

ORIGINAL

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD
APPLICATION FOR PERMIT

RECEIVED

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

OCT 16 2009

This Section must be completed for all projects.

Facility/Project Identification

HEALTH FACILITIES &
SERVICES REVIEW BOARD

Facility Name:	CARLE FOUNDATION HOSPITAL		
Street Address:	611 WEST PARK STREET		
City and Zip Code:	URBANA	61801	
County:	CHAMPAIGN	Health Service Area	USA - 4
		Health Planning Area:	D-1

Applicant Identification

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

Exact Legal Name:	CARLE FOUNDATION HOSPITAL		
Address:	611 WEST PARK STREET, URBANA, IL 61801		
Name of Registered Agent:	JAMES C. LEONARD, MD.		
Name of Chief Executive Officer:	JAMES C. LEONARD, MD.		
CEO Address:	611 WEST PARK STREET, URBANA, IL 61801		
Telephone Number:	(217) 383-3220		

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

Type of Ownership

<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.

SEE ATTACHMENT - 2

Primary Contact

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

Name:	FRED SEGOVICH
Title:	DIRECTOR, BUSINESS DEVELOPMENT
Company Name:	CARLE FOUNDATION HOSPITAL
Address:	611 WEST PARK STREET, URBANA, IL 61801
Telephone Number:	(217) 326-0411
E-mail Address:	FRED.SEGOVICH@CARLE.COM
Fax Number:	(217) 383-3232

Additional Contact

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

Name:	KARA FRIEDMAN
Title:	ATTORNEY
Company Name:	MCGUIRE WOODS, LLP.
Address:	77 WEST WACKER DRIVE, SUITE 4100, CHICAGO, IL 60601-1815
Telephone Number:	(312) 750-2781
E-mail Address:	kfriedman@mcguirewoods.com
Fax Number:	(312) 920-6188

**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:	THE CARLE FOUNDATION		
Street Address:	611 WEST PARK STREET		
City and Zip Code:	URBANA	61801	
County:	CHAMPAIGN	Health Service Area	HSA-4 Health Planning Area: D-1

Applicant Identification

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

Exact Legal Name:	THE CARLE FOUNDATION		
Address:	611 WEST PARK STREET, URBANA, IL. 61801		
Name of Registered Agent:	JAMES C. LEONARD, M.D.		
Name of Chief Executive Officer:	JAMES C. LEONARD, M.D.		
CEO Address:	611 WEST PARK STREET, URBANA, IL. 61801		
Telephone Number:	(217) 383-3220		

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

Type of Ownership

<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.

SEE ATTACHMENT -2

Primary Contact

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

Name:	FRED SEGOVICH
Title:	DIRECTOR, BUSINESS DEVELOPMENT
Company Name:	CARLE FOUNDATION HOSPITAL
Address:	611 WEST PARK STREET, URBANA, IL. 61801
Telephone Number:	(217) 326-0411
E-mail Address:	FRED.SEGOVICH@CARLE.COM
Fax Number:	(217) 383-3232

Additional Contact

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

Name:	KARA FRIEDMAN
Title:	ATTORNEY
Company Name:	MCGUIRE WOODS LLP
Address:	77 WEST WACKER DRIVE, SUITE 4100, CHICAGO, IL. 60601-1815
Telephone Number:	(312) 750-2781
E-mail Address:	KFriedman@mcguirewoods.com
Fax Number:	(312) 720-6188

Post Permit Contact

[Person to receive all correspondence subsequent to permit issuance]

Name:	FRED SEGOVICH
Title:	DIRECTOR, BUSINESS DEVELOPMENT
Company Name:	CARLE FOUNDATION HOSPITAL
Address:	611 WEST PARK STREET, URBANA, IL. 61801
Telephone Number:	(217) 326-0411
E-mail Address:	FRED.SEGOVICH@CARLE.COM
Fax Number:	(217) 383-3232

Site Ownership

[Provide this information for each applicable site]

Exact Legal Name of Site Owner:	THE CARLE FOUNDATION
Address of Site Owner:	611 WEST PARK STREET, URBANA, IL. 61801
Street Address or Legal Description of Site:	611 WEST PARK STREET, URBANA, IL. 61801

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:	CARLE FOUNDATION HOSPITAL		
Address:			
<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"> 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. 			
<i>SEE ATTACHMENT 2</i>			

Organizational Relationships

Provide (for each co-applicant) an organizational chart containing the name and relationship of any person who is related (as defined in Part 1130.140). If the related person 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-3**, 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 or 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.idph.state.il.us/about/hfpp.htm>).

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

Historic Resources Preservation Act Requirements

[Refer to application instructions.]

SEE ATTACHMENT 5

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

APPEND DOCUMENTATION AS ATTACHMENT-5, 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 checked="" type="checkbox"/> Substantive</p> <p><input 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>
---	--

2. Project Outline

In the chart below, indicate the proposed action(s) for each clinical service area involved by writing the number of beds, stations or key rooms involved:

ATTACHMENT 6

Clinical Service Areas	Establish	Expand	Modernize	Discontinue	No. of Beds, Stations or Key Rooms
Medical/Surgical, Obstetric, Pediatric and Intensive Care					
Acute/Chronic Mental Illness					
Neonatal Intensive Care					
Open Heart Surgery					
Cardiac Catheterization					
In-Center Hemodialysis					
Non-Hospital Based Ambulatory Surgery					
General Long Term Care					
Specialized Long Term Care					
Selected Organ Transplantation					
Kidney Transplantation					
Subacute Care Hospital Model					
Post Surgical Recovery Care Center					
Children's Community-Based Health Care Center					
Community-Based Residential Rehabilitation Center					
Long Term Acute Care Hospital Bed Projects					
Clinical Service Areas Other Than Categories of Service:					
• Surgery					
• Ambulatory Care Services (organized as a service)					
• Diagnostic & Interventional Radiology/Imaging					
• Therapeutic Radiology					
• Laboratory					
• Pharmacy					
• Occupational Therapy					
• Physical Therapy					
• Major Medical Equipment					
Freestanding Emergency Center Medical Services					
Master Design and Related Projects					
Mergers, Consolidations and Acquisitions					

PLEASE SEE ATTACHMENT 6 FOR DATA AND NARRATIVE INFORMATION RELATED TO THIS PROJECT

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

3. 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.

This Certificate of Need is for the acquisition of the assets of Carle Clinic Association ("CCA"), a physician practice with 342 employed physicians, optometrists, podiatrists, oral surgeons, and psychologists and offices throughout central Illinois (as described in Attachment 1), by Carle Foundation Hospital ("Hospital"), a not-for-profit hospital located at 611 W. Park Street, Urbana, Illinois 61801. With this acquisition, the Hospital and CCA will combine their health care operations into a single health care system. As part of the transaction The Carle Foundation will also acquire CCA's entire ownership interest in Health Alliance Medical Plan, Inc. ("HAMP"), a health insurance and benefits administration company which operates in 30 states with contracts for approximately 320,000 plan enrollees.

The Hospital plans to make a capital expenditure of \$250 million in order to acquire the CCA assets, including all CCA clinic locations, equipment related to clinical service areas of the Hospital and the stock of HAMP. In addition, the Hospital will acquire minority, non-controlling interests in a number of joint ventures which are currently held by CCA. The purchase price for the CCA assets was established based upon an independent valuation of CCA's business, using established third party valuation methodologies. A substantial element of the value of the enterprise is attributed to HAMP which is a non-clinical, non-reviewable asset of CCA. The letter of intent between the Hospital and CCA is attached hereto.

The project is substantive because it cannot be classified as either emergency or non-substantive projects according to Section 1110.40. The project is a Category B classification because expenditures will exceed \$2 million.

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-clinical components that are not related to the provision of health care, complete the second column of the table below. See 20 ILCS 3960 for definition of non-clinical. Note, the use and sources of funds must equal.

Project Costs and Sources of Funds			
USE OF FUNDS	CLINICAL	NON-CLINICAL	TOTAL
Preplanning Costs			
Site Survey and Soil Investigation			
Site Preparation			
Off Site Work			
New Construction Contracts			
Modernization Contracts			
Contingencies			
Architectural/Engineering Fees			
Consulting and Other Fees			
Movable or Other Equipment (not in construction contracts)			
Bond Issuance Expense (project related)			
Net Interest Expense During Construction (project related)			
Fair Market Value of Leased Space or Equipment			
Other Costs To Be Capitalized			\$ 245,377,783
Acquisition of Building or Other Property (excluding land)			
TOTAL USES OF FUNDS			\$ 245,377,783
SOURCE OF FUNDS	CLINICAL	NON-CLINICAL	TOTAL
Cash and Securities			
Pledges			
Gifts and Bequests			
Bond Issues (project related)			\$ 82,877,783
Mortgages (PROMISSORY NOTE)			\$ 162,500,000
Leases (fair market value)			
Governmental Appropriations			
Grants			
Other Funds and Sources			
TOTAL SOURCES OF FUNDS			\$ 245,377,783

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:

Land acquisition is related to project	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Purchase Price:	\$ <u>4,622,217</u>	
Fair Market Value:	\$ <u>4,622,217</u>	

The project involves the establishment of a new facility or a new category of service
 Yes No

If yes, provide the dollar amount of all non-capitalized 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.

Estimated start-up costs and operating deficit cost is \$ 0.

Project Status and Completion Schedules

Indicate the stage of the project's architectural drawings:

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

Anticipated project completion date (refer to Part 1130.140): APRIL 30, 2010

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.

State Agency Submittals

Are the following submittals up to date as applicable:

Cancer Registry
 APORS
 All formal document requests such as IDPH Questionnaires and Annual Bed Reports been submitted
 All reports regarding outstanding permits

Cost Space Requirements

Provide in the following format, the department/area GSF and cost. 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
CLINICAL							
Medical Surgical							
Intensive Care							
Diagnostic Radiology							
MRI							
Total Clinical							
NON CLINICAL							
Administrative							
Parking							
Gift Shop							
Total Non-clinical							
TOTAL							

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

SEE ATTACHMENT 8

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**. Any bed capacity discrepancy from the Inventory will result in the application being deemed incomplete.

FACILITY NAME: <i>CARLE FOUNDATION HOSPITAL</i>		CITY: <i>URBANA, IL</i>			
REPORTING PERIOD DATES:		From: <i>JAN 1, 2008</i>		to: <i>DEC 31, 2008</i>	
Category of Service	Authorized Beds	Admissions	Patient Days	Bed Changes	Proposed Beds
Medical/Surgical	* <i>195/195</i>	<i>13,317</i>	<i>50,898</i>	<i>0</i>	<i>0</i>
Obstetrics	<i>28</i>	<i>2,504</i>	<i>7,213</i>	<i>0</i>	<i>0</i>
Pediatrics	<i>20</i>	<i>933</i>	<i>2,579</i>	<i>0</i>	<i>0</i>
Intensive Care	<i>32</i>	<i>682</i>	<i>6,808</i>	<i>0</i>	<i>0</i>
Comprehensive Physical Rehabilitation	<i>15</i>	<i>437</i>	<i>4,738</i>	<i>0</i>	<i>0</i>
Acute/Chronic Mental Illness	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Neonatal Intensive Care	<i>25</i>	<i>373</i>	<i>6,250</i>	<i>0</i>	<i>0</i>
General Long Term Care	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Specialized Long Term Care	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Long Term Acute Care	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Other ((identify) <i>OBSERVATION</i>)	<i>0</i>	<i>0</i>	<i>1085</i>	<i>0</i>	<i>0</i>
TOTALS:	* <i>305/315</i>	<i>18,246</i>	<i>79,571</i>	<i>0</i>	<i>0</i>

*CFH USED THE 10 PERCENT RULE IN JUNE 2009 TO ADD 10 MED/SURG BEDS

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 manger 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 CARLE FOUNDATION 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.

James C. Leonard
 SIGNATURE
JAMES C. LEONARD, MD
 PRINTED NAME
PRESIDENT & CEO
 PRINTED TITLE

John Snyder
 SIGNATURE
JOHN SNYDER
 PRINTED NAME
EXECUTIVE VICE PRESIDENT & COO
 PRINTED TITLE

Notarization:
Subscribed and sworn to before me
this 8th day of October

Notarization:
Subscribed and sworn to before me
this 8th day of October

Mary McFall
Signature of Notary

Mary McFall
Signature of Notary

Seal

Seal



*Insert EXACT legal name of the applicant

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 manger 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 THE CARLE FOUNDATION *
 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 C. Leonard
 SIGNATURE
JAMES C. LEONARD, MD.
 PRINTED NAME
PRESIDENT & CEO
 PRINTED TITLE

John Snyder
 SIGNATURE
JOHN SNYDER
 PRINTED NAME
EXECUTIVE VICE PRESIDENT & COO
 PRINTED TITLE

Notarization:
 Subscribed and sworn to before me
 this 8th day of October

Notarization:
 Subscribed and sworn to before me
 this 8th day of October

Mary McFall
 Signature of Notary

Mary McFall
 Signature of Notary

Seal

Seal



*Insert EXACT legal name of the applicant

SECTION III. - PROJECT PURPOSE, BACKGROUND AND ALTERNATIVES - INFORMATION REQUIREMENTS *SEE ATTACHMENT 10*

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

Criterion 1110.230 - Project Purpose, Background 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, certification and accreditation identification numbers, 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-10, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

PURPOSE OF PROJECT *SEE ATTACHMENT 11*

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.

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

NOTE: The description of the "Purpose of the Project" should not exceed one page in length. Information regarding the "Purpose of the Project" will be included in the State Agency Report.

APPEND DOCUMENTATION AS ATTACHMENT-11, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

ALTERNATIVES*SEE ATTACHMENT 12*

Document ALL of the alternatives to the proposed project:

Examples of alternative options 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
- 2) Documentation shall consist of a comparison of the project to alternative options. The comparison shall address issues of cost, 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.
 - 3) The applicant shall provide empirical evidence, including quantified outcome data, that verifies improved quality of care, as available.

APPEND DOCUMENTATION AS ATTACHMENT-12, 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: *SEE ATTACHMENT 13*

1. Document that the amount of physical space proposed for the proposed project is necessary and not excessive.
2. If the gross square footage exceeds the GSF 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 bed space that results in excess square footage.

APPEND DOCUMENTATION AS ATTACHMENT-13, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**PROJECT SERVICES UTILIZATION:** *SEE ATTACHMENT 14*

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.

APPEND DOCUMENTATION AS ATTACHMENT-14, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**UNFINISHED OR SHELL SPACE:** *NOT APPLICABLE*

Provide the following information:

1. Total gross square footage of the proposed shell space;
2. The anticipated use of the shell space, specifying the proposed GSF to be allocated to each department, area or function;
3. Evidence that the shell space is being constructed due to
 - a. Requirements of governmental or certification agencies; or
 - b. Experienced increases in the historical occupancy or utilization of those areas proposed to occupy the shell space.
4. Provide:
 - a. Historical utilization for the area for the latest five-year period for which data are available; and

- b. Based upon the average annual percentage increase for that period, projections of future utilization of the area through the anticipated date when the shell space will be placed into operation.

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

ASSURANCES: *NOT APPLICABLE*

Submit the following:

1. Verification that the applicant will submit to HFSRB a CON application to develop and utilize the shell space, regardless of the capital thresholds in effect at the time or the categories of service involved.
2. The estimated date by which the subsequent CON application (to develop and utilize the subject shell space) will be submitted; and
3. The anticipated date when the shell space will be completed and placed into operation.

APPEND DOCUMENTATION AS ATTACHMENT-16, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

SECTION VI. MERGERS, CONSOLIDATIONS AND ACQUISITIONS/CHANGES OF OWNERSHIP

This Section is applicable to projects involving merger, consolidation or acquisition/change of ownership.

SEE ATTACHMENT 18

A. Criterion 1110.240(b), Impact Statement

Read the criterion and provide an impact statement that contains the following information:

1. Any change in the number of beds or services currently offered.
2. Who the operating entity will be.
3. The reason for the transaction.
4. Any anticipated additions or reductions in employees now and for the two years following completion of the transaction.
5. A cost-benefit analysis for the proposed transaction.

B. Criterion 1110.240(c), Access

Read the criterion and provide the following:

1. The current admission policies for the facilities involved in the proposed transaction.
2. The proposed admission policies for the facilities.
3. A letter from the CEO certifying that the admission policies of the facilities involved will not become more restrictive.

C. Criterion 1110.240(d), Health Care System

Read the criterion and address the following:

1. Explain what the impact of the proposed transaction will be on the other area providers.
2. List all of the facilities within the applicant's health care system and provide the following for each facility.
 - a. the location (town and street address);
 - b. the number of beds;
 - c. a list of services; and
 - d. the utilization figures for each of those services for the last 12 month period.
3. Provide copies of all present and proposed referral agreements for the facilities involved in this transaction.
4. Provide time and distance information for the proposed referrals within the system.
5. Explain the organization policy regarding the use of the care system providers over area providers.
6. Explain how duplication of services within the care system will be resolved.
7. Indicate what services the proposed project will make available to the community that are not now available.

