 1,800 \text{ procedures/unit} = 1.1 \text{ unit, rounded to 2 units}$$

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

There is a standard and Advocate Good Shepherd Hospital has met it.

**Advocate Good Shepherd Hospital has justified the need for two Interventional Radiology units. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Surgical Procedure Suite – Endoscopy, Class B</b>	B-01

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

The Hospital has been advised by DNV, the hospital's accrediting body, in its 2012 site visit survey, that a better physical separation must occur in the endoscope cleaning area, so that clean and dirty processing events each has its own room. The need for a separate clean scope storage room was also noted. All of these deficiencies will be corrected in this Project. A temporary solution acceptable to DNV has been implemented, with the knowledge that a permanent solution will be forthcoming.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital offers endoscopy procedures for gastrointestinal and pulmonary studies in a distinct, stand-alone five room suite. The suite is supported by nine Phase II prep and recovery rooms. There are 15 gastroenterologists, one colorectal surgeon, and 9 pulmonologists that use the service.

The Surgical Procedure suite is the department where endoscopy is used to look inside the body for medical reasons using a flexible endoscope (an instrument used to examine the interior of a hollow organ or cavity of the body). Unlike most other medical imaging devices, flexible endoscopes are inserted directly into the organ where direct line of-sight observation is not feasible. A fiber optic light delivery system illuminates the anatomy under examination. The image is projected onto a monitor for the physician's review and pictures can be taken immediately for patient education. A biopsy tool is used to obtain specimens for examination or a homeostasis instrument is used to cauterize bleeding vessels.

The Hospital has partnered with the American Cancer Society and a Federally Qualified Health Center to provide 50 free colonoscopies annually in order to increase the colorectal screening opportunities for the communities served by Advocate Good Shepherd. The Patient Protection and Affordable Care Act signed into law in 2010, requires health plans to include these screenings with no co-payment. These initiatives will lead to increased procedure volume at Advocate Good Shepherd. A significant trend of younger patients with Gastroesophageal Reflux Disease (GERD) causing gastrointestinal pain is also driving GI lab volume. Informed patients are seeking diagnosis and treatment.

The proposed Project involves the modernization of one of the five procedure rooms. Currently only one procedure room has negative pressure. A second procedure room with negative pressure is needed to accommodate the increase in patients that require isolation during procedures, such as bronchoscopies. An existing room will be retrofitted to provide a second room with negative pressure capabilities. The modernization will provide better access to the nearby patient toilet that is needed by patients in this procedure room, better access to the ante room for the new isolation room, and installation of a new monitor boom in the same procedure room, to replace the current one that is not stable and out of date.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

Dedicated endoscopy studies were first reported in the Annual Hospital Questionnaire in 2005. The demand for the service has remained strong:

	2005	2006	2007	2008	2009	2010	2011	% change 2005-2011	Compound Annual Growth Rate
Endoscopy procedures	3,439	6,608	6,680	7,014	5,516	5,147	5,070	47.4%	6.7%

Source: Annual Hospital Questionnaires and IHFSRB Hospital Profiles

Should the trend continue the Compound Annual Growth Rate (CAGR) shows the utilization for 2019 as:

CAGR Projected Utilization									
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019	
6.7%	5,409	5,770	6,156	6,567	7,006	7,475	7,974	8,507	

Using that projection, the demand for six rooms is shown:

$$8,507 \text{ procedures} \div 1,500 \text{ procedures/room} = 5.7 \text{ rooms, rounded to 6 rooms}$$

The Hospital is conservatively proposing to continue the five-room suite it currently operates. One of the rooms needs modernizing to update an outdated monitor boom and provide additional negative pressure room capacity within the department.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

There is a standard and the Hospital has met it.

**Advocate Good Shepherd Hospital has justified the need for  
five Surgical Procedure Rooms for Endoscopy – Class B.  
This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Phase II Prep &amp; Recovery – Endoscopy</b>	B-02

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

In Section B-01, Surgical Procedure Rooms – Endoscopy, Class B, Advocate Good Shepherd Hospital justified the need for 5 surgical procedure rooms. Additional Phase II Prep & Recovery stations are needed to support these procedure rooms and meet State requirements.

## 3) Utilization

## A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

## B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

There is no State Standard for utilization of Phase II Prep and Recovery stations. Instead, the minimum number of stations required is dictated by the number and type of surgical procedure rooms.

## C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The State has indicated it requires a minimum of 2 recovery stations for every Surgical Procedure Room where outpatients are treated. There are five procedure rooms in the

Endoscopy department currently and they are proposed to remain with one being modernized in the proposed Project.

5 surgical procedure rooms x 2 recovery rooms = 10 recovery rooms, minimum

The throughput of incoming patients for prep, and into the Procedure Rooms can be slowed if the recovering patients are not ready to be discharged. With only 9 prep & recovery bays currently supporting 5 procedure rooms, the Hospital does not presently adhere to the State requirements. To address this, the Hospital is expanding from 9 stations to 15 stations, thereby meeting the minimum requirement.

The five additional prep and recovery stations are needed to accommodate timely throughput of patients to ensure department and physician productivity and decrease the current bottlenecks that exist today. Additionally, Endoscopy has seen an increase in the acuity of the patients being treated and therefore additional prep and recovery bays are needed due to the variation in procedure and recovery times. All "stations" will be in separate rooms to provide privacy to ensure compliance with HIPAA standards, minimize the spread of infection, and provide patients, families and physicians a quiet space to explain procedures and discuss the outcomes and follow-up needed.

**Advocate Good Shepherd Hospital has justified the need for  
15 Phase II Prep & Recovery Rooms for Endoscopy**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Chronic Care (Diabetic, Anticoagulant, Chronic Heart Failure)</b>	C-01

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital has been providing outpatient care to monitor and support patients with chronic illnesses, such as diabetes, congestive heart failure and patients needing their Coumadin levels regularly evaluated. These services have been provided in separate locations, including leased space outside the hospital. The Project will provide space in the hospital to co-locate these services, enhancing care coordination, staff efficiency and the patient experience.

The current diabetes program offers a site where diabetic and pre-diabetic patients can get their blood sugar and Hemoglobin A1c tests performed easily, with appropriate support and education as needed. The Diabetes Self-Management Education Program at Good Shepherd Hospital has been re-certified and re-awarded with recognition by the American Diabetes Association.

The Coumadin program checks anticoagulant levels and adjusts medications. A nurse supports patients with congestive heart failure by providing education about their condition and answers to their concerns. The service reinforces the patients' understanding of their treatment plans and assures they stay on the regimen of care. This program will be relocated from its current location into the Chronic Care space.

As the goals of the Affordable Care Act and the need to support patients to remain healthy and out of inpatient units become more pressing, patients will have a growing need for a place to obtain support and help break the cycle of repeat admissions to the hospital.

Currently, the services for chronic care outpatients are dispersed in three locations throughout the hospital and even in rental space in a nearby medical office building. With this Project, more space will become available in the Hospital, allowing for the chronic care services to be co-located in a central location, sharing resources, improving coordination, and reducing costs. Many of these chronic disease patients have co-morbidities in more than one chronic disease. By co-locating these services, services will be more accessible and coordinated. Also with the relocation of diabetes from the medical

office building, the hospital no longer needs to pay rent to the building owner. By relocating these services back into the main hospital, this will open up additional office space for physician practices to rent office space on campus. The proposed space is designed to be flexible, to be easily modified as new patient needs arise.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The State Standard applies as Ambulatory Care. The standard is 800 sf for every 2,000 visits. From the table below, it is easy to see the major growth of the patients for anticoagulation testing. The Chronic Heart Failure sessions began in 2012 so a full year of data was not available. Therefore a conservative estimate of 390 visits per year was used to predict that volume.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Diabetic visits	234	458	846	419	317	351	360	309	32.1%	4.1%
Anticoag visits	2,988	4,055	4,278	5,569	6,881	10,566	11,267	11,284	277.6%	20.9%
CHF (New in 2012)										

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 is:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
Diabetic: 4.1%	322	335	348	362	377	392	408	425
Anticoag.: 20.9%	13,643	16,495	19,943	24,112	29,152	35,246	42,613	51,521
New CHF	390	390	390	390	390	390	390	390
Total								52,336

$$52,366 \text{ visits} \div 2,000 \text{ visits per } 800 \text{ dgsf} = 26.2 \times 800 \text{ dgsf} = 20,960 \text{ dgsf}$$

While this calculation indicates 20,960 dgsf is needed, in fact the Chronic Care service is proposed to be located in 3,207 dgsf, within the standard.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

There is a standard for ambulatory care at 2,000 visits per 800 sf and the Hospital has met it.

**Advocate Good Shepherd Hospital has justified the need for 3,207 dgsf for the Chronic Care service. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Infusion Therapy</b>	C-02

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Providing infusion services is an important component to the Advocate Good Shepherd Hospital cancer care program. Infusion therapy includes blood transfusions and infusion of other medications, as well as chemotherapy. Chemotherapy is usually given over several hours.

A chemotherapy outpatient visit is very long, including the following steps: the patient is assigned to a treatment chair; blood is drawn and sent to the lab; vital signs are taken; lab test is conducted and results sent back to the chemotherapy staff. Staff then contacts the pharmacy to mix the chemotherapy; at that point the IV may be started, the pre-treatment medications administered, and the infusion given.

The Hospital has thirteen oncologists on staff. The recent addition of two Gynec-Oncologists to the medical staff will likely add to the volume of current infusion therapy patients.

The service proposes to expand into modernized space which will be 15% larger than the current space. This expanded space will allow for more treatment capacity, and several treatment bays will be enhanced to become larger. Some of the bays will be enclosed, affording more privacy and quiet. The overly crowded support space will be expanded providing more staff workspace and storage.

## 3) Utilization

## A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

**B) Service or Facility**

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The State Standard applies as Ambulatory Care. The standard is 800 sf for every 2,000 visits. The historical pattern of visits for chemotherapy and non-chemo infusion is shown below. (Note: data for the non-chemo infusion is only available by a laborious process of counting department records, so that work was done for the base year of 2004 and 2008 forward to establish the trend line.)

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Chemotherapy	304	344	389	440	498	564	638	722	137.50%	13.20%
Non chemo infusion	4,878				6,526	7,288	5,984	5,939	21.75%	2.85%

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 is:

	CAGR Projected Utilization								
	Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
Chemotherapy	13.20%	817	925	1,046	1,184	1,340	1,516	1,715	1,941
Non chemo infusion	2.85%	6,108	6,283	6,462	6,646	6,835	7,030	7,231	7,437

Recognizing that the chemotherapy patients stay for an extended period of time, it is necessary to establish an appropriate amount of time the State allows for these visits. According to the Board rules, the term ambulatory care means medical care that is provided on an outpatient basis.

The Hospital assumed that the average time for an ambulatory visit under the Section 1110. Appendix B guideline could be determined by taking room utilization time for surgery (the only such calculation in the State Agency Rules) and the number of visits proposed per room. In section 1110.1540, the State Agency Rules propose the following formula for determining hours of operation per surgery room:

$$250 \text{ days per year} \times 7.5 \text{ hours per day} \times 80 \text{ percent occupancy} = \\ 1,500 \text{ hours of surgery per room per year}$$

The Hospital then divided the hours per room by the number of visits required to justify an Ambulatory Care Service.

$$1,500 \text{ hours per room} \div 2,000 \text{ visits per room} = 0.75 \text{ hours or } 45 \text{ minutes per visit}$$

By using these two factors – hours of time per room and number of visits per room – the Hospital determined that the average time proposed by the State Standard for an ambulatory care visit was 45 minutes.

The average treatment time for a chemotherapy visit is 3.2 hours. (The Advisory Board, a national health care intelligence firm has also studied this issue. The Advisory Board Oncology Roundtable “*Blueprint for Growth II*” reported that the average infusion length is 3.5 hours.) This is 4.3 times longer than the State Standard for an ambulatory visit of 45 minutes.

$$3.2 \text{ hours} \times 60 \text{ min per hour} = 192 \text{ minutes}$$

$$192 \text{ minutes} \div 45 \text{ minutes State Standard for Ambulatory Care visit} = 4.3 \text{ multiplier}$$

To calculate the sf needed:

$$1,941 \text{ chemotherapy visits in 2019} \times 4.3 \text{ multiplier} = 8,347 \text{ equivalent visits}$$

$$8,347 \text{ equivalent chemotherapy visits} + 7,437 \text{ non-chemo visits} = 15,784 \text{ visits}$$

$$15,784 \text{ visits} \div 2,000 \text{ visits per } 800 \text{ sf} = 7.89 \text{ factor}$$

$$7.89 \text{ factor} \times 800 \text{ sf} = 6,312 \text{ dgsf needed}$$

This adjustment approach has been used in other CON applications and accepted by the Review Board. Infusion Therapy service is proposed to be located in 3,014 dgsf, within the standard.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

There is a standard for ambulatory care of 2,000 visits per 800 sf and the Hospital has met it.

**Advocate Good Shepherd Hospital has justified the need for  
3,014 dgsf for Infusion Therapy.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Cardio-Diagnostics (Echo, Echo Stress)</b>	D-01

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 4) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 5) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital provides a full range of both invasive and non-invasive diagnostic cardiology services. The services addressed in this section include Echocardiography, Stress Testing, EKG's and Holter Monitoring. The growing importance of these tests is anticipated with the aging of a population committed to remaining active. By identifying and addressing cardiovascular disease, early treatment can be initiated, reducing admissions and cost, while improving the overall quality of life.

Due to the need to expand endoscopy preparation and recovery bays, cardio diagnostics must relocate. The current 1,025 sf site is very crowded, particularly difficult to optimize patient privacy and safety. Additional space is needed. As an example, the current space has no dedicated area for patients to wait during the "resting" phase of their tests, except for public hallways. Due to lack of space in the main department, one of the procedure rooms is remotely located from the rest of the department creating inefficiencies and causing a potential safety issue, in case of emergency when a second clinician is needed.

The proposed Project would relocate the service to 1,742 dgsf of modernized space with examination rooms, supported by patient changing area, and appropriate staff space to process the results. The larger space will provide enhanced patient privacy, safety, work flow, and expanded rooms to accommodate the larger, more advanced equipment.

Cardio-Diagnostics will be co-located with the other key diagnostic services (e.g., imaging, specimen collection, pulmonary function testing, pre admission testing and counseling) in the diagnostic testing center. The location of the testing center at the front of the Hospital provides patients with easy access through a single portal to the key diagnostic testing services. This co-location of the diagnostic testing services allows for enhanced patient convenience, improved service coordination, streamlined patient flow, shared resources, and improved operating efficiencies.