APPEND DOCUMENTATION AS ATTACHMENT-18, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

SECTION VII. - CATEGORY OF SERVICE - REVIEW CRITERIA

SEE ATTACHMENT 19

1. This Section is applicable to all projects proposing establishment, expansion or modernization of **ALL categories of service that are subject to CON review**, as provided in the Illinois Health Facilities Planning Act [20 ILCS 3960], **WITH THE EXCEPTION OF:**
 - General Long Term Care;
 - Subacute Care Hospital Model;
 - Postsurgical Recovery Care Center Alternative Health Care Model;
 - Children's Community-Based Health Care Center Alternative Health Care Model; and
 - Community-Based Residential Rehabilitation Center Alternative Health Care Model.

If the project involves any of the above-referenced categories of service, refer to " SECTION VIII.- Service Specific Review Criteria" for applicable review criteria, and submit all necessary documentation for each service involved..

2. READ THE APPLICABLE REVIEW CRITERIA FOR EACH OF THE CATEGORIES OF SERVICE INVOLVED. [Refer to SECTION VIII regarding the applicable criteria for EACH action proposed, for EACH category of service involved.]
3. After identifying the applicable review criteria for each category of service involved (see the charts in Section VIII), provide the following information, **AS APPLICABLE TO THE CRITERIA THAT MUST BE ADDRESSED:**

A. Planning Area Need - Formula Need Calculation:

1. **Complete the requested information for each category of service involved:**
Refer to 77 Ill. Adm. Code 1100 for information concerning planning areas, bed/station/key room deficits and occupancy/utilization standards.

Planning Area _____

Category of Service	No. of Beds/Stations/Key Rooms Proposed	HFSRB Inventory Need or Excess	Part 1100 Occupancy/Utilization Standard

Using the formatting above:

2. Indicate the number of beds/stations/key rooms proposed for each category of service.
3. Document that the proposed number of beds/stations/key rooms is in conformance with the projected deficit specified in 77 Ill. Adm. Code 1100.
4. Document that the proposed number of beds/stations/key rooms will be in conformance with the applicable occupancy/utilization standard(s) specified in Ill. Adm. Code 1100.

B. Planning Area Need - Service to the Planning Area Residents:

1. If establishing or expanding beds/stations/key rooms, 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.
2. If expanding an existing category of service, 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, document that at least 50% of the projected patient volume will be from residents of the

SECTION VIII. - SERVICE SPECIFIC REVIEW CRITERIA *THE FOLLOWING SECTIONS ARE NOT APPLICABLE : A-G, I-Q & S*

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

- In addition to addressing the Category of Service Review Criteria for ALL category of service projects [SECTION VII], 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	# to Establish	# to Expand	# to Modernize
<input type="checkbox"/> Medical/Surgical					
<input type="checkbox"/> Obstetric					
<input type="checkbox"/> Pediatric					
<input type="checkbox"/> Intensive Care					

- READ the applicable review criteria outlined below:

APPLICABLE REVIEW CRITERIA	Establish	Expand	Modernize
1110.530(b)(1) - Planning Area Need - 77 Ill. Adm. Code 1100 (formula calculation)	X		
1110.530(b)(2) - Planning Area Need - Service to Planning Area Residents	X	X	
1110.530(b)(3) - Planning Area Need - Service Demand - Establishment of Category of Service	X		
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	X		
1110.530(c)(1) - Unnecessary Duplication of Services	X		
1110.530(c)(2) - Maldistribution			
1110.530(c)(3) - Impact of Project on Other Area Providers	X		
1110.530(d)(1) - Deteriorated Facilities			X
1110.530(d)(2) - Documentation			X
1110.530(d)(3) - Documentation Related to Cited Problems			X

H. Non-Hospital Based Ambulatory Surgery**SEE ATTACHMENT 32**

This section is applicable to all projects proposing to establish or modernize a non-hospital based ambulatory surgical treatment center or to the addition of surgical specialties.

1. Criterion 1110.1540(a), Scope of Services Provided

Read the criterion and complete the following:

a. Indicate which of the following types of surgery are proposed:

<input type="checkbox"/> Cardiovascular	<input type="checkbox"/> Obstetrics/Gynecology	<input type="checkbox"/> Plastic
<input type="checkbox"/> Dermatology	<input type="checkbox"/> Ophthalmology	<input type="checkbox"/> Podiatry
<input type="checkbox"/> Gastroenterology	<input type="checkbox"/> Oral/Maxillofacial	<input type="checkbox"/> Thoracic
<input type="checkbox"/> General/Other	<input type="checkbox"/> Orthopaedic	<input type="checkbox"/> Urology
<input type="checkbox"/> Neurology	<input type="checkbox"/> Otolaryngology	

b. Indicate if the project will result in a limited or a multi-specialty ASTC.

2. Criterion 1110.1540(b), Target Population

Read the criterion and provide the following:

- On a map (8 1/2" x 11"), outline the intended geographic services area (GSA).
- Indicate the population within the GSA and how this number was obtained.
- Provide the travel time in all directions from the proposed location to the GSA borders and indicate how this travel time was determined.

3. Criterion 1110.1540(c), Projected Patient Volume

Read the criterion and provide signed letters from physicians that contain the following:

- The number of referrals anticipated annually for each specialty.
- For the past 12 months, the name and address of health care facilities to which patients were referred, including the number of patients referred for each surgical specialty by facility.
- A statement that the projected patient volume will come from within the proposed GSA.
- A statement that the information in the referral letter is true and correct to the best of his or her belief.

4. Criterion 1110.1540(d), Treatment Room Need Assessment

Read the criterion and provide:

- The number of procedure rooms proposed.
- The estimated time per procedure including clean-up and set-up time and the methodology used in arriving at this figure.

5. Criterion 1110.1540(e), Impact on Other Facilities

Read the criterion and provide:

- A copy of the letter sent to area surgical facilities regarding the proposed project's impact on their workload. NOTE: This letter must contain: a description of the project including its size, cost, and projected workload; the location of the proposed project; and a request that the facility administrator indicate what the impact of the proposed project will be on the existing

facility.

- b. A list of the facilities contacted. NOTE: Facilities must be contacted by registered mail.

6. Criterion 1110.1540(f), Establishment of New Facilities

Read the criterion and provide:

- a. A list of services that the proposed facility will provide that are not currently available in the GSA; or
- b. Documentation that the existing facilities in the GSA have restrictive admission policies; or
- c. For co-operative ventures,
- a. Patient origin data that documents the existing hospital is providing outpatient surgery services to the target population of the GSA, and
- b. The hospital's surgical utilization data for the latest 12 months, and
- c. Certification that the existing hospital will not increase its operating room capacity until such a time as the proposed project's operating rooms are operating at or above the target utilization rate for a period of twelve full months; and
- d. Certification that the proposed charges for comparable procedures at the ASTC will be lower than those of the existing hospital.

7. Criterion 1110.1540(g), Charge Commitment

Read the criterion and provide:

- a. A complete list of the procedures to be performed at the proposed facility with the proposed charge shown for each procedure.
- b. A letter from the owner and operator of the proposed facility committing to maintain the above charges for the first two years of operation.

8. Criterion 1110.1540(h), Change in Scope of Service

Read the criterion and, if applicable, document that existing programs do not currently provide the service proposed or are not accessible to the general population of the geographic area in which the facility is located.

APPEND DOCUMENTATION AS ATTACHMENT-32, 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	# to Establish	# to Expand	# to Modernize
<input type="checkbox"/> SEE ATTACHMENT 73					
<input type="checkbox"/>					
<input type="checkbox"/>					

3. READ the applicable review criteria outlined below and SUBMIT all required information:

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 INDICATED BELOW, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM:

APPLICABLE REVIEW CRITERIA	Attachment Number
Need Determination - Establishment	62
Service Demand	63
Referrals from Inpatient Base	64
Physician Referrals	65
Historical Referrals to Other Providers	66
Population Incidence	67
Impact of Project on Other Area Providers	68
Utilization	69
Deteriorated Facilities	70
Necessary Expansion	71
Utilization -Major Medical Equipment	72
Utilization - Service or Facility	73

SEE ATTACHMENT 73

T. Financial Feasibility

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

REVIEW CRITERIA RELATING TO FINANCIAL FEASIBILITY (FIN)

Does the applicant (or the entity that is responsible for financing the project or is responsible for assuming applicant's debt obligations in case of default) have a bond rating of "A" or better?

Yes No

SEE ATTACHMENT 75

If yes is indicated, submit proof of the bond rating of "A" or better (that is less than two years old) from Fitch's, Moody's or Standard and Poor's rating agencies and go to Section XXVI. If no is indicated, submit the most recent three years' audited financial statements including the following:

1. Balance sheet
2. Income statement
3. Change in fund balance
4. Change in financial position

A. Criterion 1120.210(a), Financial Viability

1. Viability Ratios *NOT APPLICABLE*

If proof of an "A" or better bond rating has not been provided, read the criterion and complete the following table providing the viability ratios for the most recent three years for which audited financial statements are available. Category B projects must also provide the viability ratios for the first full fiscal year after project completion or for the first full fiscal year when the project achieves or exceeds target utilization (per Part 1100), whichever is later.

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. Insert the worksheets after this page.

2. Variance *NOT APPLICABLE*

Compare the viability ratios provided to the Part 1120 Appendix A review standards. If any of the standards for the applicant or for any co-applicant are not met, provide documentation that a person or organization will assume the legal responsibility to meet the debt obligations should the applicant default. The person or organization must demonstrate compliance with the ratios in Appendix A when proof of a bond rating of "A" or better has not been provided.

REVIEW CRITERIA RELATING TO FINANCIAL FEASIBILITY (FIN)
(continued)

B. Criterion 1120.210(b), Availability of Funds *NOT APPLICABLE*

If proof of an "A" or better bond rating has not been provided, read the criterion and document that sufficient resources are available to fund the project and related costs including operating start-up costs and operating deficits. Indicate the dollar amount to be provided from the following sources:

_____ Cash & Securities

Provide statements as to the amount of cash/securities available for the project. Identify any security, its value and availability of such funds. Interest to be earned or depreciation account funds to be earned on any asset from the date of application submission through project completion are also considered cash.

_____ Pledges

For anticipated pledges, provide a letter or report as to the dollar amount feasible showing the discounted value and any conditions or action the applicant would have to take to accomplish goal. The time period, historical fund raising experience and major contributors also must be specified.

_____ Gifts and Bequests

Provide verification of the dollar amount and identify any conditions of the source and timing of its use.

_____ Debt Financing (indicate type(s) _____)

For general obligation bonds, provide amount, terms and conditions, including any anticipated discounting or shrinkage) and proof of passage of the required referendum or evidence of governmental authority to issue such bonds;

For revenue bonds, provide amount, terms and conditions and proof of securing the specified amount;

For mortgages, provide a letter from the prospective lender attesting to the expectation of making the loan in the amount and time indicated;

For leases, provide a copy of the lease including all terms and conditions of the lease including any purchase options.

_____ Governmental Appropriations

Provide 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, provide a resolution or other action of the governmental unit attesting to such future funding.

_____ Grants

Provide a letter from the granting agency as to the availability of funds in terms of the amount, conditions, and time or receipt.

_____ Other Funds and Sources

Provide verification of the amount, terms and conditions, and type of any other funds that will be used for the project.

_____ TOTAL FUNDS AVAILABLE

C. Criterion 1120.210(c), Operating Start-up Costs

If proof of an "A" or better bond rating has not been provided, indicate if the project is classified as a Category B project that involves establishing a new facility or a new category of service? Yes No . If yes is indicated, read the criterion and provide in the space below the amount of operating start-up costs (the same as reported in Section I of this application) and provide a description of the items or components that comprise the costs. Indicate the source and amount of the financial resources available to fund the operating start-up costs (including any initial operating deficit) and reference the documentation that verifies sufficient resources are available.

APPEND DOCUMENTATION AS ATTACHMENT 75, IN NUMERICAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

U. Economic Feasibility

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

SECTION XXVI. REVIEW CRITERIA RELATING TO ECONOMIC FEASIBILITY (ECON)

A. Criterion 1120.310(a), Reasonableness of Financing Arrangements

Is the project classified as a Category B project? Yes No . If no is indicated this criterion is not applicable. If yes is indicated, has proof of a bond rating of "A" or better been provided? Yes No . If yes is indicated this criterion is not applicable, go to item B. If no is indicated, read the criterion and address the following:

Are all available cash and equivalents being used for project funding prior to borrowing? Yes No **NOT APPLICABLE**

If no is checked, provide a notarized statement signed by two authorized representatives of the applicant entity (in the case of a corporation, one must be a member of the board of directors) that attests to the following:

1. a portion or all of the cash and equivalents must be retained in the balance sheet asset accounts in order that the current ratio does not fall below 2.0 times; or
2. 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. Criterion 1120.310(b), Conditions of Debt Financing *SEE ATTACHMENT 76*

Read the criterion and provide a notarized statement signed by two authorized representatives of the applicant entity (in the case of a corporation, one must be a member of the board of directors) that attests to the following as applicable:

1. The selected form of debt financing the 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 (years) financing costs, and other factors;
2. All or part of the project involves the leasing of equipment or facilities and the expenses incurred with such leasing are less costly than constructing a new facility or purchasing new equipment.

B. Criterion 1120.310(c), Reasonableness of Project and Related Costs *SEE ATTACHMENT 76*

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

2. For each piece of major medical equipment included in the proposed project, the applicant must certify one of the following:

REVIEW CRITERIA RELATING TO ECONOMIC FEASIBILITY (ECON)
(continued)

- a. that the lowest net cost available has been selected; or
 - b. that the choice of higher cost equipment is justified due to such factors as, but not limited to, maintenance agreements, options to purchase, or greater diagnostic or therapeutic capabilities.
3. List the items and costs included in preplanning, site survey, site preparation, off-site work, consulting, and other costs to be capitalized. If any project line item component includes costs attributable to extraordinary or unusual circumstances, explain the circumstances and provide the associated dollar amount. When fair market value has been provided for any component of project costs, submit documentation of the value in accordance with the requirements of Part 1190.40.

D. Criterion 1120.310(d), Projected Operating Costs

Read the criterion and provide in the space below the facility's projected direct annual operating costs (in current dollars per equivalent patient day or unit of service, as applicable) for the first full fiscal year of operation after project completion or for the first full fiscal year when the project achieves or exceeds target utilization pursuant to 77 Ill. Adm. Code 1100, whichever is later. If the project involves a new category of service, also provide the annual operating costs for the service. Direct costs are the fully allocated costs of salaries, benefits, and supplies. Indicate the year for which the projected operating costs are provided.

E. Criterion 1120.310(e), Total Effect of the Project on Capital Costs

Is the project classified as a category B project? Yes No . If no is indicated, go to item F. If yes is indicated, provide in the space below the facility's total projected annual capital costs as defined in Part 1120.130(f) (in current dollars per equivalent patient day) for the first full fiscal year of operation after project completion or for the first full fiscal year when the project achieves or exceeds target utilization pursuant to 77 Ill. Adm. Code 1100, whichever is later. Indicate the year for which the projected capital costs are provided.

F. Criterion 1120.310(f), Non-patient Related Services

Is the project classified as a category B project and involve non-patient related services? Yes No . If no is indicated, this criterion is not applicable. If yes is indicated, read the criterion and document that the project will be self-supporting and not result in increased charges to patients/residents or that increased charges are justified based upon such factors as, but not limited to, a cost benefit or other analysis that demonstrates the project will improve the applicant's financial viability.