One of the key advantages in this clinical area is the consolidation of nuclear medicine. Currently, there are two locations for nuclear medicine with two separate hot labs, one serving nuclear cardiology within the diagnostic cardiology area and a second serving nuclear imaging within the imaging department. By co-locating cardiovascular diagnostic testing adjacent to imaging, a single, consolidated nuclear medicine area with only one hot lab and only two rather than four nuclear medicine procedure rooms can serve both nuclear cardiology and nuclear medicine imaging. The consolidated department reduces facility and operating needs by one hot lab, two procedure rooms, and support space for patient waiting, staff work space, staffing, equipment and supplies. For the purpose of this CON, nuclear medicine is addressed in E-03, Nuclear Medicine.

6) Utilization

D) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

E) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The historical pattern of procedures is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Cardio - Diagnostic Procedures	27,332	30,917	31,158	31,874	25,002	16,423	26,085	27,616	1.0%	0.1%

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 is:

CAGR Projected Utilization									
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019	
0.1%	27,657	27,698	27,739	27,780	27,821	27,862	27,903	27,944	

There are no state standards for utilization.

F) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

While not a typical Ambulatory Care department, applying the ambulatory care department ratios yields:

$$27,944 \text{ Procedures} \div 2,000 \text{ Procedures per 800 dgsf} = 14 \times 800 \text{ dgsf} = 11,200 \text{ dgsf}$$

The Hospital is only seeking 1,742 dgsf, less than the calculated space.

**Advocate Good Shepherd Hospital has justified the need for 1,742 dgsf for Cardio-Diagnostics. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Pre-Admission, Specimen Collection &amp; Electrocardiograms</b>	D-02

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital has a goal to expedite the care of outpatients and the pre-procedure testing of both inpatients and outpatients.

The effective coordination and administration of pre-surgery/pre-anesthesia assessment has been identified as critical to patient safety within the Advocate system as a part of the system's Safer Surgery Initiative. This Project will provide space for a patient to meet with the Pre-Admission Testing Nurse in person prior to the admission or procedure, providing more opportunities for pre-procedure training and family education. The advantages of this consultation include: 1) safe surgical preparation, 2) thorough patient education, 3) reduction in day-of-surgery cancellations and delays, 4) increased patient safety through reduction of surgical complications, and 5) reduction of potentially avoidable re-admissions post surgery.

Currently, there is inadequate space available for in-person consultation; therefore, consultations are primarily conducted over the phone.

The service is also used for the patient who is not expecting to have a procedure but needs testing performed at the Hospital. These services will be relocated to the diagnostic testing center. The proposed Project co-locates the key diagnostic testing services of cardio diagnostics, pulmonary function, pre-admission testing/consultation, lab draw/specimen collection and imaging into a diagnostic testing center. This design allows for enhanced patient convenience, improved service coordination, streamlined patient flow, shared resources, and improved operating efficiencies.

The current 715 sf site is too small to accommodate the in-person nurse consultations, and the proposed Project would relocate the service to 1,679 dgsf of modernized space with specimen collection stations and private areas for the nursing consults to occur.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The historical pattern of tests and consults is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Spec. Collection	24,726	23,859	21,408	23,112	21,391	20,503	17,136	17,741	28.2%	-4.6%
EKG	2,861	3,110	2,606	2,574	2,563	2,108	2,507	2,687	-6.1%	-0.9%
PAT Nurse consult								Limited due to space		
Total								20,428		

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected is:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
-4.6%	16,919	16,136	15,388	14,675	13,996	13,347	12,729	12,140
-0.9%	2,663	2,639	2,616	2,592	2,569	2,546	2,524	2,501
PAT Nurse consult.								
Total	19,582	18,775	18,004	17,268	16,565	18,894	18,253	17,641

There are no state standards for utilization.

C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

While this is not considered an ambulatory care department, applying the ambulatory care department ratios yields:

$$17,641 \text{ visits} \div 2,000 \text{ visits per } 800 \text{ dgsf} = 8.8 \times 800 \text{ dgsf} = 7,040 \text{ dgsf}$$

The Hospital is only seeking 1,679 dgsf, less than the calculated space.

**Advocate Good Shepherd Hospital has justified the need for 1,679 dgsf for Pre-Admission, Specimen Collection and Electrocardiograms. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area

Clinical List Designation

**Pulmonary Function**

D-03

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Pulmonary function tests (PFTs) are non-invasive diagnostic tests that provide measurable feedback about the function of the lungs. By assessing lung volumes, capacities, rates of flow, and gas exchange, PFTs provide information that can help diagnosis of certain lung disorders. Pulmonary Function tests are useful in evaluating:

- Allergies
- Chronic lung conditions, such as asthma, emphysema, and chronic bronchitis
- Asbestosis
- Chest trauma, such as impact of fractured ribs
- Respiratory infections
- Risk of complications from anesthesia

Pulmonary function needs to be relocated to allow for the needed expansion of infusion and will be relocated to the diagnostic testing center. The proposed Project co-locates the key diagnostic testing services of cardio-diagnostics, pulmonary function, pre-admission testing/consultation and lab draw/specimen collection and imaging into a diagnostic testing center. This design allows for enhanced patient convenience, improved service coordination, streamlined patient flow, shared resources, and improved operating efficiencies.

## 3) Utilization

## A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

**B) Service or Facility**

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The historical pattern of procedures is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Pulmonary Function Procedures	7,898	8,127	8,012	10,028	11,626	10,286	10,618	9,424	19.3%	2.6%

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 is:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
2.6%	9,665	9,912	10,165	10,425	10,691	10,965	11,245	11,532

There is no utilization standard for Pulmonary Function.

**C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.**

While this is not a typical ambulatory care department, utilizing the ambulatory ratio standards yields:

$$11,532 \text{ procedures} \div 2,000 \text{ visits per } 800 \text{ dgsf} = 5.8 \times 800 \text{ dgsf} = 4,640 \text{ dgsf}$$

The Hospital is only seeking 724 dgsf, under the calculated space.

**Advocate Good Shepherd Hospital has justified the need for 724 dgsf for Pulmonary Function. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>General Radiology-Fluoroscopy</b>	E-01

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. No equipment or facilities is deteriorated.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital operates general radiology at the main campus of the hospital in the Imaging and Emergency Departments. The Hospital also provides fluoroscopy in the imaging department. In addition to the main campus, there are x-ray units in three satellite outpatient imaging centers in the communities of Lake Zurich, Crystal Lake and Algonquin. These satellite locations provide convenient access to the communities where they are located and the physicians in the outpatient centers. The outpatient centers are covered by the same radiologists who read imaging studies at the Hospital. The procedures occurring in the outpatient centers are reported together in the Annual Hospital Questionnaire. A full complement of procedures is offered, supported by 18 radiologists.

One of the goals of the proposed Project is to separate inpatients and outpatients, providing for an enhanced environment of care, greater privacy and improved patient flow and staff efficiency. The new location provides outpatients with direct, easy, streamlined access in a more welcoming and healing environment without comingling the healthier outpatients with the more frail inpatients. The area will have more support space for the staff and the patients, and the design will improve staff and patient work flow.

Due to the current age of the equipment and five year duration from the start of construction until the Project is complete, the equipment in this department is anticipated to be replaced or upgraded during the course of the Project. While this equipment would be regularly replaced or updated due to obsolescence or the equipment coming to the end of its normal lifecycle as part of the annual capital process, this routine capital expenditure is included in the CON Project because the equipment touches an area of service included in the modernization Project. This is particularly important as the function is moving, and relocating older equipment is not cost effective.

The department based at the main campus will expand from 2,552 dgsf to 2,910 dgsf, with 85% of it in modernized space, and the remaining 15% will be as is. The satellite services will remain intact.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The historical pattern of procedures is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Rad/Fluoro Procedures including DEXA as reported in AHQ	39,973	44,280	46,940	47,313	54,317	59,648	55,135	54,826	37.2%	4.6%
Rad/Fluoro only (DEXA reported in bone density service of this application)	39,973	42,801	45,535	45,586	52,457	58,208	53,892	53,430	33.7%	4.2%

Source: Annual Hospital Questionnaire and Hospital Profiles

Note that OPs were missed in the original 2008 AHQ and a correction was submitted later that year.

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 for Rad/Fluoro (excluding DEXA) is:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
4.2%	57,129	59,528	62,028	64,633	67,348	70,177	73,124	76,195

The State standard for Radiology is 8,000 procedures per unit

$$76,195 \text{ procedures} \div 8,000 \text{ state standard per unit} = 9.5, \text{ rounded to 10 units}$$

The Hospital is proposing to continue to operate eight general radiology/fluoroscopy units. (The 11 units reported in the AHQ have included the 3 Bone Density DEXA units with the 8 general radiology and fluoroscopy units. These DEXA units along with the DEXA volume are discussed in the E-07 Bone Density section of this CON.)

The Hospital will keep the three satellite general radiology units and have five units at the main campus. The five units at the main campus will include two units with Fluoroscopy capability.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

There is a standard and the Hospital meets the standard.

**Advocate Good Shepherd Hospital has justified the need for eight radiology/fluoroscopy units. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Magnetic Resonance Imaging</b>	E-02

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. No equipment or facilities are deteriorated.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital operates magnetic resonance imaging (MRI) at the main campus of the hospital. In addition to the main campus, there are satellite units in Lake Zurich and Crystal Lake. As is the case with other imaging modalities, the satellite units serve to provide increased access to the communities where they are located and the physicians in the community.

The MRI is currently located in a separate attached building, remote from the imaging department and distant from other patient care areas and support services for the patients and staff. The new MRI location will be within the imaging department providing patients with an enhanced environment of care, greater support services, safety, and improved staff efficiency.

Due to the current age of the equipment and five year duration until the Project is complete, the equipment in this department is anticipated to be replaced or upgraded during the course of the Project. While this equipment would be regularly replaced or updated due to obsolescence or the equipment coming to the end of its normal lifecycle as part of the annual capital process, this routine capital expenditure is included in the CON Project because the equipment touches an area of service included in the modernization Project. This is particularly important as the function is moving, and relocating older equipment is not cost effective.

The Hospital based unit will be relocated from its 1,165 dgsf space (which will be demolished) to 2,662 dgsf modernized space.

## 3) Utilization

## A) Major Medical Equipment

B)

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

C) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The historical pattern of procedures is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
MRI Procedures	1,714	1,892	2,021	5,013	5,544	6,367	6,137	6,087	255.1%	19.8%

Source: Annual Hospital Questionnaire

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 is:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
19.8%	7,295	8,743	10,478	12,558	15,050	18,037	21,617	25,907

The State Standard for Magnetic Resonance Imaging is 2,500 procedures per unit:

$$25,907 \text{ procedures} \div 2,500 \text{ procedures per unit} = 10.4 \text{ units, rounded to 11 units}$$

The Hospital is proposing to be conservative and operate 3 units. It will keep the two satellite units and have one at the main campus.

D) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The Hospital meets the standard.

**Advocate Good Shepherd Hospital has justified the need for three magnetic resonance imaging units. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Nuclear Medicine</b>	E-03

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. No equipment or facilities are deteriorated.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital provides nuclear medicine using four units at the main campus of the hospital in two locations using two separate hot labs - one in the imaging department and one in cardiovascular diagnostic testing. In the proposed Project the Hospital is planning to consolidate the nuclear medicine service. The nuclear medicine service will co-locate both imaging and cardiovascular diagnostic nuclear medicine into one area, reducing from two hot labs to one hot lab and from four nuclear medicine exam rooms to two nuclear medicine exam rooms

This realignment will reduce resources and expenses, both capital (number of exam rooms and hot labs) and the operating expenses (equipment maintenance, staffing, and supplies). This reduction in units is consistent with recent industry trends of declines in nuclear medicine volume. The recent declines in volumes are expected to stabilize with additional applications of nuclear medicine, such as for the care of Alzheimer's patients.

Due to the current age of the equipment and five year until the Project is complete, the equipment in this department is anticipated to be replaced or upgraded during the course of the Project. While this equipment would be regularly replaced or updated due to obsolescence or the equipment coming to the end of its normal lifecycle as part of the annual capital process, this routine capital expenditure is included in the CON Project because the equipment touches an area of service included in the modernization Project. This is particularly important as the function is moving, and relocating older equipment is not cost effective.

Nuclear medicine will be consolidated and relocated from its 3,932 dgsf space to 2,112 dgsf modernized space.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

Nuclear Medicine is a case where history is not the best predictor for the future. To better anticipate the volume of work in the future, the growth of inpatients and outpatients were separately assessed and those rates applied to the current volume of inpatient and outpatient nuclear medicine procedures.

**Inpatient Utilization**

The inpatient history in the Medical-Surgical-Pediatric and ICU beds is shown below:

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Total M/S, Peds and obsv days	28,649	31,479	34,386	35,267	36,888	35,788	34,100	33,128	15.6%	2.1%
ICU days	3,464	7,268	5,312	5,288	6,085	6,642	5,565	5,653	63.2%	7.2%
Total								38,761		

Source: Annual Hospital Questionnaire

The Compound Annual Growth Rate (CAGR) forecast for utilization in 2019 is shown below:

	Compound Annual Growth Rate	CAGR Projected Utilization							
		2012	2013	2014	2015	2016	2017	2018	2019
M/S/Peds Days	2.1%	33,823	34,532	35,256	35,995	36,750	37,521	38,307	39,110
ICU Days	7.2%	6,063	6,502	6,973	7,479	8,021	8,602	9,225	9,894
Total									49,004

The change in inpatient volume for medical-surgical-pediatric and ICU, from 2011 to 2019, is:

$$49,004 \text{ days} - 38,761 \text{ days} = 10,243 \text{ days increase}$$

10,243 days increase ÷ 38,761 base year days = 26% growth

The outpatient volume forecast was based on extensive studies of medical procedure volume conducted by Sg2, a well respected health care intelligence firm based in Skokie, Illinois. Sg2's forecast for outpatient nuclear medicine volume in the Midwest is an estimated 5% increase over the next 8 years, (a lower rate of growth than forecast for the US overall).

The pattern for nuclear medicine utilization for the past three years is as follows:

	2009	2010	2011
Nuc Med	3,388	3,123	3,504

Starting with the 3,504 nuclear medicine procedures done in 2011, the two growth measures were then applied to the Nuclear Medicine volume.

Inpatient procedures in 2011 = 793 x 126% = 999 in 2019  
 Outpatient procedures in 2011 = 2,711 x 105% = 2,846 in 2019  
 Total 3,504 in 2011 3,845 in 2019

The State standard for Nuclear Medicine is 2,000 procedures per unit:

3,845 procedures ÷ 2,000 procedures per unit = 1.9 units, rounded to 2 units

The Hospital is proposing to operate two units.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The Hospital meets the standard.

**Advocate Good Shepherd Hospital has justified the need for two Nuclear Medicine units. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Ultrasound</b>	E-04

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. The Project will not address deteriorated equipment or facilities

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital provides Ultrasound at the main hospital campus and at three outpatient center locations in Lake Zurich, Crystal Lake and Algonquin. The main hospital campus provides general, vascular and breast ultrasound. General ultrasound is provided at the outpatient centers. Because this is a cost effective methodology without radiation, it is likely to continue to be a modality of choice.

The Hospital based units will be relocated from 1,068 dgsf to 1,617 dgsf modernized space located in the breast center and the testing center. The units located in the satellite centers will remain intact. The new expanded space for ultrasound will allow for the addition of one unit to meet the expected growth in demand and may provide additional breast ultrasound capacity to provide an alternative to screening mammograms. A new technology application, screening breast ultrasound, provides the advantage of no radiation and greater patient comfort. Imaging ultrasound is a highly outpatient service, and the new ultrasound area is better situated, near the front of the hospital, providing easy outpatient access.

## 3) Utilization

## A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

## B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years,*

unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).

The pattern of utilization is shown in the table below.

	2005	2006	2007	2008	2009	2010	2011	% change 2005-2011	Compound Annual Growth Rate
Ultrasound	12,681	13,183	14,027	16,396	18,023	17,429	17,409	37.3%	5.4%

Source: Hospital Records

In the past, the reporting of breast ultrasound in the Annual Hospital Questionnaire was with the mammography numbers. See E-06 Mammography for details. Vascular Ultrasound reporting in the Annual Hospital Questionnaire was inconsistent. Hospital records were used to prepare this trend line.

The compound annual growth rate (CAGR) forecast for Ultrasound utilization in 2019 is shown below:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
5.4%	18,353	19,348	20,398	21,504	22,670	23,900	25,196	26,562

The State standard for Ultrasound is 3,100 procedures per unit:

$$26,562 \text{ procedures} \div 3,100 \text{ procedures per unit} = 8.6 \text{ units, rounded to 9 units}$$

The Hospital is proposing to operate 9 units. It will keep the three satellite units, and at the main campus will have three breast units, one vascular, and two general units.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

There is a standard and the Hospital meets it.

**Advocate Good Shepherd Hospital has justified the need for nine Ultrasound units. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Pain Treatment</b>	E-05

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. No equipment or facilities are deteriorated.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital has provided pain treatment service for several years. The volume of the cases is related to the availability of pain management physicians and referrals. There are now three pain management physicians on staff at the Hospital. The methods of treatment include medications, injections, surgical implant pumps, transcutaneous electrical nerve stimulation therapy (TENS), bio-electric therapy, and physical therapy.

The pain treatment service has been operating in a 393 sf room located in the Infusion Therapy department, due to lack of other available space. This location is less than ideal due to the intermingling of chemotherapy patients with patients receiving pain treatments. The lack of adjacency of the pain prep/recovery bays to the pain treatment rooms causes pain patients to be transported through the Infusion Therapy department. The new, modernized pain treatment area is designed with the needs of the pain patient in mind, rather than the current situation of space retrofitted within the Infusion Therapy suite. The new pain area will provide a larger, dedicated pain treatment room with immediately adjacent recovery space. The proposed Project relocates the department to 1,249 dgsf of modernized space.

## 3) Utilization

## A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The historical pattern of treatments is shown below. These cases were seen by two physicians. A volume drop in 2011 was related to the formalization of the Pain Clinic and the hiring of a medical director for the pain program and the discontinuation of pain procedures by a pain physician.

	2006	2007	2008	2009	2010	2011	% change 2006-2011	Compound Annual Growth Rate
Pain Treatments	900	785	860	986	795	584	-35.1%	-8.3%

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 is:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
-8.3%	584	536	491	450	413	379	348	319

There is no State utilization standard for Pain Treatment.

C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The utilization is linked to the availability of a physician who will treat pain patients. There are now three physicians on the Hospital medical staff with the specialty of pain management, treating patients with chronic, persistent pain. The recent addition of an Advocate-employed physician specializing in pain procedures will reverse the recent declining trend. That assumption is supported by the forecast of 1-2% growth per year of interventional pain procedures as reported by J.D. Schim in the *Journal of Pain Practice*, 2007.

The 2010 Facilities Guideline Institute and the American Institute of Architects have provided the guidelines for the design of the proposed department to be consistent with outpatient facilities.

**Advocate Good Shepherd Hospital has justified the need for one Pain Treatment room. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Mammography</b>	E-06

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. No equipment or facilities deteriorated.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital provides mammography at the main hospital campus and in three satellite locations: Lake Zurich, Crystal Lake, and Algonquin. The services at the Hospital are located in the Breast Center.

The incidence of breast cancer continues to be a cause for concern. About 1 in 8 U.S. women will develop invasive breast cancer over the course of her lifetime. For women in the U.S., breast cancer death rates are higher than those for any other cancer, besides lung cancer.

Breast cancer is also the second most commonly diagnosed cancer among American women. Almost 30% of cancers in women are breast cancers. For these reasons, early detection through mammography is so important to the community.

The Hospital also performs stereotactic or image-guided biopsies

The Hospital may offer new procedures, such as breast tomosynthesis, which could offer benefits in years to come. In digital tomosynthesis, unlike conventional mammography, minimal pressure is needed during the acquisition of the image, providing a greater level of patient comfort.

The Hospital-based mammography units will be relocated to allow for the necessary expansion of surgery and the test center. Mammography will be located in primarily modernized space, co-located with breast ultrasound and a breast health nurse navigator into a new Breast Center. (See Ultrasound, E-07) The new breast center will provide expanded space to accommodate the additional equipment to keep pace with growing demand and additional diagnostic technology. It will also allow more space for support

services such as a nurse navigator and consult rooms, and co-locating women's screening services such as bone density scanning. This new location not only provides multiple preventive services in one location, situated with easy access to the front door, but also offers enhanced patient privacy and care environment. The satellite units will not be impacted by the Project.

### 3) Utilization

#### A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

#### B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The historical pattern of mammograms is shown below. The hospital had three new offsite locations open between 2006 and 2008 which caused a significant increase in volume. The Hospital did considerable outreach to educate women that outpatient facilities were available nearby in their communities.

Breast ultrasound has been reported in the Annual Hospital Questionnaire under the category of "Mammography". In this CON the breast ultrasound has been combined with the general and vascular ultrasound and can be found in E-04 Ultrasound.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Annual Increase Projected
Mammography		11,040	18,775	12,860	9,905	20,258	19,159	19,972	80.9%	10.4%
Breast Ultrasound		2,201	2,448	2,775	2,959	3,641	3,339	3,327		
Breast proc. in AHQ	12,420	13,241	21,223	15,635	12,864	23,899	22,498	23,299		

Source: Annual Hospital Questionnaire and Hospital records. Note: includes satellite centers utilization.

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 is:

CAGR Projected Utilization								
Annual Increase Projected	2012	2013	2014	2015	2016	2017	2018	2019
10.4%	22,046	24,335	26,863	29,652	32,731	36,131	39,883	44,024

The state standard for utilization is 5,000 visits per unit.

44,024 visits ÷ 5,000 visits per unit = 8.8 units, rounded to 9 units

The Hospital is being conservative and only planning to operate six mammography units. It will also continue to have a separate room for stereotactic biopsy procedures.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

There is a standard and the Hospital meets it.

**Advocate Good Shepherd Hospital has justified the need for seven rooms, with 6 Mammography units and meets the standard**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Bone Density</b>	E-07

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. No equipment or facilities deteriorated.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital provides Bone Density procedures at the main hospital campus and in two outpatient centers: Lake Zurich and Crystal Lake. The services at the Hospital are located in the Breast Center.

Bone Density scanning, also called dual-energy x-ray absorptiometry (DEXA) or bone densitometry, is an enhanced form of x-ray technology that is used to measure bone loss. The test can also assess an individual's risk for developing fractures. As the population ages, it is expected that there will be more people at risk for fractures.

The bone density service, heavily used by post menopausal women, will be relocated to be within the breast center. Bone density procedures will be conveniently located at the front entrance to the Hospital along with mammography, providing easy and convenient access for women needing these screening services. This new location within the breast center affords patients more privacy than the current location directly off a main corridor with much public traffic.

## 3) Utilization

## A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

**B) Service or Facility**

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The historical pattern of bone density (DEXA) studies is shown below.

	2005	2006	2007	2008	2009	2010	2011	% change 2005-2011	Compound Annual Growth Rate
DEXA	1,479	1,405	1,727	1,860	1,440	1,243	1,396	-5.6%	-1.0%

Source: Hospital Records

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 is:

CAGR Projected Utilization									
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019	
-1.0%	1,383	1,369	1,356	1,343	1,330	1,318	1,305	1,293	

There are no state standards for utilization.

The Hospital plans to continue to operate the three units, offering geographic access to Bone Density studies along with mammography at the main hospital as well as satellite locations, in the community.

C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

In the March 1, 2011 Annals of Internal Medicine, the U.S. Preventive Services Task Force presented an article "Screening for osteoporosis: U.S. preventive services task force recommendation statement". In that article is the recommendation that all women 65 years of age or older be screened by bone densitometry.

The incidence of osteoporosis is increasing as the population ages. Early diagnosis and treatment can prevent the disabling effects of the disease.

The 2010 Facilities Guideline Institute and the American Institute of Architects have provided the guidelines for the design of the proposed department to be consistent with outpatient facilities.

**Advocate Good Shepherd Hospital has justified the need to continue to operate three Bone Density Units**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Computed Tomography</b>	E-08

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. No equipment or facilities deteriorated.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Advocate Good Shepherd Hospital provides Computed Tomography (CT) with five units at the hospital and its offsite locations. Advocate Good Shepherd has recently retired one unit, reducing the number on the hospital's inventory from five to four. Computed tomography is a medical imaging procedure that utilizes computer-processed x-rays to produce tomographic images or 'slices' of specific areas of the body.

The Hospital-based department will remain in the same location with some minor modernization to provide separate inpatient and outpatient access, avoiding co-mingling of very ill inpatients with relatively healthy outpatients, enhancing patient privacy and flow.

Due to the current age of the equipment and five year duration until the Project is complete, the equipment may be replaced during the course of the Project. While this equipment would be regularly replaced as part of the annual capital process, this routine capital replacement is included in the CON Project because the equipment touches an area of service included in the modernization Project.

## 3) Utilization

## A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

## B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed*

*the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

CT and Nuclear Medicine are two dynamic modalities in medical imaging. This is a case where history is not the best predictor for the future. To better anticipate the volume of work in the future, the growth of inpatients and outpatients were separately assessed and those rates applied to the current volume of inpatient and outpatient CT procedures.

**Inpatient Utilization**

The inpatient history in the Medical/Surgical/Pediatric and ICU beds is shown below:

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Total M/S, Peds and obsv days	28,649	31,479	34,386	35,267	36,888	35,788	34,100	33,128	15.6%	2.1%
ICU days	3,464	7,268	5,312	5,288	6,085	6,642	5,565	5,653	63.2%	7.2%
Total								38,761		

Source: Annual Hospital Questionnaire

The compound annual growth rate (CAGR) forecast for utilization in 2019 is shown below:

	CAGR Projected Utilization								
	Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
M/S/Peds and obsv days	2.1%	33,823	34,532	35,256	35,995	36,750	37,521	38,307	39,110
ICU days	7.2%	6,063	6,502	6,973	7,479	8,021	8,602	9,225	9,894
Total									49,004

The change in inpatient utilization for med/surg/peds and ICU, from 2011 to 2019, is:

$$49,004 \text{ days in 2019} - 38,761 \text{ days in 2011} = 10,243 \text{ days increase}$$

$$10,243 \text{ days increase} \div 38,761 \text{ days in 2011} = 26\% \text{ growth}$$

The prediction for outpatient volume was based on extensive studies of medical procedures conducted by Sg2, a well respected health care intelligence firm based in Skokie, Illinois. Their study indicated outpatient CT volume in the Midwest will increase by 16% over the next 8 years.

The historic volume of CT studies has been as follows:

	2004	2005	2006	2007	2008	2009	2010	2011
CT Procedures	21,906	21,951	23,639	25,256	27,404	28,152	26,448	19,834

The two growth measures were then applied to the 2011 CT volume:

Inpatient procedures in 2011 =	5,914 x 126% =	7,452 in 2019
Outpatient procedures in 2011 =	13,920 x 116% =	16,147 in 2019
Total	19,834 in 2011	23,599 in 2019

The State standard for CT is 7,000 procedures per unit:

23,599 procedures ÷ 7,000 procedures per unit = 3.4 units, rounded to 4 units

The Hospital is proposing to operate 4 units.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The hospital meets the standard.

**Advocate Good Shepherd Hospital has justified the need for four Computed Tomography units. This standard has been met.**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Physical Therapy</b>	F-01

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

The Rehabilitation Services Department at Advocate Good Shepherd Hospital provides both inpatient and outpatient physical, occupational and speech therapies to individuals of all ages. The department specializes in both orthopedic and neurological injuries.

Patients utilize Advocate Good Shepherd Hospital's rehabilitation services to improve strength, coordination, balance, speech/language/swallowing, cognition and hand function to reach their optimal functional performance following illness or injury. Rehabilitation services are provided by multidisciplinary therapists with physician oversight who provide individualized plans of care to regain function in order to perform activities of daily living.

The subject of this section is the Physical Therapy (PT) component. Physical Therapy for adults is provided at the main campus and three satellite locations (Lake Zurich, Crystal Lake, and Barrington). Pediatric PT is offered at the Lake Zurich and Crystal Lake sites.

Specialty areas are:

- Aquatic physical therapy
- Treatment of lymphedema
- McKenzie Certified Therapy for back/neck injuries
- Sport specific rehabilitation and training
- Temporary foot/ankle orthotic fitting
- Evaluation and treatment of orthopedic and neurological injury or disease
- Oncology Rehabilitation Physical Therapy

In April 2010, Advocate Good Shepherd Hospital was designated a Primary Stroke Center in Illinois. Patients with neurological illness or injury including stroke may receive coordinated Speech, Occupational Therapy (OT) and PT services at the hospital outpatient location.

Industry experts (Sg2) forecast the demand for outpatient rehabilitation services to continue to grow. ScienceDaily, on January 17, 2012, reported on various studies including the World Health Organization report that osteoarthritis is the fourth leading cause of disability worldwide. The Journal of Musculoskeletal Medicine, December 2, 2010, published the study of use rates of total hip and total knee surgery. J.A Singh and coworkers from Mayo Clinic studied epidemiological data from patients who had arthroplasty between 1969 and 2008 which revealed the procedures have increased steadily since the procedures were introduced, and they continue to increase in all age-groups. Physical therapy is critical to advance these patients towards functional performance post-surgery.

The current Physical Therapy area is undersized to accommodate the current demand, and has not been modernized since being built as part of the original hospital over 30 years ago.

Outpatient Physical Therapy space is severely limited, requiring patients to be treated in hallways for ambulation. Current space does not provide privacy for patient care evaluation and for patients who are better served by disrobing during treatment. Current space does not provide adequate private space for the Balance Master computerized assessment, head room height for use of therapy stairs, or adequate space for treatment of patients post stroke that are unable to safely use a modified treadmill.