APPEND DOCUMENTATION AS ATTACHMENT -76, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

SAFETY NET IMPACT STATEMENT that describes all of the following:

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

APPEND DOCUMENTATION AS ATTACHMENT-77, 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:

INDEX OF ATTACHMENTS		
ATTACHMENT NO.		PAGES
1	Applicant Identification	29
2	Site Ownership	31
3	Organizational Relationships (Organizational Chart) Certificate of Good Standing Etc.	35
4	Flood Plain Requirements	36
5	Historic Preservation Act Requirements	37
6	Description of Project	38
7	Project and Sources of Funds Itemization	39
8	Cost Space Requirements	46
9	Discontinuation	
10	Background of the Applicant	47
11	Purpose of the Project	56
12	Alternatives to the Project	95
13	Size of the Project	104
14	Project Service Utilization	105
15	Unfinished or Shell Space	
16	Assurances for Unfinished/Shell Space	
17	Master Design Project	
18	Mergers, Consolidations and Acquisitions	106
	Categories of Service:	
19	Planning Area Need	107
20	Service Demand – Establishment of Category of Service	
21	Service Demand – Expansion of Existing Category of Service	
22	Service Accessibility – Service Restrictions	
23	Unnecessary Duplication/Maldistribution	
24	Category of Service Modernization	
25	Staffing Availability	
26	Assurances	
	Service Specific:	
27	Comprehensive Physical Rehabilitation	
28	Neonatal Intensive Care	
29	Open Heart Surgery	
30	Cardiac Catheterization	
31	In-Center Hemodialysis	
32	Non-Hospital Based Ambulatory Surgery	108
	General Long Term Care:	
33	Planning Area Need	
34	Service to Planning Area Residents	
35	Service Demand-Establishment of Category of Service	
36	Service Demand-Expansion of Existing Category of Service	
37	Service Accessibility	
38	Description of Continuum of Care	
39	Components	
40	Documentation	
41	Description of Defined Population to be Served	

INDEX OF ATTACHMENTS		
ATTACHMENT NO.		PAGES
42	Documentation of Need	
43	Documentation Related to Cited Problems	
44	Unnecessary Duplication of Service	
45	Maldistribution	
46	Impact of Project on Other Area Providers	
47	Deteriorated Facilities	
48	Documentation	
49	Utilization	
50	Staffing Availability	
51	Facility Size	
52	Community Related Functions	
53	Zoning	
54	Assurances	
	Service Specific (continued...):	
55	Specialized Long Term Care	
56	Selected Organ Transplantation	
57	Kidney Transplantation	
58	Subacute Care Hospital Model	
59	Post Surgical Recovery Care Center	
60	Children's Community-Based Health Care Center	
61	Community-Based Residential Rehabilitation Center	
	Clinical Service Areas Other than Categories of Service:	
62	Need Determination - Establishment	
63	Service Demand	
64	Referrals from Inpatient Base	
65	Physician Referrals	
66	Historical Referrals to Other Providers	
67	Population Incidence	
68	Impact of Project on Other Area Providers	
69	Utilization	
70	Deteriorated Facilities	
71	Necessary Expansion	
72	Utilization- Major Medical Equipment	
73	Utilization-Service or Facility	109
	FEC:	
74	Freestanding Emergency Center Medical Services	
	Financial and Economic Feasibility:	
75	Financial Feasibility	110
76	Economic Feasibility	115
77	Safety Net Impact Statement	120

Facility / Project Identification

The Carle Clinic Association is comprised of individual locations. The primary business address is:

The Carle Clinic Association
 602 West University Avenue
 Urbana, Illinois, 61801

The following is a list of all locations:

FACILITY LOCATION INFORMATION					
Location	Address	County	Health Service Area	Health Planning Area	
Carle Clinic Association - Main Campus - Urbana	602 W. University Ave., Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	208 W. Griggs, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	1101 E. University Pod C, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Danville	311 W. Fairchild, Danville IL	Vermilion	HSA 4	D-01	
Carle Clinic Association - Urbana	709 W. University, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Champaign	2102 N. Neil St., Suite 3, Champaign IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	703 University, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Monticello	1109 N. State, Monticello IL	Piatt	HSA 4	D-01	
Carle Clinic Association - Urbana	722 Killarney, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	732 Killarney, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	1908 Linview, Unit 1 West, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	1908 Linview, Unit 1 East, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	1908 Linview, Lots 10 and 11, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	301 S. Vine, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	301 S. Vine, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Champaign	709 S. Neil, Champaign IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	102 E. Main, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Champaign	1813 & 1815 W. Kirby, Champaign IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	204 - 206 W. University, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Effingham	503 N. Maple St, Effingham IL	Effingham	HSA 5	F-02	
Carle Clinic Association - Champaign	206 Anthony Dr., Champaign IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Urbana	810 W. Anthony, Urbana IL	Champaign	HSA 4	D-01	
Carle Clinic Association - Champaign	1710 W. Curtis, Champaign IL	Champaign	HSA 4	D-01	

Facility / Project Identification

Carle Clinic Association - Danville	2300 Vermillion, Danville IL	Champaign	HSA 4	D-01
Carle Clinic Association - Mahomet	1001 S. Heather Dr, Mahomet IL	Champaign	HSA 4	D-01
Carle Clinic Association - Champaign	1802 S. Mattis, Champaign IL	Champaign	HSA 4	D-01
Carle Clinic Association - Rantoul	1540 E. Grove Ave, Rantoul IL	Champaign	HSA 4	D-01
Carle Clinic Association - Urbana	610 N. Lincoln Ave, Urbana IL	Champaign	HSA 4	D-01
Carle Clinic Association - Champaign	1702 S. Mattis, Champaign IL	Champaign	HSA 4	D-01
Carle Clinic Association - Tuscola	301 E. Southline Rd, Tuscola	Douglas	HSA 4	D-01
Carle Clinic Association - Urbana	1818 E. Windsor Rd, Urbana IL	Champaign	HSA 4	D-01

Site Information

The Carle Clinic Association is comprised of individual locations. The primary business address is:

The Carle Clinic Association
 602 West University Avenue
 Urbana, Illinois, 61801

The following is a list of all locations and other required information:

FACILITY LOCATION INFORMATION						
Location	Address	County	Health Service Area	Health Planning Area	Gross Square Feet	
Carle Clinic Association - Main Campus - Urbana	602 W. University Ave., Urbana IL	Champaign	HSA 4	D-01	355,069	
Carle Clinic Association - Urbana	208 W. Griggs, Urbana IL	Champaign	HSA 4	D-01	18,000	
Carle Clinic Association - Urbana	1101 E. University Pod C, Urbana IL	Champaign	HSA 4	D-01	22,717	
Carle Clinic Association - Danville	311 W. Fairchild, Danville IL	Vermillion	HSA 4	D-01	32,644	
Carle Clinic Association - Urbana	709 W. University, Urbana IL	Champaign	HSA 4	D-01	2,000	
Carle Clinic Association - Champaign	2102 N. Neil St., Suite 3, Champaign IL	Champaign	HSA 4	D-01	41,290	
Carle Clinic Association - Urbana	703 University, Urbana IL	Champaign	HSA 4	D-01	1,600	
Carle Clinic Association - Monticello	1109 N. State, Monticello IL	Piatt	HSA 4	D-01	5,607	
Carle Clinic Association - Urbana	722 Killarney, Urbana IL	Champaign	HSA 4	D-01	4,500	
Carle Clinic Association - Urbana	732 Killarney, Urbana IL	Champaign	HSA 4	D-01	4,500	
Carle Clinic Association - Urbana	1908 Linview, Unit 1 West, Urbana IL	Champaign	HSA 4	D-01	5,500	
Carle Clinic Association - Urbana	1908 Linview, Unit 1 East, Urbana IL	Champaign	HSA 4	D-01	2,000	
Carle Clinic Association - Urbana	1908 Linview, Lots 10 and 11, Urbana IL	Champaign	HSA 4	D-01	1,000	
Carle Clinic Association - Urbana	301 S. Vine, Urbana IL	Champaign	HSA 4	D-01	3,708	
Carle Clinic Association - Urbana	301 S. Vine, Urbana IL	Champaign	HSA 4	D-01	21,500	
Carle Clinic Association - Champaign	709 S. Neil, Champaign IL	Champaign	HSA 4	D-01	7,500	
Carle Clinic Association - Urbana	102 E. Main, Urbana IL	Champaign	HSA 4	D-01	13,746	
Carle Clinic Association - Champaign	1813 & 1815 W. Kirby, Champaign IL	Champaign	HSA 4	D-01	24,795	
Carle Clinic Association - Urbana	204 - 206 W. University, Urbana IL	Champaign	HSA 4	D-01	4,777	
Carle Clinic Association - Effingham	503 N. Maple St, Effingham IL	Effingham	HSA 5	F-02	2,000	
Carle Clinic Association - Champaign	206 Anthony Dr., Champaign IL	Champaign	HSA 4	D-01	1,758	
Carle Clinic Association - Urbana	810 W. Anthony, Urbana IL	Champaign	HSA 4	D-01	3,200	
Carle Clinic Association - Champaign	1710 W. Curtis, Champaign IL	Champaign	HSA 4	D-01	66,230	
Carle Clinic Association - Danville	2300 Vermillion, Danville IL	Champaign	HSA 4	D-01	47,078	
Carle Clinic Association - Mahomet	1001 S. Heather Dr, Mahomet IL	Champaign	HSA 4	D-01	13,009	

Site Information

Carle Clinic Association - Champaign	1802 S. Mattis, Champaign IL	Champaign	HSA 4	D-01	23,434
Carle Clinic Association - Rantoul	1540 E. Grove Ave, Rantoul IL	Champaign	HSA 4	D-01	12,690
Carle Clinic Association - Urbana	610 N. Lincoln Ave, Urbana IL	Champaign	HSA 4	D-01	16,092
Carle Clinic Association - Champaign	1702 S. Mattis, Champaign IL	Champaign	HSA 4	D-01	2,859
Carle Clinic Association - Tuscola	301 E. Southline Rd, Tuscola	Douglas	HSA 4	D-01	4,280
Carle Clinic Association - Urbana	1818 E. Windsor Rd, Urbana IL	Champaign	HSA 4	D-01	66,324
Total					831,407



To all to whom these Presents Shall Come, Greeting:

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

THE CARLE FOUNDATION HOSPITAL, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON MAY 28, 1982, 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.



Authentication #: 0922902042

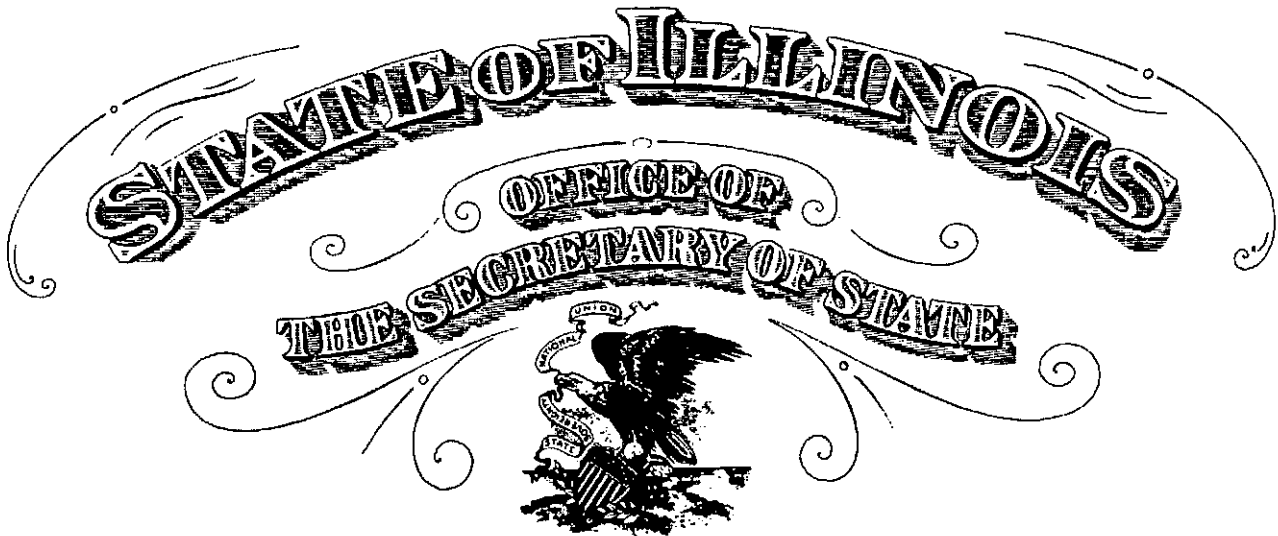
Authenticate at: <http://www.cyberdriveillinois.com>

In Testimony Whereof, I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this 17TH day of AUGUST A.D. 2009 .

Jesse White

SECRETARY OF STATE

Attachment -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

THE CARLE FOUNDATION, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON NOVEMBER 06, 1946, 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.



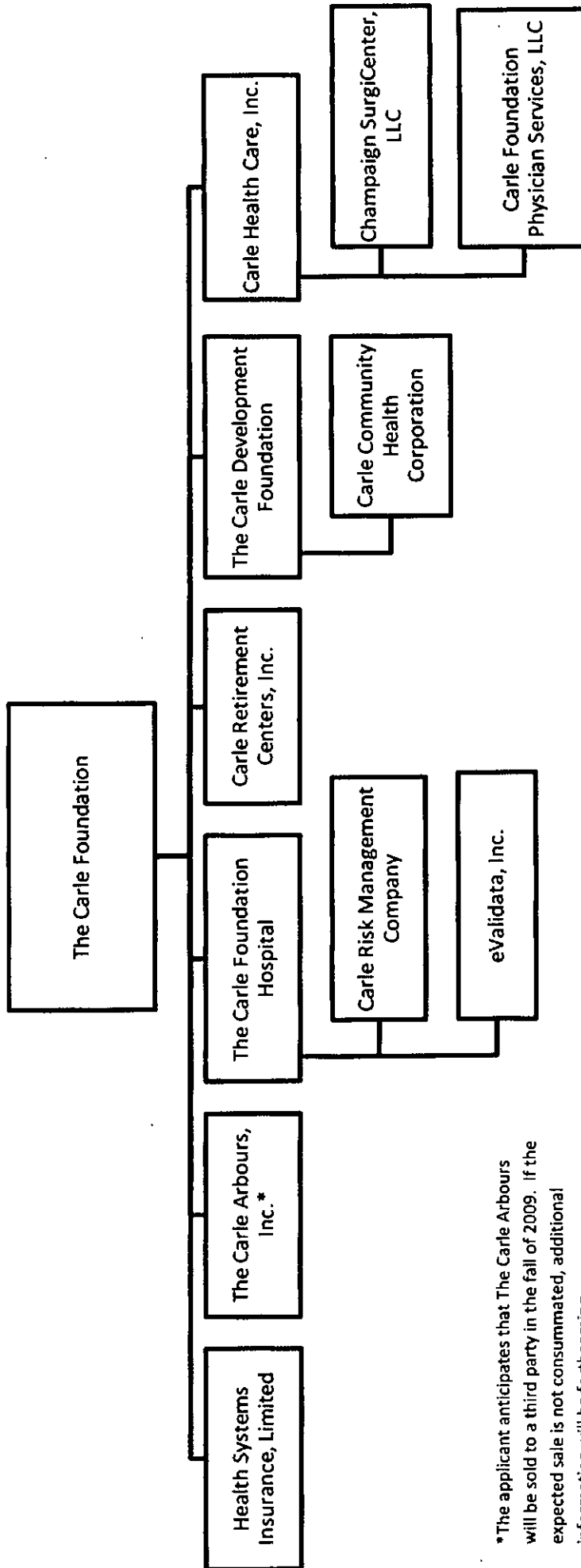
Authentication #: 0922902040

Authenticate at: <http://www.cyberdriveillinois.com>

In Testimony Whereof, I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this 17TH day of AUGUST A.D. 2009 .

Jesse White

SECRETARY OF STATE



*The applicant anticipates that The Carle Arbours will be sold to a third party in the fall of 2009. If the expected sale is not consummated, additional information will be forthcoming.

Flood Plain Requirements

This application for permit does not involve new construction therefore, the Flood Plain requirement is not applicable.

Historic Resources Preservation Act Requirements

This project involves the acquisition of a medical practice to be operated in existing spaces. There is no construction of new buildings, modernization of existing buildings, or demolition of any structures involved in this project. Therefore this section is not applicable.

Project Outline

The proposed project does not include the establishment, expansion, modernization or discontinuation of any health care facility or category of service as those terms are defined under applicable HFSRB law and rules. Nor does the proposed transaction involve the change of ownership of a health care facility. Rather, the project involves a capital expenditure for clinical service areas other than a category of service in excess of the current capital expenditure minimum (\$11.5 million). The services affected and their associated units of service and volumes are included in the chart below.

The chart provides a summary of units of service provided by CCA and CFH during the last calendar year, separated by categories of service.

Summary of Service Volumes - CY 2008

Service	Units / Equipment Type	# of Pieces of Equipment	#of Rooms	Historical Utilization
Clinical Professional Services	Work RVU's	NA	NA	2,159,650
	Total RVU's	NA	NA	5,284,822
MRI	Machine	6 ¹	6	13,610 exams
Lab Tests	Number of Tests	NA	NA	1,377,658 tests
General X-Ray and Radiology ²	Machines	36	21	130,852 exams
Breast Imaging	Machines	6	6	38,919 exams
Ultrasound & OB Sono	Machines	18	14	37,531 exams
Angiography Room ³	Machines	10	10	6,729 exams
CT & PET/CT	Machines	6	6	38,658 exams
Nuclear Medicine	Machines	4	4	6,142 exams
Cardiac Diagnostic	Visits	38	NA	60,421 exams
Carle SurgiCenter	Operating Rooms	NA	5	5,718 cases ⁴
DEXA	Machines	3	3	5,476 exams

¹ Data provided consists of 5 rooms and 1 mobile unit.