The department needs facilities which meet current industry standards and accommodate the increasing demand. For example, Oncology Rehabilitation Physical Therapists are critical in evaluation and treatment of patients post surgery due to Cancer or arm disability subsequent to surgery or Radiation Oncology treatment. Treatment of patients with vertigo and patients with balance disturbance are growing areas of need. As an assessment of the local community documents, falls are a significant life-threatening problem with seniors; Advocate Good Shepherd is addressing these community needs through balance training and education. To better assess these patients, the department has recently acquired a Balance Master to evaluate patients, and more space is needed to accommodate this new equipment.

The evaluation of lymphedema patients (who present with swelling arms and legs caused by a blockage in the lymphatic system) requires a large private treatment room and additional space for storage of supplies. The current location does not adequately accommodate lymphedema care, due to a shortage of private treatment rooms to care for this patient population which usually requires treatment sessions from 60-90 minutes. The hospital location is preferred for lymphedema treatment because a significant percentage of patients with lymphedema also receive treatment on the hospital campus in the Radiation Oncology department.

The proposed outpatient Physical Therapy service will be expanded and modernized. Occupational Therapy, speech and cardiac rehabilitation will be relocated to be incorporated into the expanded Rehabilitation area to improve the clinical coordination of care and efficiencies of service. The Project will co-locate outpatient Physical Therapy with cardiac rehabilitation, providing the advantage of sharing resources – staff, space and

equipment. In particular, the co-location of outpatient Physical Therapy with cardiac rehabilitation offers the physical therapy patients the immediate availability of a cardiac rehabilitation nurse to address questions or a medical emergency.

The area in the proposed Project is designed to be flexible and accommodate the changing needs of the industry and patients.

The present Physical Therapy area is too remote from the inpatient bed units to serve inpatients effectively. As a result, the inpatients needing Physical Therapy are treated in their inpatient rooms or corridors. The 100 foot walk that is a measure of functional ambulation must be conducted in the public hallway which interferes with optimal patient care. The proposed Project will include a Physical Therapy gym at the end of the orthopedic inpatient unit, where patients can begin their rehabilitation and strengthening before they are discharged. The benefits are numerous, including family members learning how to assist, and education for all about expectations during recovery.

The current Physical Therapy space at the main campus is 2,528 dgsf. It is proposed to be relocated to 3,614 dgsf modernized space co-located with the rest of the rehabilitation services, plus 879 dgsf of new space as a rehabilitation gym on the orthopedic nursing unit.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The following table shows the growth in PT visits to be substantial.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Physical Therapy	28,709	27,313	27,568	29,537	35,038	37,698	38,292	42,406	47.7%	5.7%

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) formula is applied, the expected visits in 2019 will be:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
5.7%	44,836	47,406	50,122	52,995	56,032	59,243	62,638	66,227

Using the predictions above, in the next 8 years there will be the following increase in Physical Therapy visits

$$66,227 \text{ visits in 2019} - 42,406 \text{ visits in 2011} = 23,821 \text{ visits increase over 8 years}$$

$$23,821 \text{ visits increase} \div 42,406 \text{ visits in 2011} = 56\% \text{ growth over 8 years}$$

There are no State Standards for utilization.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The 2010 Facilities Guideline Institute and the American Institute of Architects have provided the guidelines for the design of the proposed department. The guidelines call for a minimum of 70 sf of clear space for every treatment area, and in addition, exercise areas, patient support space for dressing, equipment storage, and soiled and clean utilities. The proposed 4,493 dgsf of new and modernized space at the main Hospital campus will meet those guidelines.

**Advocate Good Shepherd Hospital has justified the need for a modernized Physical Therapy department**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Occupational Therapy</b>	F-02

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Occupational Therapy is one of the core services provided by the Advocate Good Shepherd Hospital Rehabilitation Services Department. (See the Physical Therapy F-01 section for more background.)

Occupational Therapy for adults is provided at the main campus and three satellite sites at Lake Zurich, Crystal Lake and Barrington. Pediatric OT is offered at the Lake Zurich and Crystal Lake sites. Occupational Therapy is provided by specialists who utilize therapeutic skills and techniques to promote independence and satisfaction for the "job of living." Therapy is indicated for orthopedic/neurological illness or injury to improve a person's ability to perform daily activities.

Advocate Good Shepherd Hospital's Occupational Therapy Specialty Areas are:

- Certified hand therapists
- Customized fabrication of splints
- Neurodevelopmental treatment
- Energy conservation techniques
- Manual therapy
- Adaptive equipment education
- Activities of Daily Living

The proposed service at the Hospital will be relocated to a modernized area where it will be co-located with PT, Speech, and Cardiac Rehabilitation to improve the clinical coordination of care and efficiencies of service. Co-locating functions allows sharing of support staff and facilities, enhanced clinical coordination, broader range of available resources, greater ability to accommodate the peaks and valleys of patient demand resulting in improved efficiency and quality of care.

The current Outpatient Occupational Therapy space at the Hospital is extremely limited. Current space is dual purpose serving as staff office and treatment space for patient's working at a table top. Additional space is required to accommodate a high/low mat table and a simulated kitchen, laundry, bath and bedroom, needed to re-train patients for activities of daily living due to neurological, orthopedic, cognitive or visual deficits.

The current OT space at the main campus is 763 sf. It is proposed to be relocated to 954 sf, modernized space, which will be a 25% increase.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The following shows the historic utilization of OT services:

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
OT visits	5,519	5,519	4,406	4,949	5,657	5,150	6,429	7,026	27.3%	3.5%

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) formula is applied, the expected visits in 2019 will be:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
3.5%	7,273	7,528	7,792	8,065	8,348	8,641	8,944	9,258

Using the predictions above, in the next 8 years there will be the following increase in OT visits.

$$9,258 \text{ visits in 2019} - 7,026 \text{ visits in 2011} = 2,232 \text{ visits increase over 8 years}$$

$$2,232 \text{ visits increase} \div 7,026 \text{ visits in 2011} = 32\% \text{ growth over 8 years}$$

There are no State Standards for utilization.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The 2010 Facilities Guideline Institute and the American Institute of Architects have provided the guidelines for the design of the proposed department. Needed are work counters, and areas suitable for teaching activities of daily living such as an area for a bed, kitchen, bathroom, table and chairs. All must be wheelchair accessible. The proposed 954 dgsf at the main campus will meet those guidelines.

**Advocate Good Shepherd Hospital has justified the need for a modernized Occupational Therapy department**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Speech Therapy</b>	F-03

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. The Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

Speech Therapy is one of the core services provided by the Advocate Good Shepherd Hospital Rehabilitation Services Department. (See the Physical Therapy F-01 section for more background.)

Speech Therapy for adults is provided at the main campus and at Lake Zurich outpatient center. Pediatric Speech Therapy is provided at two satellite locations (Lake Zurich and Crystal Lake). Speech Language pathologists specialize in disorders of communication, cognition, swallowing, and voice. The goal of speech language therapy is to restore or improve the ability to communicate.

Advocate Good Shepherd Hospital Speech Therapy specialty areas include:

- Aphasia, apraxia, dysarthria, dysphagia
- Cognitive linguistic therapy
- Videofluoroscopy swallow evaluation
- Voice evaluation/therapy (Visi-Pitch)
- Alaryngeal speech and esophageal speech
- E-Stim for swallowing facilitation
- Lee Silverman Voice Treatment (LSVT) for Parkinson's patients
- Computer analysis of voice & speech skills

In April 2010, Advocate Good Shepherd Hospital was designated a Primary Stroke Center program in Illinois. Patients with neurological illness or injury including stroke may receive coordinated Speech, OT and PT services at the hospital outpatient location.

The proposed service at the Hospital will be relocated to a modernized area where it will be co-located with PT, OT, and Cardiac Rehabilitation to improve the clinical coordination of care and efficiencies of service. Co-locating functions allows sharing of support staff and facilities, enhanced clinical coordination, broader range of available

resources, greater ability to accommodate the peaks and valleys of patient demand resulting in improved efficiency and quality of care.

Only one Speech Therapy treatment space is currently available for outpatients, which also serves as the Speech Language Pathologists' staff office. Speech Therapy requires private space with a degree of sound proofing due to the nature of the treatment which involves speech discrimination and listening skills. One treatment room for speech is not sufficient because complex patients with neurological conditions need back to back treatment for all three disciplines of PT, OT and ST. Coordinating appointments is extremely difficult with multiple Physical Therapists and Occupational Therapists when only one Speech Therapist space is available for scheduling the patient.

The current Speech Therapy space at the main campus is in 126 sf. It is proposed to be in 233 sf designed with flex space be located between Occupational Therapy and Speech Therapy to offer more flexibility for scheduling back-to-back OT/PT/ST patients. The proposed Speech section of Rehabilitation will include treatment areas designed to meet the growing needs of these patients.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The following shows the historic utilization of Speech Therapy services:

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Speech Procedures	5,362	5,618	5,464	5,953	7,957	8,214	8,646	8,335	55.4%	6.5%

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) formula is applied, the expected visits in 2019 will be:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
6.5%	8,877	9,455	10,070	10,725	11,422	12,165	12,956	13,799

Using the predictions above, in the next 8 years there will be the following increase in Speech visits:

13,799 visits in 2019 – 8,335 visits in 2011 = 5,464 visits increase over 8 years

5,464 visits increase ÷ 8,335 visits in 2011 = 66% growth over 8 years

There are no State Standards for utilization.

- C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The trend of growth demonstrates the need for the service. The 2010 Facilities Guideline Institute and the American Institute of Architects have provided the guidelines for the design of the proposed department. The guidelines for Speech and Hearing services call for space for evaluation and treatment as well as space for equipment and storage. Reception and control stations may be shared (as is the case with this Project). All must be wheelchair accessible. The proposed 233 sf of modernized space, within the Rehabilitation Department at the main Hospital campus will meet those guidelines.

**Advocate Good Shepherd Hospital has justified the need for a modernized  
Speech Therapy department**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
<b>Cardiopulmonary Rehabilitation</b>	F-04

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 1) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. The Project will not result in replacement of deteriorated facilities.

## 2) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

The Cardiopulmonary Rehabilitation program at Advocate Good Shepherd Hospital continues to be well received by referring physicians and patients. National data have concluded that participation in cardiac rehabilitation is associated with a 25% decrease in overall mortality over three years. Even so, on the national scene, cardiopulmonary rehabilitation is often underutilized. Cardiopulmonary rehabilitation is a key mechanism to keep patients healthy, reducing the need for inpatient care and health care expenditures. As Advocate Good Shepherd Hospital is focused on prevention, cardiopulmonary rehabilitation is a key service.

The new, modernized department will be relocated near the front entrance providing easier access for patients. This is a much needed improvement for patients who currently have to negotiate the long walk to the department. The cardiopulmonary rehab department will be co-located with physical therapy, occupational therapy and speech, offering the cardiopulmonary patients access to the other rehabilitation services to address questions and related issues and improve quality of care and enhance the patient experience. The co-location of physical therapy with cardiopulmonary rehabilitation offers the physical therapy patients the immediate availability of a cardiopulmonary rehabilitation nurse to address questions or a medical emergency. The co-location of cardiopulmonary rehabilitation and physical therapy also offer the opportunity to share resources: equipment and support space such as waiting and lockers.

The area is designed to be flexible and accommodate the changing needs of the industry and patients.

The current cardiopulmonary rehabilitation department is in 4,108 dgsf. It is proposed to be relocated to 2,932 sf, modernized space. Shared resources with physical therapy allows for a reduction in space required by cardiopulmonary rehabilitation.

3) Utilization

A) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

B) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

The following shows the historic utilization of Cardiopulmonary Rehabilitation services.

	2006	2007	2008	2009	2010	2011	% change 2006-2011	Compound Annual Growth Rate
Cardiopulmonary Rehab Procedures	2,984	7,655	5,028	7,668	7,849	7,891	164.4%	21.5%

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) formula is applied, the calculated visits in 2019 will be:

CAGR Projected Utilization								
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019
21.5%	9,585	11,643	14,143	17,179	20,867	25,347	30,789	37,399

There are no State Standards for utilization.

C) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The 2010 Facilities Guideline Institute and the American Institute of Architects have provided the guidelines for the design of the proposed department. The guidelines for rehabilitation services call for space for evaluation and exercise as well as space for extra equipment and storage. Reception and control stations may be shared (as is the case with this Project). The proposed 2,932 sf of modernized space, within the Rehabilitation Department at the main Hospital campus, will meet those guidelines.

**Advocate Good Shepherd Hospital has justified the need for a modernized Cardiopulmonary Rehabilitation department**

## SECTION 1110.3030 – Clinical Service Areas Other Than Categories of Service – Review Criteria

Clinical Service Area	Clinical List Designation
Pharmacy	G-01

## c) Service Modernization

The applicant shall document that the proposed Project meets one of the following:

## 4) Deteriorated Equipment or Facilities

*The proposed project will result in the replacement of equipment or facilities that have deteriorated and need replacement. Documentation shall consist of, but is not limited to: historical utilization data, downtime or time spent out of service due to operational failures, upkeep and annual maintenance costs, and licensure or fire code deficiency citations involving the proposed project.*

Not applicable. This will not replace equipment that has deteriorated.

## 5) Necessary Expansion

*The proposed project is necessary to provide expansion for diagnostic treatment, ancillary training or other support services to meet the requirements of patient service demand. Documentation shall consist of, but is not limited to: historical utilization data, evidence of changes in industry standards, changes in the scope of services offered, and licensure or fire code deficiency citations involving the proposed project.*

The chemotherapy patients in the Infusion Therapy department are dependent on the Pharmacy to supply all cytotoxic intravenous compounds. Vertical laminar flow hood technology is available for the pharmacists and technicians to use when compounding intravenous chemotherapy medications. The US Pharmacopoeia 797 (USP 797) is the code which regulates the design and use of compounding hoods and clean rooms, related to hazardous sterile compounding.

The existing pharmacy clean compounding room will be reconfigured by expanding the negative pressure room. The work involved will include renovating a portion of the walls of the clean room suite to allow for a second vertical laminar flow hood to be installed. The door placement to the expanded compounding room will be modified to accommodate the new room configuration and work flow. The HVAC, electrical and low voltage systems servicing the space will need to be reconfigured to account for the revised room design. The modernization will encompass 304 sf.

This component of the Project provides additional compounding capacity to support chemotherapy patients. It also provides for continuity in the event the older hood becomes inoperable. This Project component is being implemented strictly for the preparation of chemo infusion medications and will only support the Infusion Therapy program of the Project.

## 6) Utilization

## D) Major Medical Equipment

*Proposed projects for the acquisition of major medical equipment shall document that the equipment will achieve or exceed any applicable target utilization levels specified in Appendix B within 12 months after acquisition.*

Not applicable. There is no equipment in this component of the Project that meets or exceeds the major medical threshold.

E) Service or Facility

*Projects involving the modernization of a service or facility shall meet or exceed the utilization standards for the service, as specified in Appendix B. The number of key rooms being modernized shall not exceed the number justified by historical utilization rates for each of the latest two years, unless additional key rooms can be justified per subsection (c)(2) (Necessary Expansion).*

There are no State Standards for utilization.

In Section C-02 Infusion Therapy, the need for the expanded Infusion service was demonstrated. The historical use of Infusion Therapy is as follows.

	2004	2005	2006	2007	2008	2009	2010	2011	% change 2004-2011	Compound Annual Growth Rate
Infusion - Chemo therapy	304	344	389	440	498	564	638	722	137.5%	13.2%

Source: Hospital records

When the Compound Annual Growth Rate (CAGR) is applied, the volume expected in 2019 is:

CAGR Projected Utilization									
Compound Annual Growth Rate	2012	2013	2014	2015	2016	2017	2018	2019	
13.2%	817	924	1,046	1,184	1,339	1,515	1,715	1,941	

It is not uncommon for an infusion patient, during each visit, to receive 2 or more chemo medications that must be compounded.

There are no State standards for Pharmacy or Pharmacy Clean Compounding.

F) If no utilization standards exist, the applicant shall document in detail its anticipated utilization in terms of incidence of disease or conditions, or population use rates.

The need for this vertical laminar flow hood to prepare the increase in chemo infusion medications has been demonstrated by the anticipated demand for Infusion Therapy.

**Advocate Good Shepherd Hospital has justified the need for a modernized Pharmacy Clean Compounding Room**

### **Non-Clinical Service Areas**

*While this information is not required, it is included to provide a better understanding of the non clinical areas in the project*

#### **Administration**

Areas designated as Administration are in various locations throughout the proposed Project, where management and staff will be situated to direct and support operations. The work entails staff management, process management, budgeting and strategic planning. Included in this space are offices, conference rooms and training sites for functions which may include functions such as health information management, finance and accounting, quality management, marketing, public relations, risk management, senior advocacy, medical staff department, volunteers, patient relations, human resources, patient access, employee health and business development. A modernized dining room and cafeteria servery are planned. A "grab and go" area will allow staff and the public to quickly obtain food and snacks. The conference rooms will be used by physicians, staff, as well as the community.

#### **Visitor/Public Support**

These locations include the public lobbies, waiting areas and toilets as well as visitor designated spaces in the nursing units. Their strategic locations make it easier for patients and those accompanying them to enter and find accommodations. By specifically designating visitor space for the patients, the patients are more comfortable being able to have a friend or family member close, and the visitors know they are not in the way of the clinical team.

#### **Circulation**

Sections of the building are passageways and corridors that help move people through the Hospital. The stairs and elevators are part of the circulation area. They have been carefully designed to assure unimpeded movement for wheelchairs, gurneys, and supply carts. Equally important is a good line of sight and appropriate lighting to help patients, visitors, and staff locate their destination. A pneumatic tube system is an essential mover of paper and small items, saving the staff untold hours of walking to make a delivery several floors away.

#### **Materials Management**

This department provides a core supply support. The supply chain function includes receiving, storage, and delivery of virtually all the supplies needed. Bio-med is located here and serves all the clinical departments. Technology is changing the way materials are tracked, ordered, and accessed so the new department will take full advantage of that. A new loading dock will expedite the delivery and better manage the truck traffic around the hospital.

#### **Building Systems**

The mechanical support for the building will come from areas designated as building systems. That includes the heating, ventilation, and cooling systems as well as vacuum. The electrical and plumbing fixtures are also located in various sites throughout the building including the roof top. The efficiency of operating the building is linked to the quality of mechanical, electrical, and plumbing systems including how they are installed, operated and maintained.

#### **Crawl Area**

This is the unfinished, gravel bottomed, unconditioned and inaccessible area under the new patient tower. The foundation that supports the building is located there.

**Chapel**

The interfaith chapel is proposed to be relocated due to expansion of imaging and the testing center. The new location is more easily accessible to the patients and visitors. The chapel is always open and has a series of services provided by the Mission and Spiritual Care chaplains. A wide range of services such as interfaith prayer, Hindu meditation, Roman Catholic Mass, and prayers in Polish are offered.

**Simulation Laboratory**

One of the features of the Project is a modernized simulation laboratory for nursing. The Hospital has been on the forefront of preparing nurses and support staff in how to care for a patient through the use of specially designed mannequins in mocked up patient rooms and clinical treatment environments. Equipment and supplies found in the hospital are available in the training lab where the learners are supervised in the use of these tools to demonstrate competency. When new methods are being introduced, the staff has a safe way to learn how to apply that method or set up that equipment on a mannequin before attempting the procedure on a patient. The labs allow students to acquire a wide range of skills needed, from drawing blood and hanging an IV bag, to delivering babies and preparing toddlers for surgery.

**VIII. - 1120.120 - Availability of Funds**

**This section is not applicable. Advocate Health Care Network bonds have been rated as AA/Stable by Fitch, Aa2 by Moody's, and AA/Stable by Standard & Poor's, which qualifies the applicants for the waiver.**

The applicant shall document that financial resources shall be available and be equal to or exceed the estimated total project cost plus any related project costs by providing evidence of sufficient financial resources from the following sources, as applicable: **Indicate the dollar amount to be provided from the following sources:**

_____	a)	Cash and Securities – statements (e.g., audited financial statements, letters from financial institutions, board resolutions) as to: <ol style="list-style-type: none"> <li>1) the amount of cash and securities available for the project, including the identification of any security, its value and availability of such funds; and</li> <li>2) interest to be earned on depreciation account funds or to be earned on any asset from the date of applicant's submission through project completion;</li> </ol>
_____	b)	Pledges – for anticipated pledges, a summary of the anticipated pledges showing anticipated receipts and discounted value, estimated time table of gross receipts and related fundraising expenses, and a discussion of past fundraising experience.
_____	c)	Gifts and Bequests – verification of the dollar amount, identification of any conditions of use, and the estimated time table of receipts;
_____	d)	Debt – a statement of the estimated terms and conditions (including the debt time period, variable or permanent interest rates over the debt time period, and the anticipated repayment schedule) for any interim and for the permanent financing proposed to fund the project, including: <ol style="list-style-type: none"> <li>1) For general obligation bonds, proof of passage of the required referendum or evidence that the governmental unit has the authority to issue the bonds and evidence of the dollar amount of the issue, including any discounting anticipated;</li> <li>2) For revenue bonds, proof of the feasibility of securing the specified amount and interest rate;</li> <li>3) For mortgages, a letter from the prospective lender attesting to the expectation of making the loan in the amount and time indicated, including the anticipated interest rate and any conditions associated with the mortgage, such as, but not limited to, adjustable interest rates, balloon payments, etc.;</li> <li>4) For any lease, a copy of the lease, including all the terms and conditions, including any purchase options, any capital improvements to the property and provision of capital equipment;</li> <li>5) For any option to lease, a copy of the option, including all terms and conditions.</li> </ol>
_____	e)	Governmental Appropriations – a copy of the appropriation Act or ordinance accompanied by a statement of funding availability from an official of the governmental unit. If funds are to be made available from subsequent fiscal years, a copy of a resolution or other action of the governmental unit attesting to this intent;
_____	f)	Grants – a letter from the granting agency as to the availability of funds in terms of the amount and time of receipt;
_____	g)	All Other Funds and Sources – verification of the amount and type of any other funds that will be used for the project.
<b>TOTAL FUNDS AVAILABLE</b>		
<b>APPEND DOCUMENTATION AS ATTACHMENT-39, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.</b>		

# Fitch Ratings

**Fitch Rates Advocate Health Care's (IL) Series 2012 Bonds 'AA'; Outlook Stable**  
 Ratings Endorsement Policy  
 05 Nov 2012 9:54 AM (EST)

Fitch Ratings-Chicago-05 November 2012: Fitch Ratings has assigned an 'AA' rating to the following Illinois Finance Authority revenue bonds issued on behalf of Advocate Health Care (Advocate):

-\$150 million revenue bonds, series 2012.

In addition, Fitch affirms the 'AA' rating on approximately \$1.06 billion of revenue bonds issued by the Illinois Health Facilities Authority and the Illinois Finance Authority on behalf of Advocate. Fitch also affirms the 'F1+' short-term ratings on the following Illinois Finance Authority bonds based upon self-liquidity provided by Advocate:

-\$51.9 million put bonds, series 2003A&C;  
 -\$137.2 million put bonds, series 2008A-1,2&3;  
 -\$21.9 million put bonds, series 2008C-3B;  
 -\$70 million variable rate demand bonds, series 2011B.

The series 2012 bonds are expected to be fixed rate and will price the week of Nov. 12, 2012 via negotiated sale. Bond proceeds will be used for various capital projects, reimbursement for prior capital expenditures, and to pay costs of issuance.

The Rating Outlook is Stable.

#### SECURITY

The bonds are unsecured obligations of the obligated group. They are not secured by a pledge of, mortgage on, or security interest in any obligated group assets.

#### KEY RATING DRIVERS

**LIGHT DEBT BURDEN:** The additional debt will not impact Advocate's relatively low burden. The system's strong profitability combined with light debt burden generates robust coverage of pro forma maximum annual debt service (MADS) by EBITDA of 9.9x through the nine month interim period ended Sept. 30, 2012, which well exceeds Fitch's 'AA' category median of 4.8x. Pro forma debt to capitalization remains a manageable 25.5% while pro-forma MADS equates to a low 1.6% of fiscal 2011 (Dec. 31 year end) revenues.

**CONSISTENT PROFITABILITY SUPPORTS LIQUIDITY:** Advocate's strong operating cash flow generation has resulted in substantial balance sheet strength, with liquidity indicators that exceed Fitch's 'AA' category median ratios. Further, Advocate consistently maintains ample liquidity to meet Fitch's criteria for the 'F1+' short term rating against its mandatory put exposure.

**LEADING MARKET SHARE POSITION:** Advocate maintains a leading market share in the Chicago metropolitan area that is more than double its nearest competitor and remains the largest provider in the state. Still, Fitch notes the service area remains highly competitive, and the regulatory environment remains challenging.

**STRONG CLINICAL INTEGRATION:** Advocate's high level of integration with its clinicians has enabled better care coordination, operating efficiencies, effective contracting, physician engagement, and should position it well to navigate continued pressures on reimbursement and focus on clinical quality metrics.

#### CREDIT PROFILE

The 'AA' rating is supported by Advocate's light pro forma debt level, consistent cash flow and strong coverage levels, strong market position, and well integrated care delivery model.

[http://www.fitchratings.com/creditedesk/press\\_releases/detail.cfm?print=1&pr\\_id=767589](http://www.fitchratings.com/creditedesk/press_releases/detail.cfm?print=1&pr_id=767589)

11/6/2012

Following the series 2012 issuance, Advocate's debt will total nearly \$1.3 billion of which \$608.3 million is fixed, \$321.3 million are variable rate demand bonds supported by SBPAs, \$281 million are put bonds supported by self-liquidity (of which \$119.9 million is subject to tender within 13 months), and \$100 million are non-rated variable rate direct bank placements. Pro forma MADS is estimated at \$72.6 million per the underwriter. While Advocate faces sizable put, renewal, and interest rate exposure, its SBPAs were recently renewed through 2015-2017, and its balance sheet strength further mitigates these risks.

Robust operating profitability has resulted in operating EBITDA of over \$500 million (12.1% and 11.1% operating EBITDA margins in 2010 and 2011, respectively) and net EBITDA over \$600 million (EBITDA margins of 15% and 13.2% in 2010 and 2011, respectively). Strong performance continued through September 2012, with a 10.3% operating EBITDA and 14.2% EBITDA margins. The series 2012 bonds will be used to finance some of Advocate's capital plans, which are notably sizeable through 2015 and will require continued strength in cash flow and perhaps additional debt issuance. Further, Advocate's defined benefit pension is well funded.

At Sept. 30, 2012, Advocate's unrestricted cash and investments totaled nearly \$3.4 billion compared \$3.1 billion at fiscal 2011. Liquidity metrics at Sept. 30, 2012 were robust with 295.4 DCOH, pro forma cushion ratio of 46.2x and cash and investments equating to 246.7% of pro forma long-term debt; all of which exceed Fitch's respective 'AA' category medians of 241.1, 24.1x and 169.4%.

Advocate's well integrated clinical platform coupled with its position as market leader and largest system in the state provide some buffer against competitive and regulatory challenges. Through June 30, 2012 Advocate's share was 15.8% against its closest competitor the newly-aligned Presence Health system with 10.4% market share. However, the presence of several well regarded academic medical centers and community hospitals and the recent merger activity by large multi-state systems present some credit risk. Fitch expects that Advocate's high level of physician integration and continued growth of the system should sustain its strong market position. The most recent expected addition to the system is Sherman Health, which announced it is pursuing a partnership with Advocate with a letter of intent signed in October 2012. The closing is expected in mid-2013.

The 'F1+' rating reflects Advocate's availability of highly liquid resources to cover the mandatory tender on its put bonds. At Sept. 30, 2012, Advocate's eligible cash and investment position available for same-day settlement would cover the cost of the maximum mandatory put on any given date well in excess of Fitch's criteria of 1.25x. Advocate provided Fitch with an internal procedures letter outlining the procedures to meet any un-remarketed puts. In addition, Advocate provides monthly liquidity reports to Fitch to monitor the sufficiency of Advocate's cash and investment position relative to its mandatory put exposure.

The Stable Outlook is supported by Fitch's expectation that Advocate will remain the market leader, allowing for consistent cash flow in support of its capital and debt service needs, while maintaining solid liquidity against the risks associated with its capital structure. Fitch believes Advocate's experienced management team and effective management practices should also ensure strong relative performance over the longer term.

Advocate is counter-party to three floating to fixed rate swaps with a total notional value of \$326.3 million against its series 2008C VRDBs. The mark to market on the swaps at Sept. 30, 2012 was approximately negative \$96.2 million requiring \$5.7 million in collateral be posted.

Advocate is an integrated health care system composed of 10 acute care hospitals and an integrated children's hospital (totaling approximately 3,200 licensed beds), primary and specialty physician services, home health, hospice, outpatient centers, via over 250 sites serving the Chicago metropolitan area and central Illinois. Total revenues in audited fiscal 2011 were \$4.65 billion (reflects Fitch's reclassification of bad debt to an expense).

Advocate's disclosure includes annual audited financial statements as well as quarterly unaudited balance sheet, income statement, cash flow statement, an extensive MD&A, and utilization statistics. The information is posted to the Municipal Securities Rulemaking Board's EMMA system. In addition, management holds routine calls with rating agencies and with investors. Fitch considers Advocate's disclosure standards to be best practice.