² This data row represents diagnostic and interventional radiology and/or imaging and therapeutic radiology.

³ The data here will be repeated for cardiac diagnostic because the same rooms and equipment are used for different procedures types.

⁴ The data provided for Carle SurgiCare represents the period of July 1, 2008 to June 30, 2009, not calendar year 2008.

Letter of Intent Regarding Potential Integration between Carle Clinic Association and The Carle Foundation

This Letter of Intent ("Letter of Intent") sets forth the mutual intentions of **Carle Clinic Association, P.C.** ("the Clinic") and **The Carle Foundation, Inc.** (the "Foundation" or the "Hospital Parent") to integrate the Carle Foundation Hospital (the "Hospital") and Clinic operations. The Foundation and the Clinic believe that the integration of the Hospital and the Clinic has the opportunity to better align the strategic, financial, and operational objectives of both the Hospital and the Clinic, would further our respective purposes and missions, strengthen our abilities to serve our community, and increase the availability and effectiveness of services provided throughout the region.

Accordingly, this Letter of Intent sets forth our non-binding intentions and understandings as well as specifies certain binding expectations and obligations of the Foundation and the Clinic related to our discussions. When accepted by both organizations, it will evidence our mutual intent with respect to the basic terms and conditions under which further discussion and planning as well as regarding the completion of definitive agreements for the proposed integration.

1. **Purpose of the Transaction.** The Hospital and the Clinic will combine their health care operations into a single health care system (the "Transaction") which will allow for the provision of a continuum of high quality health care and service excellence for the community, enhancement of the ability to attract and retain quality physicians and health care professionals, and cost savings and operational efficiencies for the entire new system.

2. **Structure of the Transaction.** The Hospital shall buy all Clinic "physician practice" assets. Simultaneously, the Foundation, shall create a subsidiary entity and there shall be a merger between the Clinic entity and said subsidiary entity. Accordingly, those assets and liabilities remaining with the Clinic at the time of such corporate integration shall be assumed by the Foundation. These assets shall include the Clinic's ownership interest in its managed care organization, Health Alliance Medical Plans, Inc.

3. **Purchase Price.** The Hospital and the Hospital Parent shall pay for the assets or interests of the Clinic at a fair market value purchase price which shall be \$250 million ("Purchase Price"). The fair market value of such Purchase Price will be supported by an independent third-party appraiser experienced in the valuation of health care entities. The Purchase Price will include the purchase of three parcels of land with an aggregate value of approximately \$4.4 million dollars.

4. **Employment.** With regard to the employment of the Clinic personnel, it is anticipated that the Hospital will make offers of employment to physician and non-physician employees of the Clinic in good standing based on fair market value compensation and benefits which are to be determined.

5. **Conditions.** The closing of the Transaction is subject to and contingent upon:

(a) Approval of the Transaction by the Board of Directors and owners of the Clinic;

(b) Approval of Transaction by the Hospital Parent's Board of Trustees and any other requisite approval of the Hospital Parent's members;

(c) All necessary licenses and permits necessary to complete the Transaction (including a Certificate of Need permit from the Illinois Health Facilities and Services Review Board for the capital expenditure for payment of the Purchase Price by the Hospital) shall have been obtained and the Transaction shall have been approved by all state agencies with jurisdiction over the licenses and permits for the parties including, but not limited to, the Illinois Health Facilities Services and Review Board and the Illinois Department of Insurance; and

(d) The execution by the Clinic, the Foundation and the Hospital of definitive agreements, containing the provisions outlined above and certain representations, warranties, and other terms and conditions mutually acceptable to the parties (the "Definitive Agreements"). The Definitive Agreements shall contain the following terms and conditions, among others:

(i) The Transaction shall be structured as a purchase of the physician practice assets of the Clinic;

(ii) Any remaining assets and liabilities, including those relating to Health Alliance Medical Plans, Inc. will be assumed by a subsidiary of the Hospital Parent through a merger of Clinic and a subsidiary of the Hospital;

(iii) Substantially all of the Clinic furniture, fixtures and equipment shall be transferred in connection with the Transaction subject to the exclusion of specific assets to be identified and mutually agreed to at a later date; and

(iv) The Clinic owners shall be subject to an agreement not to compete with the Hospital in any of its service lines the terms of which are to be mutually agreed to.

6. **Tax-Exempt Status of Hospital.** The Hospital intends that the proposed Transaction will promote its charitable philosophies, mission and purposes, and the Hospital intends that the Transaction will expand the availability of health care services in east central Illinois. The Transaction will be structured in furtherance of its charitable philosophies, missions and purposes.

7. **Binding Agreements.** In recognition of the significant time and effort necessary to pursue this integration and in recognition of the need for mutual commitments by each of the Foundation and the Clinic relating to undertaking and conducting the integration discussions, the following provisions of this Section 7 constitute the legally binding and enforceable agreements

of the Foundation and the Clinic. The parties agree that the binding terms of this Letter of Intent shall be applicable to and binding upon their respective subsidiary organizations.

(a) Intent. Both the Foundation and the Clinic agree that no purpose of this Letter of Intent is to induce or reward referrals or generate business, but is to engage in a fair market value, commercially reasonable, and legitimate integration.

(b) Diligent Efforts and Good Faith Discussions. Both parties agree to discuss in good faith and to use diligent efforts to arrive at mutually acceptable terms for an integration and to negotiate in good faith and with all diligent efforts the terms and conditions of the Definitive Agreements. Except for the binding obligations described in this Letter of Intent, there will be no final, binding agreement regarding the proposed integration until the Definitive Agreements are executed.

(c) Access. Subject to the confidentiality provisions set forth below and applicable law, each party shall provide to the other party, to its legal counsel and to other authorized representatives, reasonable access to appropriate personnel, properties, books, records, financial statements, and such other information reasonably related to the proposed integration. Such access shall be granted for the purpose of facilitating the assessment and development of the proposed integration and related business plans. It may be shared internally and with consultants and advisors on a reasonable "need to know" basis, and shall in any case be used only for the consideration and evaluation of the proposed integration.

(d) Confidentiality. This Letter of Intent, the terms and provisions of the proposed integration, and all information associated with or relating to the integration are and shall remain strictly confidential in accord with a Confidentiality Agreement executed by the parties. Each party agrees to treat all information concerning the other party furnished pursuant to this Letter of Intent (the "Information") in accordance with the provisions of this paragraph and to comply with the requirements set forth in this Letter of Intent. The Information will be used solely for the purpose of evaluating the contemplated integration and will be kept confidential by the recipient party and its representatives, provided that:

i. Neither party shall disclose or divulge any Information without the express prior written consent of the disclosing party, except that each party may disclose such Information to its employees, officers, directors, shareholders, members, accountants, attorneys or other representatives who reasonably need access to such information for the purpose of evaluating the proposed arrangement. Each party shall ensure that anyone who obtains such Information is made aware of this confidentiality provision and agrees not to disclose any Information without express written consent from the party to whom the Information belongs;

ii. The Information may be disclosed if disclosure is required by law or court order; and

iii. Upon termination of this Letter of Intent, each party agrees to promptly return all Information provided to it by or on behalf of the other parties; and

iv. Either party may request that any Information be governed by a specific confidentiality agreement appropriate to particular circumstances. In the event of a conflict between this Letter of Intent and the Confidentiality Agreement entered into, the Confidentiality Agreement shall control.

(e) Continued Operations and Exclusivity. From the date of acceptance of this Letter of Intent until its termination, the Foundation will not, directly or indirectly, through any officer, director, agent, or otherwise, solicit or initiate, discuss or negotiate, or encourage submission of proposals or offers relating to, any integrations with other physician organizations involving terms or possible transactions similar to those contemplated in this Letter of Intent. From the date of acceptance of this Letter of Intent until its termination, the Clinic will not, directly or indirectly, through any officer, director, agent, or otherwise, solicit or initiate, discuss or negotiate, or encourage submission of proposals or offers relating to, any integrations with other hospitals, health care systems, health services providers, physician organizations, or other organizations, involving terms or possible transactions similar to those contemplated in this Letter of Intent. The Clinic shall continue to conduct its businesses in the ordinary course and shall refrain from engaging in any extraordinary Transaction involving its operations during the course of these discussions.

(f) Public Disclosure. Consistent with our commitment to appropriate confidentiality noted above, neither the Foundation nor the Clinic shall make, or cause to be made, any public statement, nor shall either party release any information regarding the proposed arrangement, except as required by law or as may specifically be agreed to by the parties in writing (e.g., joint press releases).

(g) Expenses. The parties shall each be solely responsible for and bear all of their respective costs and expenses related to the proposed arrangement and development of the Definitive Agreements including, without limitation, expenses of legal counsel, accountants, and other advisors.

(h) No Claims. Except for Section 7 of this Letter of Intent which contains certain binding agreements, this Letter of Intent reflects only our mutual intent to pursue integration and is not a binding agreement. No person shall bring any claim against any person based on this Letter of Intent as the result of a failure to agree on, or enter into, the Definitive Agreements contemplated herein or otherwise, except to the extent such obligations arise out of the sections identified herein as binding agreements among the parties.

(i) Termination. This Letter of Intent shall terminate upon the earlier of: (a) the date of execution of a Definitive Agreement relating to a comprehensive integration (e.g., not a Definitive Agreement relating to an interim step in the process); or (b) January 15, 2010, unless mutually extended or terminated by the parties in writing. Upon termination, this Letter of Intent will have no force or effect and neither party will have any further obligations hereunder, except with respect to the Confidentiality, Continued Operations and Exclusivity, Public Disclosure, No Claims, and Expenses portions of the Letter of Intent, as addressed in this Section 7.

8. **Legal Effect of Letter of Intent.** Except for the provisions contained in Section 7 which are to be considered legally binding agreements which shall survive expiration or termination of this Letter of Intent, this Letter of Intent sets forth only a non-binding summary of the understanding between the Foundation and the Clinic with respect to the transaction. This Letter of Intent does not constitute, and shall not be construed as, a legally binding agreement to agree with respect to any aspect of the integration transaction or to enter into the transaction.


Effective as of the date above, we are signing a copy of this Letter of Intent in the space provided below to confirm our mutual understanding and agreement. We look forward to our continued discussions and to the success of our mutual efforts for the benefit of the communities we serve.

CARLE CLINIC ASSOCIATION, P.C.

By: 

Title: CEO

THE CARLE FOUNDATION, INC.

By: 

Title: CEO



Ernst & Young LLP
233 South Wacker Drive
Chicago, Illinois
60606
Tel: (312) 879-2000
www.ey.com

9 October 2009

Dr. James C. Leonard
President and Chief Executive Officer
Carle Foundation Hospital
611 West Park Street
Urbana, IL 61801

Dear Dr. Leonard:

It is my understanding that the Foundation Board of Trustees (the "Board") for Carle Foundation Hospital held a meeting on Tuesday October 6, 2009 to approve an offer to purchase 100% of the shareholder's equity of Carle Clinic Association ("CCA") and its wholly owned subsidiary, Health Alliance Medical Plan ("HAMP") for \$250,000,000. This price falls within the overall recommended range of fair market value for the shareholder's equity documented in our independent valuation analysis and narrative report prepared for both CCA and HAMP.

I appreciate the opportunity to assist Carle Foundation Hospital and its Board with the valuation analysis of CCA and HAMP. Please feel free to contact me with any comments or questions that may arise regarding either valuation analysis.

Sincerely,


Matthew M. Vitellaro
Partner

Itemization of Other Costs to be Capitalized

The \$245,377,783¹ fair market value purchase price being paid for Carle Clinic Association ("Clinic") by Carle Foundation Hospital was determined in consideration of both the Clinic assets being acquired as well as the Clinic liabilities being assumed by Carle Foundation Hospital. Therefore, the Other Costs to be Capitalized figure contained in the Project Costs and Sources of Funds table reflects the following assets and liabilities:

\$45,528,000	Cash
\$112,728,000	Net Working Capital
\$94,771,000	Fixed Assets
\$24,000,000	Joint Venture Minority Interests
\$121,872,000	Intangible Assets and Goodwill
(\$59,188,000)	Interest-bearing Debt
(\$50,400,000)	Pension Liability
(\$11,500,000)	Retiree Medical Liability
(\$27,811,000)	<u>Other Operating Liabilities²</u>
\$250,000,000	TOTAL including land
- \$ 4,622,217	Land Value
<hr/>	
\$245,377,783	TOTAL excluding land

¹ The Carle Foundation is also acquiring land with a value of \$4,622,217 for a total purchase price of \$250,000,000.

² Other operating liabilities reflect certain liabilities to be assumed by Carle Foundation Hospital related to employee time off, professional tail liability coverage, ancillary contract adjustments and adjustments for potential future taxes payable by Carle Foundation Hospital.

Cost Space Requirements

This project involves the acquisition of a medical practice to be operated in existing spaces that will not be modified. There is no construction, modernization or demolition of space involved in this project, therefore this section is not applicable.



Carle Foundation Hospital

611 West Park Street, Urbana, IL 61801-2595 Phone: (217) 383-3311

October, 2009

Ms. Courtney Avery
Acting Chairperson
Illinois Health Facilities and Services Review Board
525 West Jefferson Street
Springfield, Illinois 62761

RE: Attachment 10 - Background of Applicant (The Carle Foundation)

Dear Ms. Avery:

The following information addresses the four points of the subject criterion 1110.230:

1. The health care facilities owned or operated by the applicant include:

Carle Foundation Hospital

License Identification Number: 003798

Accreditation Identification Number: 7439

Champaign SurgiCenter, LLC

License Identification Number: 7002959

**Carle Foundation Hospital Postsurgical Recovery Care Center
- Champaign**

License Identification Number: 4000015

**Carle Foundation Hospital Ambulatory Surgical Treatment
Center - Danville**

License Identification Number: 7002439

**Carle Foundation Hospital Postsurgical Recovery Care Center
- Danville**

License Identification Number: 4000019

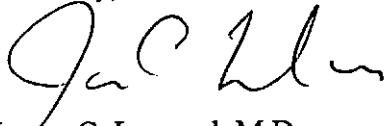
2. Proof of current licensure and accreditation is attached.

Attachment-10

3. There have been no adverse actions taken against the health care facilities owned or operated by the applicant during the three years prior to the filing of this application.

4. This letter serves as authorization permitting the State Board and Agency access to 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 Agency finds pertinent to this subsection.

Sincerely,

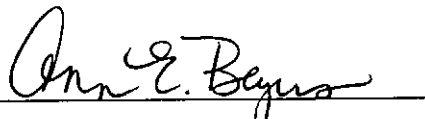


James C. Leonard, M.D.
President and CEO

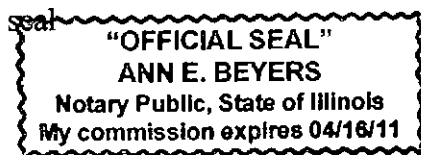
Attachments

Notarization:

Subscribed and sworn to before
me this 9th day of October



Signature of Notary





State of Illinois 1899772
 Department of Public Health

LICENSED PROFESSIONAL REGISTRATION

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

DANON T. ARNOLD, M.D.
 DIRECTOR

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

12/31/09

BGBD 0003798

FULL LICENSE

GENERAL HOSPITAL

EFFECTIVE: 01/01/09

BUSINESS ADDRESS

CARLE FOUNDATION HOSPITAL
 611 WEST PARK STREET

URBANA IL 61801

The State of this license has a colored background. Printed by Authority of the State of Illinois.

REGISTRATION AND LICENSES

FOR THE YEAR THIS LICENSE TO EXPIRE SEE THE IDENTIFICATION

1899772

CARLE FOUNDATION HOSPITAL

12/31/09

BGBD 0003798

FULL LICENSE

GENERAL HOSPITAL

EFFECTIVE: 01/01/09

11/01/08

CARLE FOUNDATION HOSPITAL
 611 WEST PARK STREET

URBANA IL 61801



July 31, 2008

James C. Leonard, MD
President and CEO
Carle Foundation Hospital
611 West Park Street
Urbana, IL 61801

Joint Commission ID #: 7439
Accreditation Activity: Measure of Success
Accreditation Activity Completed: 7/31/2008

Dear Dr. Leonard:

The Joint Commission would like to thank your organization for participating in the accreditation process. This process is designed to help your organization continuously provide safe, high-quality care, treatment, and services by identifying opportunities for improvement in your processes and helping you follow through on and implement these improvements. We encourage you to use the accreditation process as a continuous standards compliance and operational improvement tool.

The Joint Commission is granting your organization an accreditation decision of Accredited for all services surveyed under the applicable manual(s) noted below:

- Comprehensive Accreditation Manual for Home Care
- Comprehensive Accreditation Manual for Hospitals

This accreditation cycle is effective beginning November 17, 2007. The Joint Commission reserves the right to shorten or lengthen the duration of the cycle; however, the certificate and cycle are customarily valid for up to 39 months.