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Fitch Ratings | Press Release

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Additional information is available at 'www.fitchratings.com'. The ratings above were solicited by, or on behalf of, the issuer, and therefore, Fitch has been compensated for the provision of the ratings.

In addition to the sources of information identified in Fitch's Revenue Supported Rating Criteria, this action was informed by information from Citigroup as Underwriter.

**Applicable Criteria and Related Research:**

--'Revenue-Supported Rating Criteria', dated Jun. 12, 2012;  
--'Nonprofit Hospitals and Health Systems Rating Criteria', dated July 23, 2012;  
--'Criteria for Assigning Short-Term Ratings Based on Internal Liquidity', dated June 15, 2012.

**Applicable Criteria and Related Research:**

Revenue-Supported Rating Criteria  
Nonprofit Hospitals and Health Systems Rating Criteria  
Criteria for Assigning Short-Term Ratings Based on Internal Liquidity

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11/6/2012

**MOODY'S**  
INVESTORS SERVICE

**New Issue: Moody's assigns Aa2 rating to Advocate Health Care Network's \$150 million of Series 2012 bonds; Outlook is stable**

Global Credit Research - 29 Oct 2012

**Aa2, Aa2/VMIG 1, and Aa2/P-1 ratings on \$1.1 billion of outstanding debt affirmed**

ILLINOIS FINANCE AUTHORITY  
Hospitals & Health Service Providers  
IL

**Moody's Rating**

ISSUE	RATING
Revenue Bonds, Series 2012 (Fixed Rate)	Aa2
Sale Amount	\$150,000,000
Expected Sale Date	11/15/12
Rating Description	Revenue: 50 to 3 Unsecured General Obligation

**Moody's Outlook** STA

**Opinion**

NEW YORK, October 29, 2012 --Moody's Investors Service has assigned an Aa2 rating to Advocate Health Care Network's (Advocate) \$150 million of Series 2012 fixed rate bonds. The rating outlook is stable. At this time, we are affirming the the Aa2, Aa2/VMIG 1 and Aa2/P-1 ratings on Advocate's outstanding bonds as listed at the conclusion of this report. The rating outlook is stable.

**SUMMARY RATINGS RATIONALE:**

The Aa2 long-term rating is based on Advocate's status as the largest healthcare system in the greater Chicago area with good geographic diversity and well positioned individual hospitals, sustained improvement in operating margins, moderate debt levels driving exceptional debt measures, a strong and growing investment portfolio, and well funded pension plan. The system's challenges include an increasingly competitive and consolidating healthcare market, moderate margins compared with similarly-rated peers, and expected increases in capital spending.

**STRENGTHS**

\*Leading market position in greater Chicagoland with good geographic coverage and individual hospitals that maintain leading or prominent market shares in their local markets; geographic reach and diversification expanding with strategy to extend further statewide

\*Consistent margins over the last several years with operating cashflow margins in the 9-10% range; in 2011, most hospitals improved or were relatively stable compared with the prior year; through nine months of fiscal year 2012, operating performance is consistent with previous levels with 5.8% operating and 10.8% operating cashflow margins

\*Conservative and balanced approach to financing capital needs; preferential debt measures based on nine months of fiscal year 2012 annualized are strong with a low 30% debt-to-operating revenue, exceptional Moody's adjusted peak debt service coverage of over 10 times, and favorably low Moody's adjusted debt-to-cashflow of 1.9 times

\*Strong and growing balance sheet position with 301 days of cash on hand as of September 30, 2012, providing a strong 251% coverage of preferential debt

\*Debt structure risks are manageable relative to cash and investments with over 400% cash-to-demand debt and over 300% monthly liquidity-to-demand debt based on fiscal year end 2011

\*Strong management capabilities evidenced by the organization's historical ability to absorb operating challenges and continue to generate consistently solid absolute operating cashflow levels, meet or exceed operating budgets, execute strategies effectively including integrating newly acquired hospitals, and a commitment to very good disclosure practices

#### CHALLENGES

\*Operating income and operating cashflow margins are below similarly-rated peers, in part due to the system's close integration with a large number of physicians

\*An increasingly competitive market for a number of Advocate's hospitals, with competitors expanding facilities, growing consolidation with several large mergers or new entrants into the market, and increasing competition for physicians

\*Capital spending is anticipated to increase, although capital needs can be funded with cashflow and bond proceeds; the system has a history of closely managing capital spending relative to cashflow and adjusting to operating shortfalls if necessary

\*Changes in investment strategy with an increased allocation to alternative investments, resulting in a less liquid portfolio relative to historically conservative practices (based on fiscal year 2011, 74% of unrestricted investments can be liquidated within a month, compared with 79% median for the Aa2 rating category)

\*Comprehensive debt (including pension and operating lease obligations) is almost 50% higher than direct debt, primarily as a result of sizable operating leases; however, cash-to-comprehensive debt at fiscal yearend2011 is still good at 172%, compared with a median of 162% for the Aa2 category

#### DETAILED CREDIT DISCUSSION

**USE OF PROCEEDS:** Proceeds from the Series 2012 bonds will be used to fund capital projects.

**LEGAL SECURITY:** Obligated group includes the Advocate Health Care Network (system parent), Advocate Health and Hospitals Corporation (operates most of the system's hospitals), Advocate North Side Health Network, and Advocate Condell Medical Center. Security is a general, unsecured obligation of the obligated group. No additional indebtedness tests.

**INTEREST RATE DERIVATIVES:** Advocate has interest rate swaps associated with the Series 2008C bonds. There is a total of \$326 million of swaps associated with the Series 2008C bonds for which Advocate pays a fixed rate of 3.6% and receives 61.7% of LIBOR plus 26 basis points. The swaps mature in 2038 and the counterparties are Wells Fargo and PNC. As of September 30, 2012 the mark-to-market on the swaps was a negative \$90.6 million and collateral of \$5.7 million was posted.

#### RECENT DEVELOPMENTS/RESULTS

Please refer to Moody's report dated July 19, 2012 for more details. Since the July rating review, Advocate's operating performance is solid and consistent with recent trends. Admissions through the nine months of fiscal year 2012 (ended September 30) are down 1%, which is generally better than trends in the broader market. Including observation cases, total cases are flat to the prior year. Both inpatient and outpatient surgeries increased by a strong 4-5% as a result of physician recruitment and alignment strategies. Through the nine months, Advocate's operating cashflow was \$373 million (10.8%), compared with \$365 million (11.1%) in the prior year. Unrestricted cash and investments increased to \$3.4 billion (301 days cash on hand) as of September 30, 2012, compared with \$3.1 billion as of December 31, 2011. As indicated in the ratios below, the incremental \$150 million in new debt does not affect materially Advocate's strong measures.

On October 23, 2012, Advocate announced plans to sign a non-binding letter of intent to pursue a partnership with Sherman Health Systems (rated Baa2). The organizations will begin a due diligence phase with a formal closing date expected between May and July of 2013. Moody's will evaluate the effect of a partnership with Sherman upon receipt of further details related to the structure, security for the debt, governance and management, and strategic plans. Based on Advocate's current financial profile and Sherman's fiscal year 2012 performance, our preliminary assessment is that a combination with Sherman would not significantly affect Advocate's overall credit profile. Advocate's relatively low leverage affords the health system the ability to absorb the high leverage that Sherman

would bring with a moderately negative effect to key debt measures.

#### OUTLOOK

The stable outlook is based on the expectation that the system will continue to maintain solid operating performance and a strong market position and balance future capital spending and debt with cash flow and liquidity strength.

#### WHAT COULD MAKE THE RATING GO UP

Sustained improvement in operating margins, further strengthening of balance sheet, and growth in the system's size to provide significantly greater geographic diversity

#### WHAT COULD MAKE THE RATING GO DOWN

Significantly greater than expected increase in debt or unexpected and prolonged decline in operating performance; material weakening of balance sheet strength

#### KEY INDICATORS

##### Assumptions & Adjustments:

- Based on financial statements for Advocate Health Care Network and Subsidiaries
- First number reflects audit year ended December 31, 2011
- Second number reflects nine-month unaudited results ended September 30, 2012, annualized and proforma including \$150 million in additional debt
- Investment returns normalized at 6% unless otherwise noted
- Comprehensive debt includes direct debt, operating leases, and pension obligation, if applicable
- Monthly liquidity to demand debt ratio is not included if demand debt is de minimis
- \*Inpatient admissions: 166,756; 166,669
- \*Observation stays: 39,648; 41,853
- \*Medicare % of gross revenues: 40%; N/A
- \*Medicaid % of gross revenues: 16%; N/A
- \*Total operating revenues (\$): \$4.6 billion; \$4.6 billion (bad debt as reduction to revenue)
- \*Revenue growth rate (%) (3 yr CAGR): 7.6%; N/A
- \*Operating margin (%): 5.3%; 5.8%
- \*Operating cash flow margin (%): 10.0%; 10.8%
- \*Debt to cash flow (x): 1.9 times; 1.9 times
- \*Days cash on hand: 269 days; 301 days
- \*Maximum annual debt service (MADS) (\$): \$66 million; \$73 million
- \*MADS coverage with reported investment income (x): 8.9 times; N/A
- \*Moody's-adjusted MADS Coverage with normalized investment income (x): 10.5 times; 10.4 times
- \*Direct debt (\$): \$1.2 billion; \$1.4 billion
- \*Cash to direct debt (%): 252%; 251%
- \*Comprehensive debt: \$1.8 billion; N/A

\*Cash to comprehensive debt (%): 170%; N/A

\*Monthly liquidity to demand debt (%): 318%; N/A

RATED DEBT (as of December 31, 2011, updated for bank facility changes in 2012)

- Series 1993C (\$22 million), Series 2008D (\$167 million), Series 2010A (\$37 million), Series 2010B (\$52 million), Series 2010C (\$26 million), Series 2010D (\$112 million), Series 2011A-1 (\$9 million), Series 2011A-2 (\$33 million) fixed rate bonds: Aa2

- Series 2003A (\$26 million), Series 2003C (\$26 million), Series 2008A (\$137 million), Series 2008C-3B (\$22 million) variable rate annual and multi-annual put bonds, supported by self-liquidity: Aa2/MMIG 1

- Series 2008C-1 (\$128 million), Series 2008C-2B (\$58 million) variable rate bonds supported with SBPAs from JPMorgan Chase (expire August 1, 2016 and August 1, 2017 respectively): Aa2/MMIG 1

- Series 2008C-3A (\$87 million) variable rate bonds supported by SBPAs from Northern Trust Company (expires August 1, 2017): Aa2/MMIG 1

- Series 2008C-2A (\$49 million) variable rate bonds supported by SBPA from Wells Fargo Bank (expires August 1, 2015): Aa2/MMIG 1

- Series 2011B Windows variable rate bonds (\$70 million): Aa2/P-1

#### CONTACTS

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#### RATING METHODOLOGY

The principal methodology used in this rating was Not-For-Profit Healthcare Rating Methodology published in March 2012. Please see the Credit Policy page on [www.moodys.com](http://www.moodys.com) for a copy of this methodology.

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## Summary:

# Illinois Finance Authority Advocate Health Care Network; System

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**Summary:**

# Illinois Finance Authority

## Advocate Health Care Network; System

US\$135.935 mil hosp rev bnds (Advocate Hlth Care Network) ser 2012 due 06/01/2047

Long Term Rating AA/Stable New

**Rationale**

**Standard & Poor's Ratings Services** assigned its 'AA' long-term rating to the Illinois Finance Authority's \$135.9 million

series 2012 fixed-rate bonds issued for Advocate Health Care Network (AHCN). Standard & Poor's also affirmed its 'AA' long-term rating and, where applicable, its 'AA/A-1+' and 'AA/A-1' ratings on various other series of bonds issued by the authority on behalf of AHCN. The outlook on all ratings is stable. The series 2012 issuance could go up to \$150 million, depending on the premium structure and pricing.

The 'A-1+' short-term component of the rating on the series 2003A, 2003C, 2008A-1, 2008A-2, 2008A-3, 2008C-3B, and 2011B Windows bonds reflects the credit strength inherent in the 'AA' long-term rating on AHCN's debt and the sufficiency of AHCN's unrestricted assets to provide liquidity support for the aforementioned bonds. Standard & Poor's Fund Ratings and Evaluations Group assesses the liquidity of AHCN's unrestricted investment portfolio to determine the adequacy and availability of these funds to guarantee the timely purchase of the bonds tendered in the event of a failed remarketing. Standard & Poor's monitors the liquidity and sufficiency of AHCN's investment portfolio on a monthly basis.

The 'A-1+' short-term component of the rating on the issuer's series 2008C-2A and 2008C-3A bonds and the 'A-1' short-term component of the rating on the series 2008C-1 and 2008C-2B bonds reflect the standby bond purchase agreements (SBPAs) in effect from various financial institutions. The short-term component of the ratings assigned represents the likelihood of payment of tenders and reflects liquidity facilities that cover all of the bond series. The providers of the liquidity facilities are as follows:

- Series 2008C-1: JPMorgan Chase Bank N.A. (A-1), expiration Aug. 1, 2016
- Series 2008C-2A: Wells Fargo Bank N.A. (A-1+), expiration Aug. 1, 2015
- Series 2008C-2B: JPMorgan Chase Bank, expiration Aug. 1, 2017
- Series 2008C-3A: Northern Trust Corp. (A-1+), expiration Aug. 1, 2017

The 'AA' long-term rating reflects our view of AHCN's strength as the Chicago area's largest health system (with total operating revenue of \$4.6 billion in 2011 and a balance sheet with \$7.1 billion of total assets) as well as its good operating performance, strong and consistent coverage, and stable and healthy unrestricted liquidity with fairly light debt. In addition, AHCN's strong physician relationships and practice in managing care under capitated risk and through shared savings programs, including the Medicare ACO demonstration project, are credit strengths in light of some of the anticipated changes related to health care reform. Although we do anticipate some declines in operational liquidity given the heightened capital spending during the next few years, we do anticipate such declines to be temporary and that operational liquidity (days' cash on hand) will return to the mid-200s during the medium term. During the short term, however, we do anticipate continued strong cash flow and healthy coverage to support the rating as AHCN focuses on expense management and backfilling volumes that may be lost as a result of lower utilization (linked to both better care management and fewer readmissions).

Standard & Poor's affirmed its ratings on AHCN in July 2012. Since then, we've received two additional quarters of unaudited financials that are in line with expectations. Although the series 2012 transaction was unanticipated, management had reported in July 2012 that some additional debt was likely during the next three to four years because it had forecast higher capital spending at our previous review. Given the interest rate environment and some other key timing factors, management and the board decided to accelerate the debt issuance. And with operations and the balance sheet remaining sound, and with Advocate's market presence remaining strong, we believe the debt is absorbable at the current rating. Also, we anticipate no additional new money debt during the next one or two years.

The 'AA' long-term rating further reflects our view of AHCN's:

- Good financial profile, with operating margins of more than 4% for the past four years and an unaudited operating margin of 4.25% through the first nine months of fiscal 2012, and consistently strong maximum annual debt service

(MADS) of more than than 6x for the past several years;

- Robust balance sheet measures, as demonstrated by still light pro forma leverage of 25% and by solid liquidity and cash to pro forma debt equal to 285 days' cash on hand and 257%, respectively, as of Sept. 30, 2012;
- Continued leading 15.8% market share through the second quarter of 2012; and
- Position as Chicago's largest and most successfully integrated health delivery system, with approximately 3,200 licensed beds and more than 5,600 physicians, 4,150 of whom are affiliated with Advocate Physician Partners, a joint venture between Advocate and clinically and financially aligned physicians with the purpose of providing cost-effective health care to patients in the communities Advocate serves.

Partly offsetting the above strengths, in our view, are:

- AHCN's very strong competition in the greater Chicago market of both other systems and large academic medical centers;
- A market consolidation that could affect AHCN as an acquirer or with new ownership at a competing facility (AHCN recently announced a non-binding letter of intent, or LOI, to acquire Sherman Health System in Elgin); and
- AHCN's heightened capital spending during the next few years as a few major projects are started and completed, which could dampen unrestricted liquidity growth during the short term.

Total long-term debt at Dec. 31, 2011 was \$1.221 billion. This includes debt classified on the audited financial statements as a current liability subject to short-term remarketing agreements, which Standard & Poor's treats as long-term debt for the purpose of our debt-related ratios. The rated bonds are the general, unsecured joint, and several obligations of the obligated group, which consists of the parent, AHCN; Advocate Health and Hospitals Corp., which includes most of Advocate's acute care facilities; Advocate North Side Health Network, which includes Advocate Illinois Masonic Center; and Advocate Condell Medical Center. However, this analysis reflects the system as a whole.

The series 2012 proceeds (along with any premium) will primarily pay a portion of the capital costs associated with the projects at Advocate Christ Medical Center (total project costs for the patient bed tower project are about \$256 million) and at Advocate Illinois Masonic Hospital (total costs for the Center for Advanced Care, focused on cancer and digestive diseases, are about \$96 million). Both of these projects were included in Advocate's capital forecasts for the next three years. Project completion for these key projects is estimated at fall 2016 for Christ Medical Center and at spring 2015 for Illinois Masonic Hospital.

Since our latest review, operating performance (excluding joint venture income, unrestricted contributions, and investment income) has continued to be strong at an unaudited 4.27% margin (\$151.8 million), compared with a 2.6% margin at the end of the first unaudited quarter of fiscal 2012. Good outpatient volume growth, a focus on general expense management, and some improvement in insurance expenses have contributed to good performance in the current year. Management anticipates ending the year with an approximate 5% operating margin, and fiscal 2013 will likely be a bit lighter at about 3% given that AHCN budgeted for the Medicare sequestration cuts as well as the full year of recent Medicaid cuts. The balance sheet on a pro forma basis remains quite strong despite the increase in debt. Unrestricted cash is at a solid 285 days' cash on hand and cash to pro forma debt and leverage are strong at 257% and 25%, respectively. Capital spending through the first nine months of fiscal 2012 was \$209 million, with a little less than \$300 million anticipated to be spent through the calendar year (down from the budgeted \$500 million because of changes in start dates of certain projects). We continue to anticipate capital spending to proceed at a steady clip of in 2013, 2014, and 2015 before returning to more stable levels as discussed in our prior report. The new bed tower at the Christ Medical Center will provide some additional beds, primarily critical care beds, which will help with throughput from the emergency room. Management anticipates that the ambulatory center at the Illinois Masonic Center facility will enhance and consolidate outpatient services related to oncology and digestive diseases.

AHCN's primary service area is quite broad, covering six counties, but is also quite fragmented. AHCN's market share, however, remains strong, at a leading 15.8%, while Presence Health's market share is second at a stabilized 10.4% and Northwestern Memorial Hospital's is at a stable 5.7%. AHCN and Sherman Health (BBB) recently announced a non-binding LOI to merge, and we anticipate that a final definitive agreement will be executed in mid-calendar 2013. We will more fully incorporate the impact of Sherman into AHCN's credit profile once plans are finalized and once we receive details on how Sherman Health would be incorporated into the network. We believe that overall competition in the market could increase because Presence Health is restructuring its organization and because Centegra Health System (A-/Stable) has plans to build a new hospital about 16 miles from Advocate Good Shepherd (and about 10 miles from Sherman) during the next few years.

For more detailed information regarding the credit, please see our most recent report on AHCN published July 24, 2012 on Ratings Direct on the Global Credit Portal.

### Outlook

The stable outlook reflects our view of AHCN's continued market leadership, extensive physician network, and solid financial profile. Given the heightened capital spending during the next few years, a higher rating is unlikely. However, we could consider raising the rating in response to continued strong operations and a sustained improvement in unrestricted liquidity to roughly 325 days' cash on hand (as the service area is highly competitive and given the recent Chicago area market trend of consolidation). Given our view of AHCN's strong market position, consistent financial profile, and good financial flexibility, we are also unlikely to lower the rating during the next year or two. However, we could consider lowering the rating if AHCN's debt service coverage declines to and remains at approximately 4x or if operational liquidity decreases to and stabilizes at about 200 days' cash. Although we believe that AHCN could absorb Sherman Health into its credit profile, we will more fully evaluate that transaction as it is finalized. We do not anticipate any additional new money debt issuances during the next one to two years.

### Related Criteria And Research

- USPF Criteria: Not-For-Profit Health Care, June 14, 2007
- USPF Criteria: Contingent Liquidity Risks, March 5, 2012
- USPF Criteria: Commercial Paper, VRDO, And Self-Liquidity, July 3, 2007
- USPF Criteria: Bank Liquidity Facilities, June 22, 2007

#### Illinois Fin Auth, Illinois

Advocate Hlth Care Network, Illinois

Illinois Finance Authority (Advocate Health Care Network)

*Long Term Rating AA/Stable Affirmed*

Illinois Finance Authority (Advocate Health Care Network) hosp VRDB ser 2008C-1

*Long Term Rating AA/A-1/Stable Affirmed*

Illinois Finance Authority (Advocate Health Care Network) hosp VRDB ser 2008C-2A

*Long Term Rating AA/A-1+/Stable Affirmed*

Illinois Finance Authority (Advocate Health Care Network) hosp VRDB ser 2008C-2B

*Long Term Rating AA/A-1/Stable Affirmed*

Illinois Finance Authority (Advocate Health Care Network) hosp VRDB ser 2008C-3A

*Long Term Rating AA/A-1+/Stable Affirmed*

Illinois Finance Authority (Advocate Health Care Network) hosp VRDB ser 2008C-3B

*Long Term Rating AA/A-1+/Stable Affirmed*

Illinois Fin Auth (Advocate Hlth Care Network) rev bnds

*Long Term Rating AA/A-1+/Stable Affirmed*

Complete ratings information is available to subscribers of RatingsDirect on the Global Credit Portal at [www.globalcreditportal.com](http://www.globalcreditportal.com). All ratings affected by this rating action can be found on Standard & Poor's public Web

site at [www.standardandpoors.com](http://www.standardandpoors.com). Use the Ratings search box located in the left column.

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**IX. 1120.130 - Financial Viability**

**This section is not applicable. Advocate Health Care Network bonds have been rated as AA/Stable by Fitch, Aa2 by Moody's, and AA/Stable by Standard & Poor's, which qualifies the applicants for the waiver.**

All the applicants and co-applicants shall be identified, specifying their roles in the project funding or guaranteeing the funding (sole responsibility or shared) and percentage of participation in that funding.

**Financial Viability Waiver**

The applicant is not required to submit financial viability ratios if:

4. All of the projects capital expenditures are completely funded through internal sources
5. The applicant's current debt financing or projected debt financing is insured or anticipated to be insured by MBIA (Municipal Bond Insurance Association Inc.) or equivalent
6. The applicant provides a third party surety bond or performance bond letter of credit from an A rated guarantor.

See Section 1120.130 Financial Waiver for information to be provided

**APPEND DOCUMENTATION AS ATTACHMENT-40, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

The applicant or co-applicant that is responsible for funding or guaranteeing funding of the project shall provide viability ratios for the latest three years for which audited financial statements are available and for the first full fiscal year at target utilization, but no more than two years following project completion. When the applicant's facility does not have facility specific financial statements and the facility is a member of a health care system that has combined or consolidated financial statements, the system's viability ratios shall be provided. If the health care system includes one or more hospitals, the system's viability ratios shall be evaluated for conformance with the applicable hospital standards.

Provide Data for Projects Classified as:	Category A or Category B (last three years)			Category B (Projected)
Enter Historical and/or Projected Years:				
Current Ratio				
Net Margin Percentage				
Percent Debt to Total Capitalization				
Projected Debt Service Coverage				
Days Cash on Hand				
Cushion Ratio				

Provide the methodology and worksheets utilized in determining the ratios detailing the calculation and applicable line item amounts from the financial statements. Complete a separate table for each co-applicant and provide worksheets for each.

2. Variance  
Applicants not in compliance with any of the viability ratios shall document that another organization, public or private, shall assume the legal responsibility to meet the debt obligations should the applicant default.

**APPEND DOCUMENTATION AS ATTACHMENT 41, IN NUMERICAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

**X. 1120.140 - Economic Feasibility**

**Part A of this section is not applicable. Advocate Health Care Network bonds have been rated as AA/Stable by Fitch, Aa2 by Moody's, and AA/Stable by Standard & Poor's, which qualifies the applicants for the waiver.**

**This section is applicable to all projects subject to Part 1120.**

**A. Reasonableness of Financing Arrangements**

The applicant shall document the reasonableness of financing arrangements by submitting a notarized statement signed by an authorized representative that attests to one of the following:

- 1) That the total estimated project costs and related costs will be funded in total with cash and equivalents, including investment securities, unrestricted funds, received pledge receipts and funded depreciation; or
- 2) That the total estimated project costs and related costs will be funded in total or in part by borrowing because:
  - A) A portion or all of the cash and equivalents must be retained in the balance sheet asset accounts in order to maintain a current ratio of at least 2.0 times for hospitals and 1.5 times for all other facilities; or
  - B) Borrowing is less costly than the liquidation of existing investments, and the existing investments being retained may be converted to cash or used to retire debt within a 60-day period.

**B. Conditions of Debt Financing**

This criterion is applicable only to projects that involve debt financing. The applicant shall document that the conditions of debt financing are reasonable by submitting a notarized statement signed by an authorized representative that attests to the following, as applicable:

- 1) That the selected form of debt financing for the project will be at the lowest net cost available;
- 2) That the selected form of debt financing will not be at the lowest net cost available, but is more advantageous due to such terms as prepayment privileges, no required mortgage, access to additional indebtedness, term (years), financing costs and other factors;
- 3) That the project involves (in total or in part) the leasing of equipment or facilities and that the expenses incurred with leasing a facility or equipment are less costly than constructing a new facility or purchasing new equipment.

**C. Reasonableness of Project and Related Costs**

Read the criterion and provide the following:

1. Identify each department or area impacted by the proposed project and provide a cost and square footage allocation for new construction and/or modernization using the following format (insert after this page).

COST AND GROSS SQUARE FEET BY DEPARTMENT OR SERVICE											
Department (list below)	A	B	C		D		E	F	G	H	Total Cost (G + H)
	Cost/Square Foot New	Mod.	Gross Sq. Ft. New	Circ.*	Gross Sq. Ft. Mod.	Circ.*	Const. \$ (A x C)	Mod. \$ (B x E)			
Contingency											
<b>TOTALS</b>											

\* Include the percentage (%) of space for circulation

**D. Projected Operating Costs**

The applicant shall provide the projected direct annual operating costs (in current dollars per equivalent patient day or unit of service) for the first full fiscal year at target utilization but no more than two years following project completion. Direct cost means the fully allocated costs of salaries, benefits and supplies for the service.

**E. Total Effect of the Project on Capital Costs**

The applicant shall provide the total projected annual capital costs (in current dollars per equivalent patient day) for the first full fiscal year at target utilization but no more than two years following project completion.

**APPEND DOCUMENTATION AS ATTACHMENT -42, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

### Projected Operating and Capital Costs

Projected Operating Cost Per Equivalent Patient Day: \$194.91

Impact of Project on Capital Cost Per Equivalent Patient Day: \$136.00

Cost and DGSF

Dept./Area	A New Const. Cost/SF	B Mod Cost/sf	C New Const dgsf	D % Circ	E Mod. Dgsf	F % Circ	G A x C New Const Cost	H B x F Mod Cost	G + H Total Cost
<b>CLINICAL</b>									
<b>Beds</b>									
Med/Surg & Peds	\$ 419.44		53,320	0.15	0	0	\$ 22,364,541		\$ 22,364,541
ICU	\$ 465.80		11,849	0.15	0	0	\$ 5,519,261		\$ 5,519,261
<b>Cardiac Catheterization</b>									
Cardiac Cath/EP	\$ 518.18		3,594	0.15	0	0	\$ 1,862,348		\$ 1,862,348
<b>Surgery &amp; Interventional Services</b>									
Surgery Operating Rooms	\$ 544.57	\$ 312.19	16,275	0.15	14,693	0.15	\$ 8,862,946	\$ 4,586,941	\$ 13,449,887
Surgical Procedure Room - Cysto		\$ 306.25	0	0.15	942	0.15	\$ -	\$ 288,483	\$ 288,483
Phase I Recovery (PACU)		\$ 302.51	0	0.15	4,080	0.15	\$ -	\$ 1,234,240	\$ 1,234,240
Phase II Prep/Recovery	\$ 470.44	\$ 292.41	1,726	0.15	18,953	0.15	\$ 811,979	\$ 5,542,568	\$ 6,354,547
Central Sterile Processing	\$ 458.51	\$ 278.98	4,457	0.15	4,163	0.15	\$ 2,043,579	\$ 1,161,413	\$ 3,204,992
Interventional Radiology	\$ 518.18		3,594	0.15		0.15	\$ 1,862,348		\$ 1,862,348
<b>Endoscopy</b>									
Surgery Procedure Rooms- Endo	\$ 350.83		0	0.15	612	0.15	\$ -	\$ 214,709	\$ 214,709
Phase II Prep/Recovery- Endo	\$ 297.85		0	0.15	5,791	0.15	\$ -	\$ 1,724,861	\$ 1,724,861
<b>Ambulatory Care Services</b>									
Chronic Care (Diab., Anticoag, CHF)		\$ 175.07	0	0.15	3,207	0.15	\$ -	\$ 561,458	\$ 561,458
Infusion Therapy		\$ 298.54	0	0.15	3,014	0.15	\$ -	\$ 899,794	\$ 899,794
<b>Outpatient Testing</b>									
Cardio-Diagnostics (Ectc, Echo stress)		\$ 327.06	0	0.15	1,742	0.15	\$ -	\$ 569,737	\$ 569,737
Pre-Admission, Specimen Collection & EKG		\$ 274.08	0	0.15	1,679	0.15	\$ -	\$ 460,179	\$ 460,179
Pulmonary Function		\$ 281.05	0	0.15	724	0.15	\$ -	\$ 203,484	\$ 203,484
<b>Diagnostic Radiology</b>									
General Radiology & Fluoroscopy	\$ 291.74		0	0.15	4,497	0.15	\$ -	\$ 1,311,968	\$ 1,311,968
Magnetic Resonance Imaging	\$ 574.95		0	0.15	2,662	0.15	\$ -	\$ 1,530,507	\$ 1,530,507
Nuclear Medicine	\$ 327.64		0	0.15	2,112	0.15	\$ -	\$ 691,984	\$ 691,984
Ultrasound	\$ 515.18	\$ 281.65	267	0.15	4,258	0.15	\$ 137,553	\$ 1,199,251	\$ 1,336,804
Pain Treatment		\$ 292.87		0.15	1,249	0.15	\$ -	\$ 365,792	\$ 365,792
Mammography	\$ 515.18	\$ 300.73	356	0.15	2,415	0.15	\$ 183,404	\$ 726,268	\$ 909,672
Bone Density	\$ 511.08	\$ 296.12	89	0.15	603	0.15	\$ 45,486	\$ 178,560	\$ 224,046
Computed Tomography		\$ 291.74		0.15	1,944	0.15	\$ -	\$ 567,148	\$ 567,148
<b>Therapies</b>									
Physical Therapy	\$ 392.66	\$ 176.45	879	0.15	3,614	0.15	\$ 345,151	\$ 637,673	\$ 982,824
Occupational Therapy		\$ 176.45	0	0.15	954	0.15	\$ -	\$ 168,329	\$ 168,329
Speech		\$ 176.45	0	0.15	233	0.15	\$ -	\$ 41,112	\$ 41,112
Cardiopulmonary Rehabilitation		\$ 283.59	0	0.15	2,932	0.15	\$ -	\$ 831,474	\$ 831,474