Please visit [Quality Check®](#) on the Joint Commission web site for updated information related to your accreditation decision.

We encourage you to share this accreditation decision with your organization's appropriate staff, leadership, and governing body. You may also want to inform the Centers for Medicare and Medicaid Services (CMS), state or regional regulatory services, and the public you serve of your organization's accreditation decision.

Please be assured that the Joint Commission will keep the report confidential, except as required by law. To ensure that the Joint Commission's information about your organization is always accurate and current, our policy requires that you inform us of any changes in the name or ownership of your organization or the health care services you provide.

Sincerely,

A handwritten signature in black ink that reads 'Linda S. Murphy-Knoll'.

Linda S. Murphy-Knoll
Interim Executive Vice President
Division of Accreditation and Certification Operations



State of Illinois 1904779

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.

DAMON T. ARNOLD, M.D.
DIRECTOR

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

EXPIRATION DATE	CATEGORY	ID NUMBER
01/31/10	BGBD	7002959
FULL LICENSE AMBUL SURGICAL TREAT CNTR EFFECTIVE: 02/01/09		

BUSINESS ADDRESS

CHAMPAIGN SURGICENTER, LLC
D/B/A CARLE SURGICENTER
1702 S. MATTIS AVENUE

CHAMPAIGN IL 61821

The face of this license has a colored background. Printed by Authority of the State of Illinois • 4/07 •



Pat Quinn, Governor
Damon T. Arnold, M.D., M.P.H., Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • www.idph.state.il.us

LICENSE, PERMIT CERTIFICATION, REGISTRATION

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

Alternative Health Care Delivery Act and the Postsurgical Recovery Care Center Demonstration Program Code (77Ill. Adm. Code 210)

Licensed number of Beds	Expiration Date	License Identification
6	8/01/2010	4000015

Carle Recovery Center-Champaign
1702 South Mattis
Champaign, IL 61821

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



Pat Quinn, Governor
Damon T. Arnold, M.D., M.P.H., Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • www.idph.state.il.us

September 23, 2009

Ms. Julie Hudson, Director
Carle Recovery Center- Champaign
1702 S. Mattis
Champaign, IL 61821

Dear Ms. Hudson:

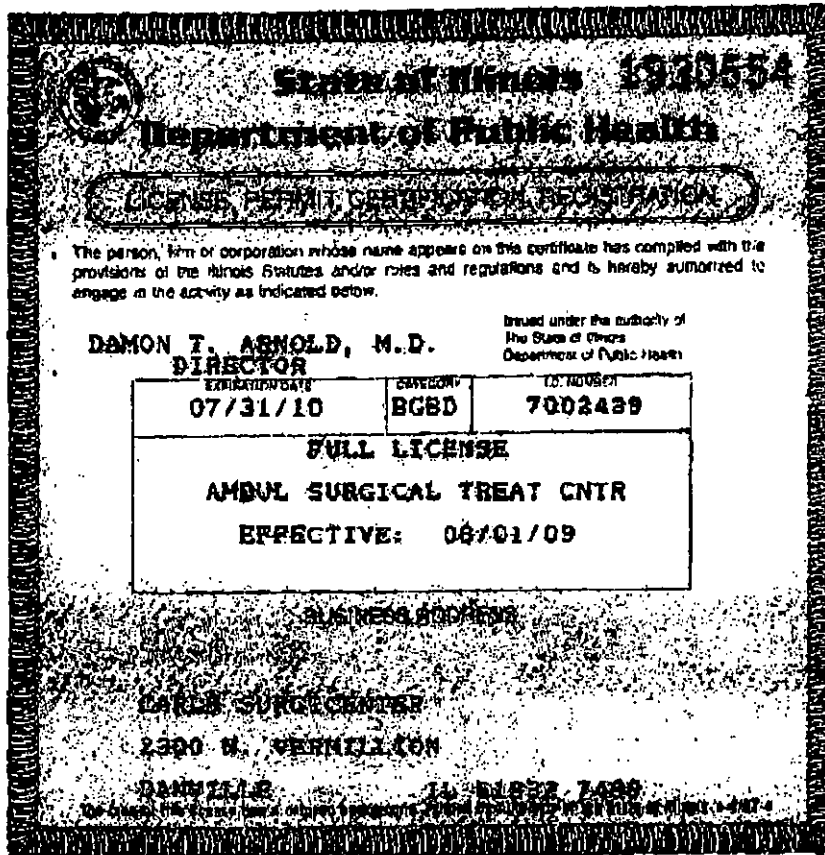
The Division of Health Care Facilities and Programs found on September 3, 2009, that the Post Surgical Recovery Care facility at Carle Recovery Center was in substantial compliance with the Alternative Health Care Delivery Act and the Postsurgical Recovery Care Center Demonstration Program Code (77Ill. Adm. Code 210). The Plan of Correction submitted was acceptable. The license applies to 6 beds.

This license is not transferable and expires August 1, 2010.

Sincerely,

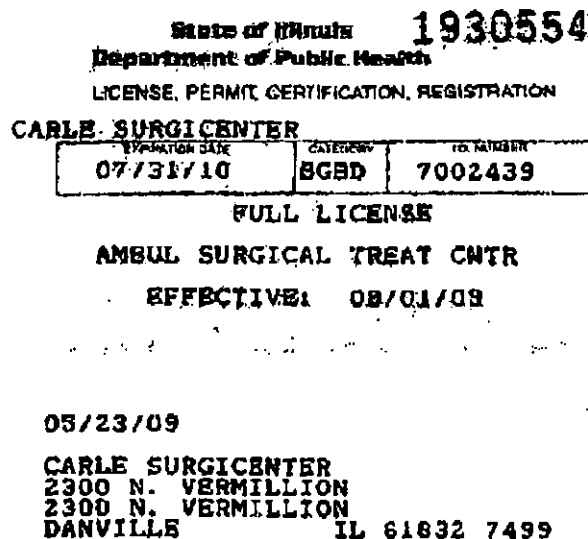
A handwritten signature in cursive script that reads "Karen Senger".

Karen Senger, RN, B.S.N.
Supervisor, Central Office Operations Section
Division of Health Care Facilities and Programs



← DISPLAY THIS PART IN A
 CONSPICUOUS PLACE

REMOVE THIS CARD TO CARRY AS AN
 IDENTIFICATION



FEE RECEIPT NO. 75437

54



Pat Quinn, Governor
Damon T. Arnold, M.D., M.P.H., Director

525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • www.idph.state.il.us

LICENSE, PERMIT CERTIFICATION, REGISTRATION

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

Alternative Health Care Delivery Act and the Postsurgical Recovery Care Center Demonstration Program Code (77Ill. Adm. Code 210)

Licensed number of Beds	Expiration Date	License Identification
2	8/01/2010	4000019

Carle Recovery Center Danville
2300 N Vermillion
Danville, Illinois 61832

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

Purpose of Project

Planned benefits of the Carle Foundation Hospital (the "Hospital")/Carle Clinic Association (the "Clinic") integration are as follows:

- Efficiently facilitate effective care coordination to deliver high-quality, high-value care;
 - Ensure the right care is delivered at the right time in the right place and eliminate access barriers to appropriate care;
 - Enable the implementation of disease state management programs to provide a systematic population-based approach to medical care designed to standardize and improve provider adherence to treatment guidelines. Integration gives the flexibility and efficiency of utilizing staff for inpatient and outpatient services when appropriate and focus on a defined patient population rather than a point of care;
 - Help ensure the availability of safety net services as discussed in the safety net impact statement including improving access to ambulatory care services;
 - Expand the Hospital's charity care policy to the broad array of ambulatory care services that will be integrated into the Hospital system;
 - Maximize integration of the electronic medical record and better position the new organization to participate in a Regional Health Information Exchange;
 - Create clear accountability for the total care of patients through unified management and clear chains of command;
 - Support a teamwork approach across care settings and align physician and Hospital quality and care goals and initiatives including allowing the system to participate in the various government-sponsored demonstration projects relating to the vertical integration of care delivery;
 - Maximize provider commitment to risk and quality management processes and enable coordination of effort for patient safety and quality improvement initiatives;
 - Establish and implement unified research priorities, commitments, and incentives to encourage innovation in care delivery and deliver clinical and educational advances;
- and
- Facilitate the Hospital's regional outreach efforts to smaller, rural hospitals in outlying areas.

Hospital service area counties: In Illinois: Champaign, Christian, Clark, Clay, Coles, Crawford, Cumberland, Dewitt, Douglas, Edgar, Effingham, Fayette, Ford, Grundy, Iroquois, Jasper, Kankakee, LaSalle, Lawrence, Livingston, Logan, Macon, McLean, Montgomery, Moultrie, Piatt, Richland, Sangamon, Shelby, Tazewell, Vermilion, Will, Woodford. In Indiana: Benton, Fountain, Montgomery, Parke, Putnam, Vermillion, Warren. The area served by the Hospital, based on the U.S. Census Bureau data had an estimated population of 2,503,218 in 2008.

Problems with the *status quo* are detailed below and in the narrative response for Section 1110.230, Alternatives to the Proposed Project (Attachment 12).

The attached reports support the Hospital's integration strategy: Douglas McCarthy, et al, Mayo Clinic: Multidisciplinary Teamwork, Physician Led Governance, and Patient Centered Culture Drive World Class Health Care August 2009 and the Geisinger Health System: Achieving the Potential of System Integration Through Innovation, Leadership, Measurement, and Incentives.

Following is additional detail regarding the project's purpose. The specific quality objectives and timelines for achieving these objectives is also described below.

1. The proposed project's purpose is the integration of the Hospital with the Clinic to advance the joint goal of creating an ideal health care delivery system to serve patients in the hospital's existing service area as well as patients in other areas. The proposed project will unite the complementary strengths of the two organizations and enable them to provide the best care to every patient through integrated clinical practice, education, and research. The goal will be to achieve the same success as the Mayo Clinic model—a model that (1) encourages health care providers to coordinate patient care among multiple sites and across various health care settings through active management and (2) challenges providers to strive towards information continuity by creating consistent, electronic medical record systems which are available to multiple providers within the system (see attached case study). Dr. Terrance Bowman, M.D., the Mayo Clinic's medical director, maintains in that case study that "sustaining change in clinical practice requires aligning management structure and care processes both horizontally and vertically across the organization." The Hospital agrees with this philosophy and desires to pursue similar integration.

The full integration of health care services and the use of shared electronic medical record across inpatient and outpatient settings has been shown to promote the efficient use of health care resources and clinical excellence. The Hospital's goal with this proposed project is to replicate the Mayo Clinic's example in central Illinois to provide better health care at a lower cost. In 2007, health care spending in the United States accounted for 16.2 percent of the nation's Gross Domestic Product, and according to the Kaiser Family Foundation, one of the major factors that is driving the cost of health care today is "administrative costs."¹ In this report, the Kaiser Foundation estimates that at least 7 percent of health care expenditures are for "administrative costs" (and may be as high as 30 percent) and the percentage is quite high when compared with Medicare's administrative cost of less than 2 percent.² The report continues and notes that "controlling health care costs" is a "key tenet for broader economic stability and growth, and President Obama has made cost control a focus of health reform efforts under way."³ Moreover, the report highlights the major proposals that exist to contain costs, which include "greater use of technology . . . [and] improving quality and efficiency [by] . . . decreasing unwarranted variation in medical practice and unnecessary care."⁴

The proposed integration will create a seamless health care delivery system. It anticipates the integration of the Clinic's 342 physicians into the Hospital system, as well as integrating the Clinic's other health care providers, and will widen access to physician services for the community. Consequently, it will improve the health of the people served by providing world-class care that is patient-focused, physician-led, and accessible. Access to ambulatory care services will be improved because practitioners will be able to spend less time on administrative work and care coordination and more time on patient care—a positive step because one factor shown to create higher administrative costs in health care is time spent by physicians on non-patient care tasks.⁵ As a result, an integrated system will allow the Hospital to become a model of patient-focused care that attracts the best people in medical care.

2. The status quo creates numerous barriers to achieving the goals of an integrated system, including:

¹ U.S. Health Care Costs, BACKGROUND BRIEF (The Henry J. Kaiser Family Found., Washington, DC, July 2009) available at http://www.kaiseredu.org/topics_im.asp?imID=1&parentID=61&id=358.

² *Id.*; see also Steffie Woolhandler, et al., Costs of Health Care Administration in the United States and Canada, N. ENGL. J. MED. 349, at 768 (Aug. 21, 2003) (reporting that health care administrative expenses are as high as 31 percent of health care expenditures in the U.S.).

³ U.S. Health Care Costs, BACKGROUND BRIEF (The Henry J. Kaiser Family Found., Washington, DC, July 2009).

⁴ *Id.*

⁵ Steffie Woolhandler, et al., Costs of Health Care Administration in the United States and Canada, N. ENGL. J. MED. 349, at 769 (Aug. 21, 2003).

- The current care delivery system does not provide for fully aligned collaboration. The current system is structured to optimize outcomes for the episode of care rather than the global level for the continuum of care. Providers (including nurses and other members of care teams) across care settings are not responsible to, nor overseen by, the same management team. In separate care systems it is more difficult to effectively and reliably collaborate to deliver high-quality, high-value care. Also, physician and hospital quality and care goals and initiatives are developed independently and commitment to risk and quality management processes is not maximized;
- The electronic medical record is an enabling technology for providers to pursue quality improvement in potentially powerful ways. Separate information technology systems, however, exist. Within the current electronic medical records systems, patients' clinically relevant information is not always efficiently available to all providers at the point of care. Delays exist because providers must create interfaces between electronic medical record systems to be able to share patient information. These distinct systems also increase costs. Moreover, government regulations restrict sharing electronic medical record data in a timely and efficient manner. For example, the Health Insurance Portability and Accountability Act can restrict the sharing of protected medical information between providers and limits full combination of data between organizations;
- In a fragmented care system where there are multiple points of entry, it is more difficult for patients to access the appropriate level of care and pertinent medical information at all hours of the day, thus challenging providers to be fully responsive to the patients' needs. An integrated system provides transparency between the episodes of care so that providers within the system can make the best care decisions irrespective of the point of entry or time of day;
- The Hospital is charged with developing and adhering to multiple, discrepant quality standards and, in the status quo, these standards are often difficult to mesh with individual physicians' medical practice. For example, physician practices are not under the jurisdiction of the Joint Commission and the accreditation process does not currently apply to the Clinic; however, the quality standards of the Joint Commission will apply after integration;
- Disparate medical research platforms and goals remain. Incongruent research priorities, commitments, and incentives deter innovation in care delivery and result in suboptimal clinical and educational advances.

The proposed model will improve service delivery because each patient will obtain physician-led care that will be supported by a vast network of coordinating providers (each who share a consistent commitment to delivering quality care). This allows all providers to have a comprehensive view of each individual patient's health care needs. The Hospital believes that a combined effort can reduce many adverse health events such as medication errors and mortality rates. Furthermore, standardized technology and methodologies, supported by universal care management software, will improve efficiency and consistency among various provider groups.

The Hospital seeks to accomplish, as a result of this proposed integration, a number of goals that will greatly improve health care delivery including:

- Information continuity;
- Care coordination through patient transitions;

- System accountability;
- Peer review and teamwork for high-value and quality care;
- Easy access to the appropriate level and type of care; and
- Disease management across episodes of care.

3. The following data, analysis and reports are attached:

- Douglas McCarthy, et al, Mayo Clinic: Multidisciplinary Teamwork, Physician-Led Governance, and Patient-Centered Culture Drive World-Class Health Care, CASE STUDY (The Commonwealth Fund, New York, N.Y.), Aug. 2009 (providing a case study of the world's oldest and largest integrated multi-specialty group medical practice).
- Douglas McCarthy, et al., Geisinger Health System: Achieving the Potential of System Integration Through Innovation, Leadership, Measurement, and Incentives, CASE STUDY (The Commonwealth Fund, New York, N.Y.), July 2009 (analyzing a Pennsylvania hospital system which is nationally recognized for providing high quality patient services as well as obtaining access to the latest innovations in care).

4. Reforming our nation's health care system is a daunting task. President Obama, Congress, health care providers, and special interest groups agree that reform is necessary but continue to debate because there is no agreement on what is the best way to deliver health care to every American. This proposed integration is a key step for the region because local reform will allow central Illinois to move towards an ideal model for healthcare delivery.

Other states have seen success with an integrated care delivery system. In 2006, Carilion Clinic in Virginia integrated its inpatient and outpatient businesses into a single, clinic-model organization. The physician-oriented, patient-centered clinic model has similar characteristics to what is in place at Mayo Clinic, Cleveland Clinic and Geisinger Health System. By integrating patient care with world-class physicians, and with a commitment to medical education and research, these world-renowned clinics have significantly improved the delivery, quality, and cost of healthcare in their communities. Central Illinois now has a similar opportunity to improve health care delivery by creating an integrated health system—one that takes the best practices of two excellent health care providers and elevates their overall performance.

5. Achievement of many of these goals will be ongoing in nature. Some of the goals, such as the expansion of the Hospital's charity care policy will be implemented immediately. Following are several specific goals with corresponding target completion dates associated with the purpose of the project:

- Immediate expansion of the charity care policy to all patients of the integrated Carle system.
- Ambulatory clinics will achieve Joint Commission accreditation within 6-12 months.
- Completion of a community needs analysis with revision of organizational strategic plan within 6 months.
- Integrated electronic medical record within 18-24 months.

- Continue to implement medication reconciliation procedures which will notify providers of drug-drug interactions and drug-allergy warnings and, ultimately, reduce medication errors. This will align with the timeline for the integrated electronic medical record of 18 – 24 months.
- Enhance consistent efficient management of acute and chronic diseases through the ambulatory and inpatient settings by hardwiring evidenced-based best practice advisories into the electronic medical record within 24 – 36 months.
- Extension of Carle electronic medical record to regional providers in order to develop community medical record within 24-36 months.
- Alignment of individual and group incentives essential to achieve strategic goals by January 2011.
- Submit surgical residency application with target of first group of surgical residents on site at Carle by July 2010. The goal is to have general surgeons available to the surrounding rural communities by Summer 2015.
- Enhance access for patients in central and southern Illinois to clinical and translational research trials in the areas of breast cancer, neurosciences, cardiovascular disease, and gastrointestinal disease during 2010.
- Further develop telemedicine programs to support outlying hospitals within 24-36 months.

19990080

Case Study

Organized Health Care Delivery System ♦ August 2009

The mission of The Commonwealth Fund is to promote a high performance health care system. The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy. Support for this research was provided by The Commonwealth Fund. The views presented here are those of the authors and not necessarily those of The Commonwealth Fund or its directors, officers, or staff.

For more information about this study, please contact:

Douglas McCarthy, M.B.A.
Issues Research, Inc.
dmccarthy@issuesresearch.com

To learn more about new publications when they become available, visit the Fund's Web site and register to receive Fund email alerts.

Commonwealth Fund pub. 1306
Vol. 27

Mayo Clinic: Multidisciplinary Teamwork, Physician-Led Governance, and Patient-Centered Culture Drive World-Class Health Care

DOUGLAS MCCARTHY, KIMBERLY MUELLER, AND JENNIFER WRENN
ISSUES RESEARCH, INC.

ABSTRACT: The Mayo Clinic is the world's oldest and largest integrated multispecialty group medical practice, combining clinical practice, education, and research at the regional, national, and international levels for the benefit of individuals with routine as well as complex health care needs. Mayo's model of integrated care is one of multidisciplinary practice with salary-based compensation that fosters team-oriented patient care and peer accountability, a supportive infrastructure allowing physicians and other caregivers to excel at clinical work, and a physician-led governance structure promoting a patient-centered culture. Full integration of the hospital and clinic and the use of a shared electronic medical record across inpatient and outpatient settings also have been critical to realizing efficiencies and promoting clinical excellence. Mayo fosters a learning environment in which teams of medical professionals use information technology and systems engineering to learn from each other and improve care in tandem with clinical practice.



OVERVIEW

In August 2008, the Commonwealth Fund Commission on a High Performance Health System released a report, *Organizing the U.S. Health Care Delivery System for High Performance*, that examined problems engendered by fragmentation in the health care system and offered policy recommendations to stimulate greater organization for high performance.¹ In formulating its recommendations, the Commission identified six attributes of an ideal health care delivery system (Exhibit 1).

Mayo Clinic is one of 15 case-study sites that the Commission examined to illustrate these six attributes in diverse organizational settings. Exhibit 2 summarizes findings for Mayo Clinic and for one exemplary organization within Mayo Health System, the regional system affiliated with Mayo Clinic.

Exhibit 1. Six Attributes of an Ideal Health Care Delivery System

- **Information Continuity** Patients' clinically relevant information is available to all providers at the point of care and to patients through electronic health record systems.
- **Care Coordination and Transitions** Patient care is coordinated among multiple providers, and transitions across care settings are actively managed.
- **System Accountability** There is clear accountability for the total care of patients. (We have grouped this attribute with care coordination, since one supports the other.)
- **Peer Review and Teamwork for High-Value Care** Providers (including nurses and other members of care teams) both within and across settings have accountability to each other, review each other's work, and collaborate to reliably deliver high-quality, high-value care.
- **Continuous Innovation** The system is continuously innovating and learning in order to improve the quality, value, and patient experiences of health care delivery.
- **Easy Access to Appropriate Care** Patients have easy access to appropriate care and information at all hours, there are multiple points of entry to the system, and providers are culturally competent and responsive to patients' needs.

Information was gathered from interviews with health system leaders and from a review of supporting documents.² The case-study sites exhibited the six attributes in different ways and to varying degrees. All offered ideas and lessons that may be helpful to other organizations seeking to improve their capabilities for achieving higher levels of performance.³

ORGANIZATIONAL BACKGROUND

The Mayo Clinic is the world's first and largest integrated multispecialty group medical practice. From its roots in the nineteenth-century family medical practice of William Mayo and his sons, Mayo by the 1920s had developed the key attributes that distinguish it today: private, not-for-profit status, a salaried staff, and a mission to "provide the best care to every patient every day through integrated clinical practice, education, and research." The Mayo Clinic Model of Care defines core expectations for clinical practice at Mayo Clinic today as the institution has evolved the forms through which it fulfills the philosophy of its founders (Exhibit 3).⁴

Mayo Clinic annually serves 520,000 individual patients (many of whom have multiple episodes of care) from across the country and around the world. A staff of almost 55,000, including more than 3,400 clinic

physicians and researchers representing nearly every medical discipline, provides comprehensive inpatient and outpatient care in four owned hospitals and outpatient facilities on three major campuses: Rochester, Minn.; Scottsdale, Ariz.; and Jacksonville, Fla. (Exhibit 4). The nonprofit Mayo Foundation owns the facilities and other assets.

Mayo Health System, created in partnership with Mayo Clinic beginning in 1992, is an affiliated regional system and referral network with almost 800 physicians and 13,000 allied health staff who serve 2.4 million patients in 17 owned and two managed hospitals, eight owned and one managed nursing homes, and clinics in 70 communities in Minnesota, Iowa, and Wisconsin.⁵

Research and education are considered essential to delivering the best care at Mayo Clinic, through both formal educational programs and ongoing knowledge dissemination. The formal educational mission is carried out through five schools of biomedical education including the Mayo Graduate School and the Mayo Schools of Medicine, Graduate Medical Education, Health Sciences, and Continuing Medical Education. Mayo funds about half of its \$400 million research portfolio internally, including basic, clinical, and translational research activities.

Exhibit 2. Case Study Highlights

Overview: Mayo Clinic is the world's oldest and largest integrated, not-for-profit, multispecialty group medical practice, with more than 3,400 clinic physicians and scientists serving 520,000 patients in four owned and managed hospitals and outpatient facilities on three major campuses (Rochester, Minn.; Scottsdale, Ariz.; and Jacksonville, Fla.) and five schools of biomedical education. Mayo Health System is an affiliated network of 17 owned hospitals and clinics with almost 800 physicians serving 2.4 million patients in 70 communities in Minnesota, Wisconsin, and Iowa.

Attribute	Examples from Mayo Clinic and Mayo Health System
Information Continuity	<p>EHR accessible by all clinicians at each Mayo Clinic site, with Web-based cross-site linkages. Implementing EHR portal for referring physicians to upload patient information and receive results of the patient visit.</p> <p>Clinicwide telephonic paging system for rapid consultations.</p> <p>Enhanced decision support tools and patient portal currently in development.</p>
Care Coordination and Transitions; System Accountability*	<p>Every Mayo Clinic patient is assigned a coordinating physician who ensures that there is an appropriate care plan, that ancillary services and consultations are scheduled in a timely fashion, and that the patient receives clear communication throughout and at the conclusion of the visit. Experiments are under way to reorganize outpatient visits to increase time with patients through the use of midlevel practitioners, with electronic communication and monitoring to engage patients in self-care between visits.</p> <p>Luther Midelfort-Mayo Health System instituted a population-based care management initiative for diabetes patients that broadens the traditional patient-visit paradigm to encompass telephonic outreach to patients who are not making regular visits, previsit planning to identify patient needs and schedule laboratory testing, and patient education and follow-up to promote treatment adherence between visits.</p>
Peer Review and Teamwork for High-Value Care	<p>Clinical Practice Committees are responsible for quality of care at each Mayo Clinic site, including dissemination of expert-developed clinical protocols. Systemwide Clinical Practice Advisory Group reconciles protocols across sites and is responsible to the board of governors for overall system quality.</p> <p>The EHR is open to all authorized Mayo physicians and invites comment and collaboration from care team members. Quality is reported internally and externally to drive improvement.</p>
Continuous Innovation	<p>Mayo is seeking to create "the future of patient care" through the ongoing application of systems engineering and process improvement principles to enhance systems and processes supporting efficient and effective care delivery.</p> <p>Center for Translational Science Activities creates innovative systems for delivering benefits of research discoveries into day-to-day medical practice.</p> <p>An electronic learning system is being built to spread medical knowledge systemwide, in addition to existing grand rounds, online curricula, and an in-house journal.</p> <p>Consultative resources are in place for systems engineering and improvement. Local teams undertake pilots; successful projects are taken to scale (e.g., improving the timeliness of heart attack treatment, reducing medication documentation discrepancies).</p>
Easy Access to Appropriate Care	<p>Patient scheduling system uses algorithms to assign new patients to physicians and orchestrate a patient's time at the Clinic; it takes into account the patient's availability, the specific time and sequencing requirements of office consultations, laboratory tests and procedures, and the travel time between appointments.</p> <p>Several primary care clinics offer same-day or next-day appointments.</p> <p>Cardiovascular clinic used "lean" methodology to reduce patient waiting time and missed appointments and increase value-added time with patients.</p>

* System accountability is grouped with care coordination and transitions, since these attributes are closely related.

Exhibit 3. Mayo Clinic Model of Care

Patient Care

- Collegial, cooperative, staff teamwork with true multispecialty integration
- An unhurried examination with time to listen to the patient
- Physicians taking personal responsibility for directing patient care over time in partnership with the local physician
- Highest-quality patient care provided with compassion and trust
- Respect for the patient, the family, and the patient's local physician
- Comprehensive evaluation with timely, efficient assessment and treatment
- Availability of the most advanced, innovative diagnostic and therapeutic technology and techniques

Environment

- Highest-quality staff mentored in the culture of Mayo and valued for its members' contributions
- Valued professional allied health staff with a strong work ethic, special expertise, and devotion to Mayo
- A scholarly environment of research and education
- Physician leadership
- Integrated medical record with common support services for all outpatients and inpatients
- Professional compensation that allows a focus on quality, not quantity
- Unique professional dress, decorum, and facilities

Source: Mayo Clinic.

The organization is physician-led at all levels and operates through physician committees and a shared governance philosophy in which physician leaders work with administrative partners in a horizontal, consensus-driven structure. Physicians serve in rotating assignments on committees and in leadership roles to promote broad participation and development of the workforce. A board of governors comprising primarily physician leaders provides high-level enterprise governance under the oversight of the Mayo Board of Trustees.

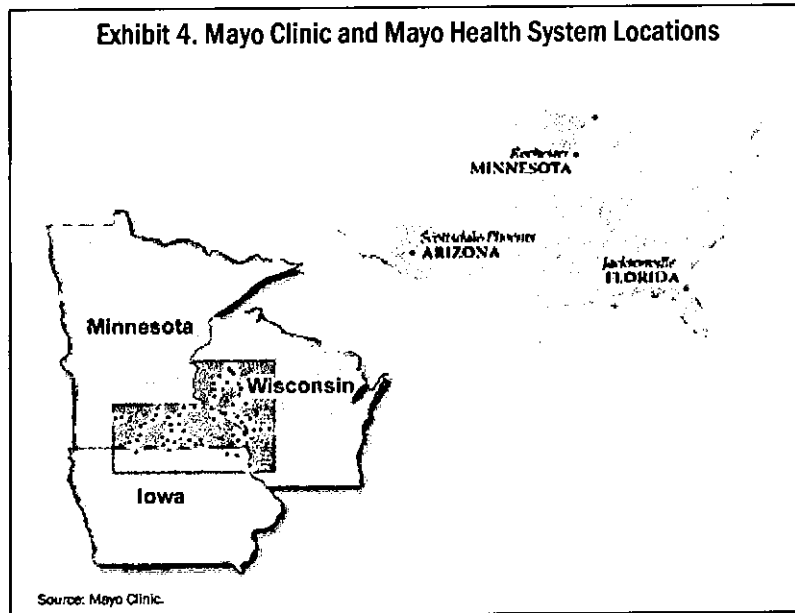
INFORMATION CONTINUITY

The longitudinal medical record, which follows a patient across encounters with different physicians, was first conceived by Mayo Clinic physician Henry Plummer in 1907. Today, Mayo's electronic health record (EHR) system holds more than 6.2 million records of Mayo patients treated since 1907, providing a cumulative account of patients' medical symptoms, diagnoses, tests, treatment plans, procedures, and stored images across disciplines in both inpatient and outpatient settings. The EHR prompts physicians on

routine tests and alerts them to potential risks, generates reminders and educational material for patients, and serves as a resource for research.

- EHR terminals are located in every office, work area, and exam room. Electronic charts are routinely shared with patients at the point of care, and are used in virtual consultations with other physicians and providers.
- CarePages, a free Web service for all patients while they are at Mayo, helps patients keep in touch with family or friends wherever Internet access is available. A full patient portal is under development.
- Mayo is working to merge six different EHR systems in use at different clinic sites. In the meantime, physicians use Web portals to view patient records from another site when patients are receiving treatment in multiple locations.

An EHR portal for referring physicians enables a patient's home physician to upload pertinent medical history and test results so that they are available to



treating Mayo physicians, thus avoiding duplication of tests. At the conclusion of the visit, the portal communicates the results of the consultation back to the patient's home physician, ensuring continuity of care.

A Web portal for Emergency Department (ED) personnel synthesizes information from disparate information systems (e.g., patient registration, laboratory, pharmacy) into a coherent "dashboard" that facilitates situational awareness and patient monitoring. The portal (called YES) displays patients' presenting complaints, demographic and vital signs, waiting times, the status of incoming ambulance services and the patient they are transporting, and other essential data.⁶

Mayo physicians can use a unique paging system, developed for the Mayo Clinic by AT&T Labs, for rapid consultations. Physician-specific paging tones allow a physician to immediately contact a colleague to ask a question, without the need to schedule an appointment. "If I'm treating a patient with urologic symptoms and I have a question about the best urologic test, I can page a urologist by dialing a five-digit number," said Mayo Clinic vice president Nina Schwenk, M.D. "Their pager rings, they go to any phone on the campus, dial their pager number, and we are immediately connected. I say, 'I'm here with a 55-year-old patient with these symptoms; what is your best advice?' I don't need to leave a message; there's no phone tag. It's immediate, person-to-person communication."

CARE COORDINATION AND TRANSITIONS: TOWARD GREATER ACCOUNTABILITY FOR TOTAL CARE OF THE PATIENT

Team-Based Care Coordination. Mayo Clinic specializes in the diagnosis and treatment of complex patient illness in an environment in which physicians from every medical specialty work collaboratively to meet individual patient needs, often during the same patient visit. "We try to bring the very best of our entire system to the service of every single patient no matter where that patient is in the system," said Dawn Milliner, M.D., chair of the Mayo Clinical Practice Advisory Group.

Every Mayo patient is assigned a coordinating physician whose job is to ensure that the patient has an appropriate plan of care, that all ancillary services and consultations are scheduled in a timely fashion to meet the patient's needs, and that the patient receives clear communication throughout and at the conclusion of a visit. A Mayo patient typically retains the same coordinating physician throughout the course of treatment and different types of care, but there is a formal hand-off procedure for cases in which a different physician would be more appropriate to coordinate the patient's clinical needs.

A current pilot is testing ways of reorganizing the outpatient visit to increase efficiency and the amount

of time that physicians can spend with patients, such as through the use of midlevel practitioners, Web-based communication, and chronic disease monitoring to better engage patients in self-care between visits.

Population-Based Chronic Care Management.