# Advocate Good Shepherd Hospital

450 West Highway 22 || Barrington, IL 60010 || T 847.381.0123 || [advocatehealth.com](http://advocatehealth.com)

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February 13, 2013

Mr. Dale Galassie, Chairman  
Illinois Health Facilities and Services Review Board  
525 West Jefferson Street, Second Floor  
Springfield, Illinois 62761

Dear Mr. Galassie:

This letter is to attest to the fact that the selected form of debt financing for the proposed Advocate Good Shepherd Hospital project will be at the lowest net cost available, or if a more costly form of financing is selected, that form is more advantageous due to such terms as prepayment privileges, no required mortgage, access to additional debt, term financing costs, and other factors.

Sincerely,

Karen A. Lambert  
President

Subscribed and sworn before me this 18 day of February 2013.



**XI. Safety Net Impact Statement**

**While the following Safety Net Impact information is NOT required of non-substantive projects, Community Service information has been included to give the reader a better understanding of the hospital and the many ways it serves its community.**

**SAFETY NET IMPACT STATEMENT that describes all of the following must be submitted for ALL SUBSTANTIVE AND DISCONTINUATION PROJECTS:**

1. The project's material impact, if any, on essential safety net services in the community, to the extent that it is feasible for an applicant to have such knowledge.
2. The project's impact on the ability of another provider or health care system to cross-subsidize safety net services, if reasonably known to the applicant.
3. How the discontinuation of a facility or service might impact the remaining safety net providers in a given community, if reasonably known by the applicant.

**Safety Net Impact Statements shall also include all of the following:**

1. For the 3 fiscal years prior to the application, a certification describing the amount of charity care provided by the applicant. The amount calculated by hospital applicants shall be in accordance with the reporting requirements for charity care reporting in the Illinois Community Benefits Act. Non-hospital applicants shall report charity care, at cost, in accordance with an appropriate methodology specified by the Board.
2. For the 3 fiscal years prior to the application, a certification of the amount of care provided to Medicaid patients. Hospital and non-hospital applicants shall provide Medicaid information in a manner consistent with the information reported each year to the Illinois Department of Public Health regarding "Inpatients and Outpatients Served by Payor Source" and "Inpatient and Outpatient Net Revenue by Payor Source" as required by the Board under Section 13 of this Act and published in the Annual Hospital Profile.
3. Any information the applicant believes is directly relevant to safety net services, including information regarding teaching, research, and any other service.

**A table in the following format must be provided as part of Attachment 43.**

Safety Net Information per PA 96-0031			
CHARITY CARE			
Charity (# of patients)	Year	Year	Year
Inpatient			
Outpatient			
<b>Total</b>			
Charity (cost In dollars)	Year	Year	Year
Inpatient			
Outpatient			
<b>Total</b>			
MEDICAID			
Medicaid (# of patients)	Year	Year	Year
Inpatient			
Outpatient			
<b>Total</b>			
Medicaid (revenue)	Year	Year	Year
Inpatient			
Outpatient			
<b>Total</b>			

**APPEND DOCUMENTATION AS ATTACHMENT-43, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

## COMMUNITY SERVICE

While the following is not required for a non-substantive Project, it has been provided as information about the strong relationship that Advocate Good Shepherd Hospital has with the community.

Advocate Health and Hospitals Corporation, as a system, has a history of providing quality care to over a million patients annually. In addition, Advocate provides essential community services and programs to patients, families, and communities. In 2011, Advocate contributed \$571 million in charitable care and services to communities across Chicagoland and Central Illinois. This represents a \$97 million increase over 2010. That included \$452 million in care that is provided free, subsidized or without full reimbursement from Medicare, Medicaid or other government-sponsored programs and uncollectible accounts.

One of the advantages Advocate offers as a system is the opportunity to share financial resources and allow Advocate hospitals to help other hospitals within its health care ministry that serve more disadvantaged communities, such as Advocate Trinity Hospital. Shared best-practices, and financial support make it possible to provide excellent care in areas where it is needed most—particularly in those communities impacted by lower income, higher unemployment, and greater incidences of health-related issues.

Advocate Good Shepherd Hospital's proposed Modernization Project will be expanding intensive care, surgical and interventional capacity and thus making more accessible the services it has historically provided to the region, including a growing number of patients with financial barriers to healthcare, special needs, or other limitations.

Advocate Good Shepherd Hospital gives generously to the people in its region, in the form of community service. The clinical excellence it provides, gives a quality of care that is not easily found in many communities. While the formal Safety Net section is not required for non-substantive Projects such as this one, the following examples of the Hospital's community service and excellence have been included in this Certificate of Need application to provide some background.

### Community Service

The Hospital's pattern of service to the community has a deep history. More recent programs include services to children, seniors, and the total community. Services have been incorporated into the Federal requirements to develop a Community Health Needs Assessment (CHNA) and build programs to support identified areas of need.

**Childhood Obesity:** In the 2011-12, more than 6,200 students participated in a school based Childhood Obesity prevention program resulting in improvements in nutrition scores, nutrition understanding and fitness improvements. With a significant expansion in the 2012-13 school year, the Hospital now offers the program through five school districts and 24 schools, reaching more than 12,000 students.

**Youth Health and Safety:** Operation Click, the teen safe driving program was expanded to 39 area schools with more than 6,000 student contracts signed. In 2012, Advocate Good Shepherd was able to donate \$40,000 to Operation Click which allowed the program to hire its first Program Director who will oversee operations and develop a fundraising plan.

The Hospital hosted a highly successful "Kids Fair" in May, 2012 which provided 383 free bike helmets and fittings. More than 550 people attended and took advantage of the full array of health screenings and information.

**Senior Outreach:** The Hospital continues to see success in the Fall Prevention program with 87% of attendees indicating they will increase their daily exercise and 100% reducing their fear of falling. Good Shepherd also received a license from Maine Health to begin implementation of the *Matter of Balance* program using volunteer leaders to expand the reach of this program.

Seniors continue to be cared for through the patient transportation service which conducts much needed medical transportation to and from the hospital campus. It is noteworthy that 3,321 rides were provided in the first three quarters of 2012.

Senior Advocate has also touched the lives of more than 900 people since the beginning of 2012, providing Medicare counseling and information and referral on a variety of services needed by aging patients.

**Community Health Improvement:** In 2012, Advocate Good Shepherd piloted a quarterly diabetes screening program to help address the growing rise in type-two diabetes. This model is designed to diagnose diabetes and pre-diabetes early and track the patients until they are under the care of a physician and equipped to keep their numbers in check. A total of 56 people attended and 10.2% returned to subsequent screenings to seek assistance with disease management.

Advocate Good Shepherd Hospital's Community Outreach Department provides monthly health events, flu vaccinations and health information to food pantry recipients through the St. Francis de Sales dining program.

Advocate Good Shepherd Hospital continues to participate in the Lake County Access to Care Program accepting patients who are unable to pay for screenings related to gastrointestinal and cardiac conditions. Good Shepherd agreed to provide \$167,000 in free services each year in support of these initiatives.

Advocate Good Shepherd Hospital provided more than 1,300 free health screenings to individuals to help assess their health risk factors and manage them in the earliest stage of disease. Screenings related to cardiovascular disease, stroke, and cancer, pulmonary function, diabetes, and colon cancer were offered through a variety of venues in the community.

Advocate Good Shepherd Hospital continues to be a driving force in community health improvement with its financial and leadership support with the Lake and McHenry County Mobilizing for Action through Planning and Partnerships (MAPP) Assessments, and the Healthier Barrington and Wauconda Health Partnership coalitions.

The Hospital fully funded four advanced wireless tracking technology systems that serve as a safety net for McHenry County families and caregivers of loved ones with Alzheimer's, Autism, and Downs Syndrome.

Advocate Good Shepherd Hospital provides bi-lingual breast cancer education and events to Latino women.

The Hospital equipped area EMS teams with wireless EKG systems to call cardiac alerts remotely from the field, which effectively shortens door-to-balloon time significantly to enable the use of angioplasty to clear blocked blood vessels.

### Clinical Excellence

Advocate Good Shepherd Hospital is well known for clinical excellence, bringing a high level of health care to the populations it serves. The recognitions of clinical excellence are numerous and include the following that were received in 2012.

**Truven Health Analytics** (formerly Thomson-Reuters): Recognized as one of the 50 Top Cardiovascular Hospitals out of more than 1,000 hospitals reviewed nationally, Good Shepherd was the only Chicago area hospital to earn this award.

**Leapfrog's Group Hospital Safety Score:** National distinction for excellence in patient safety, *Hospital Safety Score of A*, highest possible rating for patient safety.

**Consumer Reports Hospital Safety Score Rating:** Ranked 3<sup>rd</sup> in the State of Illinois and 1<sup>st</sup> in the six-county Chicago metropolitan area. The rating was based on six categories that relate to hospital safety: avoiding readmissions, communicating about medications and discharge, appropriate use of chest and abdominal scanning, avoiding serious complications, and mortality.

**American Heart Association:** *Lifeline Bronze Quality Achievement Award* for implementing a higher standard of care for heart attack patients that effectively improves the survival and care of STEMI (ST Elevation Myocardial Infarction) patients. *Stroke Care Silver Award*, for achieving greater than 85% on stroke quality measures for 12 consecutive months.

**HealthGrades Awards:** *Distinguished Hospital Award* for Clinical Excellence, *Emergency Medicine Excellence Award*, *Cardiac Care Excellence Award* (America's 100 Best Cardiac Care), *Gastrointestinal Care Excellence Award*, *Pulmonary Care Excellence Award* (America's 100 Best Pulmonary Care), and *Stroke Care Excellence Award*.

**CareChex Hospital Quality Ratings:** *Medical Excellence Award* ranked Advocate Good Shepherd as #1 in Illinois for overall hospital, surgical and cancer care. The Hospital was ranked with Top 100 in the Nation for overall hospital care, overall medical care, overall surgical care, cancer care, cardiac care, coronary bypass surgery, general surgery, heart attack treatment, interventional coronary care, and pneumonia care.

**Emergency Nurses Association:** 2<sup>nd</sup> *Lantern Award*, this designation recognizes an emergency department's commitment to quality, safety, a healthy work environment, and innovation in nursing practice and emergency care.

**American College of Cardiology:** *Platinum Award for Acute Myocardial Infarction*, was given for maintaining a rate of performance of 90% or better, for eight consecutive quarters.

**ADVANCE for Nurses 2012 National Best Nursing Teams:** Good Shepherd Emergency Nurses recognized as one of 10 national winners for provision of expert stroke care.

**American College of Surgeons Commission on Cancer:** Two-time recipient of *Outstanding Achievement Award*. One of only six Illinois hospitals recognized with the prestigious award and one of 66 hospitals nationally receiving it

**Blue Cross/Blue Shield (BCBS):** One of just 12 sites in Illinois named a *Center of Distinction of Cardiac Care*.

**XII. Charity Care Information**

Charity Care information **MUST** be furnished for **ALL** projects.

1. All applicants and co-applicants shall indicate the amount of charity care for the latest three audited fiscal years, the cost of charity care and the ratio of that charity care cost to net patient revenue.
2. If the applicant owns or operates one or more facilities, the reporting shall be for each individual facility located in Illinois. If charity care costs are reported on a consolidated basis, the applicant shall provide documentation as to the cost of charity care; the ratio of that charity care to the net patient revenue for the consolidated financial statement; the allocation of charity care costs; and the ratio of charity care cost to net patient revenue for the facility under review.
3. If the applicant is not an existing facility, it shall submit the facility's projected patient mix by payer source, anticipated charity care expense and projected ratio of charity care to net patient revenue by the end of its second year of operation.

Charity care" means care provided by a health care facility for which the provider does not expect to receive payment from the patient or a third-party payer. (20 ILCS 3960/3) Charity Care **must** be provided at cost.

A table in the following format must be provided for all facilities as part of Attachment 44.

CHARITY CARE			
	Year	Year	Year
Net Patient Revenue			
Amount of Charity Care (charges)			
Cost of Charity Care			

APPEND DOCUMENTATION AS **ATTACHMENT-44**, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

AGSH CHARITY CARE			
	Year 2009	Year 2010	Year 2011
Net Patient Revenue	\$ 266,412,000	\$ 264,560,996	\$ 269,201,993
Amount of Charity Care (charges)	\$ 7,376,000	\$ 7,626,000	\$ 11,620,000
Cost of Charity Care	\$ 2,113,000	\$ 2,288,500	\$ 3,486,000
Charity Care as % of total net patient revenue	0.8%	0.9%	1.3%

## Audited Financial Reports

The Consolidated Financial Statements and Supplementary Information for Advocate Healthcare Network and Subsidiaries, Years Ended December 31 2012 and 2011, with Report of Independent Auditors, are included with the CON Application from Advocate Trinity Hospital, submitted March 27, 2013.