The Mayo Health System undertook the Diabetes Translation Project during the late 1990s, which found that a planned-care model (including implementation of guidelines, support for patient self-management, and use of a clinical information system) led to improved diabetes care and metabolic outcomes.⁷

More recently, Luther Midelfort—a division of Mayo Health System serving the west-central region of Wisconsin—embarked on a population-care management initiative to better meet the needs of its patients who have diabetes.⁸ This effort builds on the organization's earlier work to develop a team-based planned-care model for chronic disease, using Wagner's Chronic Care Model as a conceptual framework.⁹ The approach broadens the traditional patient-visit paradigm to encompass elements such as:

- telephonic outreach to patients who are not making regular visits
- previsit planning to identify patient needs and schedule laboratory testing
- patient education and follow-up to promote treatment adherence between visits

Teamwork is central to this change in practice, with expanded roles for the practice nurse, who conducts outreach and previsit planning, and for the receptionist, who acts as the diabetes registry coordinator. A primary care council—consisting of the departmental chairs of internal medicine, family medicine, pediatrics, and urgent care—identifies and shares best practices and designs care models to create a consistent patient experience across primary care sites. An expert team led by an endocrinologist leverages the expertise of primary care physicians, nurses, and diabetes educators, who together develop and share common patient education tools.

Luther Midelfort's EHR facilitates information sharing as patients move between care settings. The clinic uses a third-party registry program to systematically track patients who are due for visits or tests or who are not meeting goals for disease control. Patients receive a reference card listing five key goals (Exhibit 5), which they can hang on the refrigerator as a reminder of the importance of maintaining their treatment regimen. The card doubles as a checklist for clinicians when conducting patient education and also serves as a notation tool for indicating medication changes and other treatment measures.

Exhibit 5. Five Goals for Diabetes Care

<p>Hemoglobin A1c < 7 percent Aspirin daily Smoking cessation Blood pressure < 130/80 Cholesterol < 100</p>
--

Luther Midelfort uses an "all-or-none" performance measure (all five goals must be met for a patient's care to be counted as meeting standards) for system-level benchmarking to other organizations within Mayo Health System. Performance data for individual physicians are shared in an "unblinded" manner at the departmental level to promote accountability among physician teams. The clinic has seen substantial improvement in the all-or-none measure since undertaking the initiative in January 2008, with its rate almost tripling in 16 months, from 5.6 percent in January 2008 to 16.1 percent in April 2009.

PEER REVIEW AND TEAMWORK FOR HIGH-VALUE CARE

Mayo has nurtured a culture of teamwork and collaboration among its professional staff since its earliest days (Exhibit 6), a tradition that it preserves through a rigorous hiring and enculturation process. As Texas A&M professor Leonard Berry observes, "The culture makes it okay for highly-trained providers to ask

Exhibit 6. Mayo Philosophy of Team-Based Care

"The sum total of medical knowledge is now so great and wide-spreading that it would be futile for any one man...to assume that he has even a working knowledge of any part of the whole.... The best interest of the patient is the only interest to be considered, and in order that the sick may have the benefit of advancing knowledge, union of forces is necessary.... It has become necessary to develop medicine as a cooperative science; the clinician, the specialist, and the laboratory workers uniting for the good of the patient, each assisting in elucidation of the problem at hand, and each dependent upon the other for support."

William J. Mayo, 1910

for help; the technology makes it easy to provide the help."¹⁰ For example, the shared clinical record serves as an "open book" means of continual peer review in which clinicians can give one another feedback that promotes ongoing group accountability for clinical excellence. Likewise, the paging system (described above) facilitates ad hoc consultations when physicians have questions as to the best treatment for a patient.

Salary-based compensation and shared system resources remove barriers to teamwork that tend to exist in other reimbursement models. Centrally held discussions and decisions about resources help reduce competition or infighting among departments or disciplines. "Peer-review pressure," rather than productivity incentives, creates group expectations for physicians to see the right number of patients, said Dr. Schwenk.

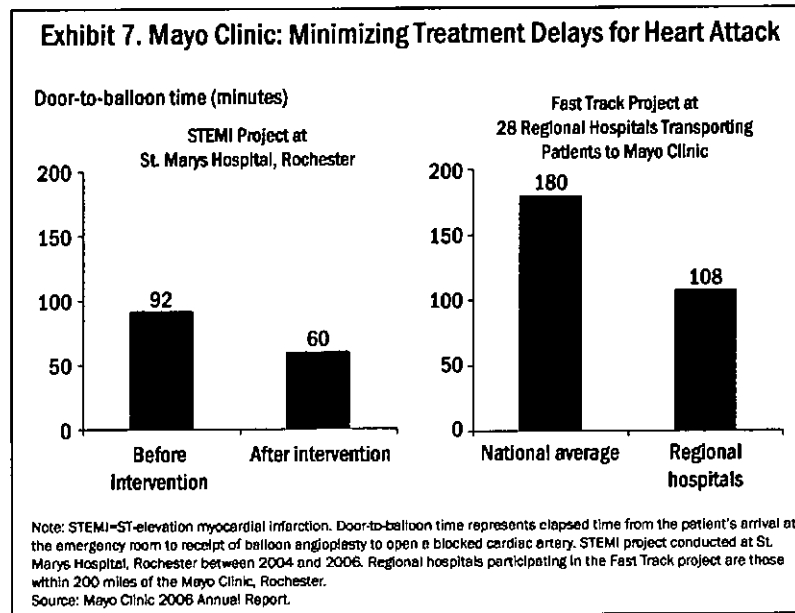
Each of the three Mayo Clinic sites (Arizona, Florida, Minnesota) has a Clinical Practice Committee (CPC), composed of and led by physicians, that is responsible for the quality of care delivery across settings of care, including the infrastructure supporting dissemination of expert-developed clinical protocols. For example, the Rochester, Minnesota, CPC has 18 subcommittees responsible for topics such as accreditation, medical records, and quality of care. To illustrate the work of the CPC, Dr. Milliner described a scenario in which diabetes experts developed a protocol for chronic disease management that required ongoing patient communication. To meet this need, the CPC's medical record subcommittee examined various options and engaged enterprise resources to develop a Web portal for patients to communicate with the care team.

The systemwide Clinical Practice Advisory Group, made up of leaders from each of the site-specific CPCs, is responsible for the overall delivery of care across all Mayo Clinic sites under the oversight of the board of governors. Reconciling clinical protocols and standards across sites affords these peer leaders the opportunity to review approaches being taken across the enterprise and to identify and address gaps or inconsistencies. As a result of developing common protocols for organ transplantation, for example, a patient can have pre-transplant workup done at Mayo Clinic Rochester, then undergo surgery at Mayo Clinic Arizona, if needed.

The Mayo committee process may take longer to reach consensus leading to action than would a traditional "top-down" management structure, Dr. Schwenk acknowledged. On the other hand, she said, it provides a systematic mechanism for vetting proposed changes to increase the odds of success, making implementation of decisions easier because physician buy-in has already been achieved.

CONTINUOUS INNOVATION

Mayo is seeking to create "the future of patient care" through the ongoing application of systems engineering as well as process improvement principles and expertise to enhance the systems and processes that support efficient and effective care delivery, such as exam room design, patient flow, appointment scheduling, and patient check-in procedures. The Mayo Clinic Quality Office offers consultative resources and workforce education for quality improvement, including the internal Mayo Clinic Quality Academy. Quality is



measured and reported internally by department, division, and institution to promote mutual accountability and drive improvement. When local teams undertake pilot projects, those demonstrating success are taken to scale in broader systemwide initiatives.

The following are several examples of specific improvement activities and initiatives.

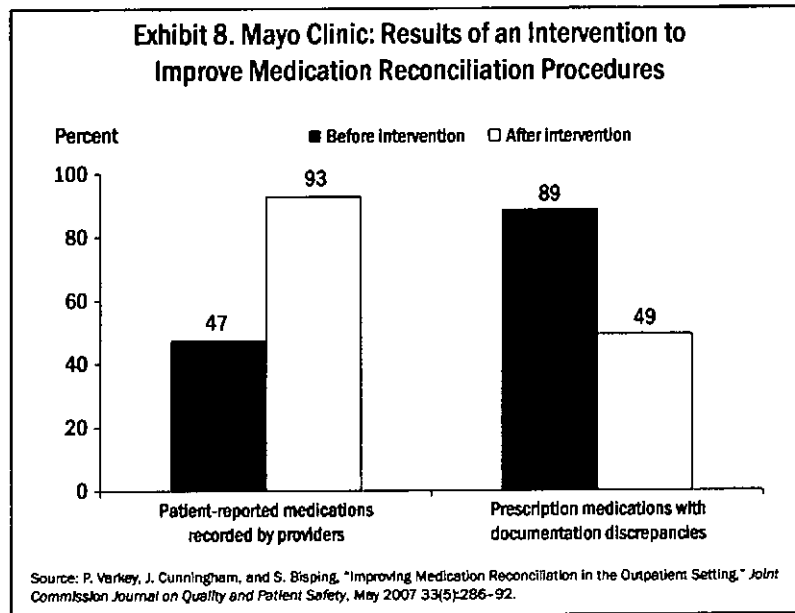
Improving asthma management. An internal medicine team headed by Kaiser Lim, M.D., developed a population-based intervention to improve asthma care and control. The team first examined quality metrics and identified a need to measure patient-focused outcomes, such as how well patients are controlling their asthma symptoms.¹¹ The team then developed an asthma registry that can be populated from existing patient diagnostic data. A patient survey found baseline asthma control was 72 percent to 81 percent, short of the goal of 95 percent. Airway "peak flow" measurement and asthma severity documentation also were deemed unsatisfactory. To improve these measures, the team developed an intervention and tools to review asthma during routine primary care visits.¹²

By linking the asthma registry to the scheduling calendar, the team developed a standard procedure to identify asthma patients in advance of primary care appointments. An electronic prompt alerts staff in the

study clinic to the asthma assessment needs of those patients. Patients are screened and treated with the help of the validated Asthma Control Test and electronic Mayo Asthma Plan and Asthma Flowsheet, which help to identify and guide the care of patients in need of assistance in controlling their asthma.¹³ Use of these tools in the study clinic resulted in substantially higher documentation of peak flow rates (84% vs. 0%) and asthma severity (63% vs. 12%) as compared with control sites.

An assessment found that opportunities to intervene with asthma patients were limited because some patients do not schedule primary care visits during the year, and because of limited time during the primary care visit to address asthma management. To overcome these barriers, the team developed two enhancements that are currently being tested: 1) a case management protocol that employs allied health professionals as physician extenders in the asthma screening, education, and monitoring process during and after primary care visits; and 2) population management techniques that invite asthma patients for targeted visits centered on teaching the use of a written action plan to attain symptom control, followed by a short prescribing visit with the primary care physician.

The experiential learning methods employed by the asthma initiative team serve as a template for



other quality improvement initiatives. Using a "plan, do, study, act" approach, quality teams follow a logical progression of steps to establish baseline performance, decide on valid quality indicators, deploy standardized processes for gathering data and implementing interventions, identify limitations of the approach, and refine the process through repeated cycles.

Improving the timeliness of heart attack treatment.

Redesigning care processes reduced the average time it takes heart attack patients entering the emergency room to receive lifesaving angioplasty treatment that opens clogged arteries (known as the "door-to-balloon" time) from 92 minutes to 60 minutes at St. Marys Hospital, Rochester, between 2004 and 2006. Mayo's Fast Track for Heart Attack project expanded this approach to the regional level, achieving a door-to-balloon time of 108 minutes (as compared with a national average of 180 minutes) among 28 regional hospitals transporting patients to Mayo Clinic Rochester (Exhibit 7). Process innovations included: prioritizing electrocardiogram acquisition at the regional hospital; implementing standard guidelines for selecting reperfusion strategy and adjunct pharmacotherapy; and, upon arrival from the regional hospital, transferring the patient directly to the catheterization lab for intervention.¹⁴

Improving outpatient medication reconciliation. The Mayo Clinic Rochester preventive medicine clinic designed a multifaceted intervention to reduce medication errors by requesting that primary care patients bring all prescription and over-the-counter medications or a current medication list with them to their clinic visit, asking patients to correct any discrepancies in the clinic's medication list (contained in the EHR) during the office visit, and providing physicians with education and feedback on medication reconciliation procedures. This process significantly improved the recording of patient-reported medications from less than half to almost all patients, and reduced by 45 percent the frequency of missing medication lists and medication documentation discrepancies that can lead to errors (Exhibit 8). Other Mayo primary care and specialty clinics are replicating the intervention to enhance patient safety across the Mayo system.¹⁵

Collaborating to promote service excellence. Since 2005, more than 80 clinical and operational departments across the Mayo system have participated in an internal collaborative to improve service for both internal and external Mayo clients. Bringing together teams of individuals from departments such as neonatology, thoracic medicine, and information technology, the collaborative provides a coach for each team and

employs a dedicated Web site to facilitate communication and training. Teams identify service-oriented targets to work on, such as improving the availability of specialized wheelchairs for patients upon entering the hospital. Organizational leaders afford teams the time needed to plan, implement, and evaluate their interventions. Some teams have achieved improvements to a degree of 50 percent or more in selected pre- and post-intervention targets.¹⁶

Translating research into practice. Mayo's Center for Translational Science Activities (CTSA) creates innovative systems for disseminating the benefits of research discoveries so they can be efficiently implemented into day-to-day medical practice. For example, Mayo recently launched an individualized medicine initiative with the goal of "link[ing] clinical and biological data to improve our ability to predict an individual's susceptibility to disease, onset and progression of disease, and likely response to therapy."

The Mayo Health System Practice-Based Research Network, developed in 2007, helps Mayo Clinic better understand the health care needs of the population of its service area as it extends research opportunities to providers and residents of local communities, which are often in underrepresented or isolated rural areas. Several studies led by primary care physicians and nurse practitioners are examining the management of diabetes, orthostatic hypotension, and end-of-life care.

Developing systems for sharing knowledge. Mayo's Education Learning Center is creating an electronic learning system (ELS) to promote a professional learning environment in which all physicians and health professionals stay up to date with the latest medical knowledge they need to treat a given patient. To that end, the ELS customizes content, or "knowledge objects," to meet the needs of users (general internists, nurses, medical students, etc.), including frequently asked questions and the names and pager numbers of Mayo's top five experts on the relevant topic. This

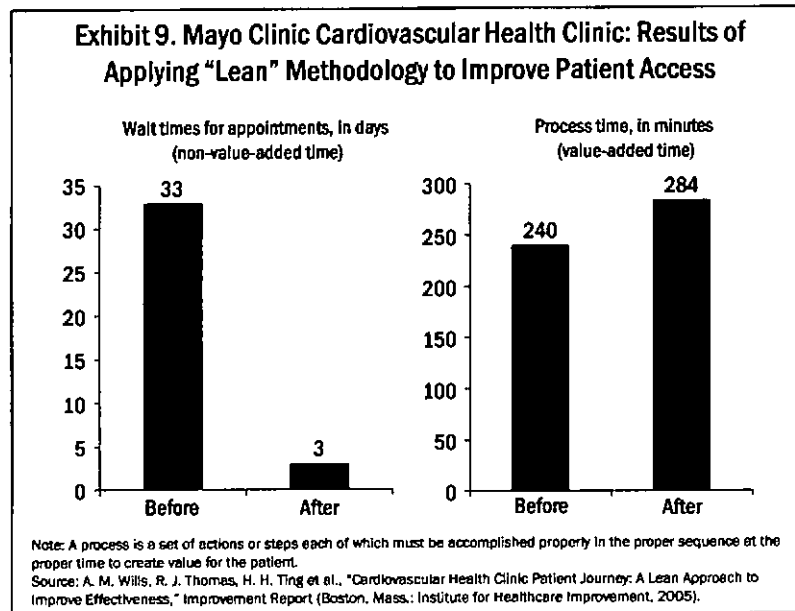
system will supplement traditional mechanisms for sharing professional knowledge, such as clinical grand rounds and online curricula resources.

EASY ACCESS TO APPROPRIATE CARE

Mayo has developed its own sophisticated patient scheduling system that uses complex rules and algorithms to assign new patients to physicians and orchestrate a patient's time at the clinic (the typical patient has five to seven appointments during the day). The system automatically takes into account the patient's availability, the specific time and sequencing requirements of office consultations, laboratory tests, and procedures, and the travel time between appointments. When a patient has a radiology appointment or stress test, for example, each preceding physician's notes are already in the EHR and available to the cardiologist or the radiologist before the test, along with the results of any tests previously ordered and the results of the physical examination.

Several Mayo primary care clinics have adopted an "advanced access" model of appointment scheduling enabling them to offer same-day or next-day appointments. Following this approach, the Community Pediatric and Adolescent Medicine team reduced the average waiting time for routine appointments from 45 days to within two days, for example.¹⁷ An evaluation assessing advanced access scheduling in Mayo family medicine clinics found that this approach sometimes increased the likelihood of patients with stable chronic conditions being scheduled for multiple preventive visits during the year, but the effects varied among clinic sites.¹⁸

The Mayo Cardiovascular Health Clinic applied "lean" methodology to improve patient access and operational effectiveness. The systems of scheduling patients into the clinic and providing comprehensive, multidisciplinary care were enhanced by redesigning and standardizing the processes of accepting referrals, stratifying patients by risk category, and ordering relevant diagnostic studies. This redesign better aligned demand and supply of clinic services and reduced waste (Exhibit 9), such as the waiting time to obtain



an appointment (from 33 days to three days on average) and patient no-shows or missed appointments (from 30 percent to 10 percent of appointment slots). Concurrently, the redesign increased the provision of value-added process time for patients (from 240 to 284 minutes on average). The Cardiology Outpatient Value Stream Map serves as a framework to guide future lean initiatives.¹⁹

Mayo Clinic has used linguistic interpreters for more than 75 years to meet the needs of its multicultural clientele. Mayo's 78 interpreters speak 23 languages and also provide sign-language interpreting.²⁰

RECOGNITION OF PERFORMANCE

In addition to the results of the specific interventions described above, Mayo Clinic has achieved notable results on selected externally reported performance indicators and has received recognition for its performance on several national benchmarking or award programs (Exhibit 10).

Researchers at Dartmouth Medical School recently reported that Mayo Clinic's flagship St. Marys Hospital in Rochester, Minnesota, delivered care to Medicare patients with severe chronic illnesses in a generally more efficient manner than did many other

integrated academic medical centers with similar reputations.²² They noted that:

[Mayo Clinic's St. Marys Hospital] is not the least costly hospital, but it enjoys a strong national reputation for quality, while simultaneously keeping utilization and costs relatively low. It is part of a well-organized health care system. These qualities make it a credible model for other academic medical centers to emulate as they begin to rethink how they might more efficiently allocate such resources as beds and physicians.

The *Dartmouth Atlas* found that, as compared with chronically ill Medicare patients at U.S. hospitals overall, those who received the majority of their care at Mayo Clinic/St. Marys from 2001 to 2005 had, on average, similar Medicare spending per person in their last two years of life but fewer hospital days (90%) and physician visits (73%).²³

The identification of areas of excellence does not mean that the Mayo Clinic has achieved perfection, however. Like the other organizations in this case-study series, Mayo has room for improvement in several areas of care. For example, the affiliated regional medical groups that constitute the Mayo

Exhibit 10. Selected Externally Reported Results and Recognition*

Inpatient Care Quality²¹ (CMS Hospital Compare Jan.–Dec. 2007)	<p><i>Four-topic clinical composite</i> (24 measures): Five Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and two of these in the top decile, of U.S. hospitals evaluated.</p> <p><i>Heart attack treatment</i> (8 measures): Five Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and two of these in the top decile, of U.S. hospitals evaluated.</p> <p><i>Heart failure treatment</i> (4 measures): Six Mayo Clinic and Mayo Health System hospitals ranked in the top quartile of U.S. hospitals evaluated.</p> <p><i>Pneumonia treatment</i> (7 measures): Seven Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and five of these in the top decile, of U.S. hospitals evaluated.</p> <p><i>Surgical care improvement</i> (5 measures): Seven Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and three of these in the top decile, of U.S. hospitals evaluated.</p> <p><i>Overall patient rating of care</i> (HCAHPS): Seven Mayo Clinic and Mayo Health System hospitals ranked in the top quartile, and four of these in the top decile, of U.S. hospitals reporting in 2007. Four large hospitals ranked in the top decile of large hospitals.</p>
National Recognition and Ratings	<p><i>Thomson/Solucient 100 Top Hospitals: National Benchmarks for Success</i> (Mayo Clinic Hospital, Ariz., in 2003; Mayo Clinic/Rochester Methodist Hospital, Minn., in 2005; Mayo Clinic/St. Marys Hospital, Minn., in 2003, 2004, and 2008).</p> <p><i>HealthGrades Distinguished Hospitals for Clinical Excellence</i>: Mayo Clinic Hospital, Ariz., in 2005–2009; Mayo Clinic/St. Luke's Hospital, Fla., in 2007, 2008; Mayo Clinic/St. Marys Hospital, Minn. in 2005–2008.</p> <p><i>Leapfrog Group Top Hospitals</i>: Mayo Clinic Hospital, Ariz., in 2008; Mayo Clinic/St. Luke's Hospital, Fla., in 2007; Mayo Clinic/St. Marys Hospital, Minn., in 2006, 2007.</p> <p><i>US News & World Report Best Hospitals</i>: Mayo Clinic Hospital, Ariz., in 2005–2008; Mayo Clinic/St. Luke's Hospital, Fla., in 2007, 2008; Mayo Clinic/St. Marys Hospital, Minn., in 2005–2008.</p> <p><i>National Research Corporation's Consumer Choice Award</i>: Mayo Clinic Hospital, Ariz., in 2003/2004 and 2004/2005; Mayo Clinic/St. Marys Hospital, Minn., in 2003/2004–2007/2008.</p> <p><i>National Committee for Quality Assurance: Diabetes Physician Recognition Program</i> (Mayo Clinic, Minn.).</p> <p><i>American Medical Group Association: Preeminence Award</i> (2004) to Albert Lea Medical Center; <i>Acclaim Award</i> (2005) to Luther Midelfort, Wis., for its Planned Care for Chronic Disease program.</p>

* See the *Series Overview, Findings, and Methods* for analytic methodology and explanation of performance recognition. CMS = Centers for Medicare and Medicaid Services; HCAHPS = Hospital Consumer Assessment of Healthcare Providers and Systems (large hospitals means 300 or more beds and patient surveys). National Committee for Quality Assurance Quality Compass data were not available because the system does not own a health plan.

Health System ranked below the regional average on eight of 12 ambulatory-care quality topics evaluated by the Minnesota Community Measurement scorecard for 2008.²⁴ Likewise, the Dartmouth researchers found “surprising variation” in the intensity of care at the end of life among Medicare patients treated in different Mayo Foundation hospitals, indicating opportunities for realizing more consistent performance.²⁵ Mayo’s nearly 100-year history, together with the evidence of improvement capabilities described above, suggests that it will continue to innovate so as to achieve higher levels of performance.

INSIGHTS AND LESSONS LEARNED

The success of Mayo Clinic’s model of integrated care flows from three primary and interrelated influences, according to Dr. Schwenk. First, multidisciplinary practice with salary-based compensation fosters team-oriented patient care and peer accountability. Second, the supportive organizational and technologic infrastructure permits physicians and other caregivers to excel at the clinical work they were trained to do. And third, a physician-led governance structure inculcates a culture that filters all decisions through the lens of patients’ interests.

The full integration of hospitals with the Clinic (Mayo acquired its two Rochester, Minnesota, hospitals—with which it had long-standing relationships—in 1986, and built hospitals in Arizona and Florida) and the use of a shared medical record across inpatient and outpatient settings have been critical to realizing efficiencies and promoting clinical excellence. This operational integration is successful because it is tied to a cultural philosophy of doing the best for the patient. “Integrated care means that when you come to Mayo, we take care of *you*, not the disease that you may have. The radiologist, the lab pathologist, the surgeon, the internist—all work together to make sure that patients get what they need,” Dr. Schwenk said.

Mayo’s consensus-driven decision-making and budgeting process means that resources and operations are deployed to serve the mission and cohesive functioning of the entire organization. Although the committee process may take more time to reach decisions

than would a top-down management approach, it engenders acceptance of decisions and a spirit of teamwork across specialties. Resources are held centrally rather than by individual sites or departments, thus avoiding infighting. “We don’t have that here because everyone’s working for one goal, and that’s the patient,” observed Dr. Milliner. The words of founder William J. Mayo—“The best interest of the patient is the only interest to be considered”—are the touchstone for decisions of all sorts ranging from conducting research to establishing the dress code, or designing equipment or a new hospital.

Mayo has served as a model for other institutions, such as the Cleveland Clinic in Ohio and the Lahey Clinic in Massachusetts, and many lessons from its experience may be applicable to other practices—although building a culture of excellence is certainly a long-term project. The Mayo Health System offers insights into how some of the advantages of the Mayo Clinic model of group practice can be adapted to community-based delivery systems. At Luther Midelfort, for example, multispecialty group practice demonstrates the built-in advantages to adoption of population-based diabetes care. “We can bring collective wisdom to bear to share what works and encourage improvement over time,” said Jill Lenhart, M.D., chair of Midelfort’s Primary Care Council.

Sustaining change in clinical practice requires aligning management structure and care processes both horizontally and vertically across the organization, said Terrance Borman, M.D., Luther Midelfort’s medical director. For example, the Midelfort Clinic’s early work on a planned-visit approach did not achieve universal adoption across all primary care sites because coordinating mechanisms were lacking. Creating the Primary Care Council to bring together physicians from across clinical sites allowed the Clinic to spread knowledge and innovations throughout the organization. Realizing the value of the chronic care model as an organizing principle for clinical work also requires paying attention to workflow design and standardization of schedules to achieve consistent patient flow across departments. This means that physicians

must be willing to give up some of their accustomed autonomy for the greater good, said Borman.

A common saying at Mayo is, "No one of us is as smart as all of us." Mayo leadership strongly believes in the critical importance of creating and maintaining a learning organization in which "teams of medical professionals use information technology and systems engineering to learn from each other in a timely way and do it as part of the ongoing activity of clinical practice," said Mayo CEO Denis Cortese, M.D. Mayo physicians are attracted to the idea of improving the science of health care delivery, which includes translational research and technologic innovations that feed vital information to both physicians and patients at the point of service. This approach supports what Cortese calls developing "true professionals" who are "prepared to pass on a body of knowledge through

teaching and mentoring, and contribute to that knowledge through basic research or quality improvement research or anything in between."

Dr. Cortese said that the ultimate benefit of an integrated system such as Mayo Clinic is its ability to deliver high-value health care. Because Mayo Clinic does not participate in contracts that require patients to see its physicians, "every single patient who comes to see us is there by choice," he notes. "In that environment, we have to provide a reason for people to come to us, something they think they are getting: outcomes, service, safety, quality, [lower cost], and coordinated care." Focusing on value aligns individual interests with population health improvement goals. "No matter how you look at this, it's about how you manage patients one-on-one," he said. "By accumulating better care for individuals, you improve population health."

For a complete list of case studies in this series, along with an introduction and description of methods, see *Organizing for Higher Performance: Case Studies of Organized Health Care Delivery Systems—Series Overview, Findings, and Methods*, available at www.commonwealthfund.org.

NOTES

- ¹ T. Shih, K. Davis, S. Schoenbaum, A. Gauthier, R. Nuzum, and D. McCarthy, *Organizing the U.S. Health Care Delivery System for High Performance* (New York: The Commonwealth Fund Commission on a High Performance Health System, Aug. 2008).
- ² Information on Mayo Clinic was synthesized from a presentation by CEO Denis Cortese, M.D., to the Commission on a High Performance Health System meeting in Minneapolis, July 2007, and from telephone interviews with Nina Schwenk, M.D., vice president of Mayo Clinic and vice chair of the Mayo Clinic Board of Trustees, Dawn Milliner, M.D., chair of the Mayo Clinical Practice Advisory Group, Terrance Borman, M.D., medical director of Luther Midelfort—Mayo Health System, Jill Lenhart, M.D., chair of the Luther Midelfort Primary Care Council, and Kaiser Lim, M.D., Division of Pulmonary and Critical Care Medicine at Mayo Clinic; from documents on the Mayo Clinic Web site (www.mayo.edu), and from other sources noted below.
- ³ A summary of findings from all case studies in the series can be found in D. McCarthy and K. Mueller, *Organizing for Higher Performance: Case Studies of Organized Health Care Delivery Systems—Series Overview, Findings, and Methods* (New York: The Commonwealth Fund, July 2009).
- ⁴ K. D. Olsen and M. E. Brown, "Preserving the Core of Quality Care as the Practice Evolves: The Mayo Clinic Model of Care," *Group Practice Journal*, Apr. 2001 50(4):11–19.
- ⁵ For additional background on Mayo Health System, see K. E. Smith, "Mayo Health System: Development of an Integrated Delivery System in Southern Minnesota, Northern Iowa and Western Wisconsin," in J. W. Appling, ed., *Integrated Health Care: Lessons Learned* (Englewood, Colo.: Medical Group Management Association, 1999), and P. W. Carryer and S. Sterioff, "Mayo Health System: A Decade of Achievement," *Mayo Clinic Proceedings*, Aug. 2003 78(8):1047–53.
- ⁶ V. Smith, A. Boggust, and B. Staven, 'YES' Application, *Department of Emergency Medicine*, presentation at the National Forum for Quality Improvement in Healthcare, Dec. 2008.
- ⁷ V. M. Montori, S. F. Dinneen, C. A. Gorman et al., "The Impact of Planned Care and a Diabetes Electronic Management System on Community-Based Diabetes Care," *Diabetes Care*, Nov. 2002 25(11):1952–57.
- ⁸ Luther Midelfort consists of the 300-bed Luther Hospital in Eau Claire, three critical-access hospitals in neighboring communities, the Midelfort Clinic—a multispecialty group of 200 physicians practicing in 11 communities—and related services. The clinic and hospital merged and joined the Mayo Health System in 1992.
- ⁹ J. Rozich, "Luther Midelfort—Mayo Health System: Planned Care for Chronic Disease," *Group Practice Journal*, Nov./Dec. 2005 54(10):12–21.
- ¹⁰ L. L. Berry, "The Collaborative Organization: Leadership Lessons from Mayo Clinic," *Organizational Dynamics*, Aug. 2004 33(3):228–42. For additional perspective, see L. L. Berry and K. D. Seltman, *Management Lessons from Mayo Clinic* (New York: McGraw-Hill, 2008).
- ¹¹ K. G. Lim, A. M. Patel, J. M. Naessens et al., "Flunking Asthma? When HEDIS Takes the ACT," *American Journal of Managed Care*, Aug. 2008 14(8):487–94.
- ¹² B. Thorsteinsdottir, G. W. Volcheck, E. Madsen et al., "The ABCs of Asthma Control," *Mayo Clinic Proceedings*, July 2008 83(7):814–20.
- ¹³ R. A. Nathan, C. A. Sorkness, M. Kosinski et al., "Development of the Asthma Control Test: A Survey for Assessing Asthma Control," *Journal of Allergy and Clinical Immunology*, Jan. 2004 113(1):59–65.
- ¹⁴ Results were taken from the Mayo Clinic 2006 annual report. For a description of the improvement process (and early results), see L. Haro, P. Geerdes, C. Rihal et al., "Reducing Door to Balloon Time for Acute Myocardial Infarction (AMI) in a Tertiary Emergency Department," *Improvement Report* (Boston, Mass.: Institute for Healthcare Improvement, 2004), and H. H. Ting, M. R. Bell, C. S. Rihal et al., "Fast Track Protocol for ST-Elevation Myocardial Infarction (STEMI) to Minimize Treatment Delays," *Improvement Report* (Boston, Mass.: Institute for Healthcare Improvement, 2005).

- ¹⁵ P. Varkey, J. Cunningham, and S. Bisping, "Improving Medication Reconciliation in the Outpatient Setting," *Joint Commission Journal on Quality and Patient Safety*, May 2007 33(5):286-92.
- ¹⁶ J. A. Fleischmann, K. Illg, and G. Dankbar, *Moving to New Levels of Service through Collaboration*, presentation at the National Forum for Quality Improvement in Healthcare, Dec. 2008.
- ¹⁷ M. Murray and C. Tantau, "Same-Day Appointments: Exploding the Access Paradigm," *Family Practice Management*, Sept. 2000 7(8):45-50.
- ¹⁸ J. E. Rohrer, M. Bernard, J. Naessens et al., "Impact of Open-Access Scheduling on Realized Access," *Health Services Management Research*, May 2007 20:134-39.
- ¹⁹ A. M. Wills, R. J. Thomas, H. H. Ting et al., "Cardiovascular Health Clinic Patient Journey: A Lean Approach to Improve Effectiveness," *Improvement Report* (Boston, Mass.: Institute for Healthcare Improvement, 2005).
- ²⁰ M. Stolle, "Interpreters Play a Critical Role in the Health Care System," *Rochester Post-Bulletin*, Jan. 31, 2009.
- ²¹ Rankings for CMS Hospital Compare clinical topics (heart attack, heart failure, and pneumonia treatment and surgical care improvement) included hospitals that reported on all measures and recorded at least 30 patients in each topic. Only results in the top quartile are noted. Six Mayo Foundation hospitals were evaluated on the four-topic clinical composite and on the heart attack topic, 10 on the heart failure topic, 13 on the pneumonia topic, and nine on the surgical care topic. Twelve Mayo Foundation hospitals (including four large hospitals) reported HCAHPS results. The overall patient rating of care means a patient rating of 9 or 10 on a 10-point scale. Results do not include managed hospitals.
- ²² J. E. Wennberg, E. S. Fisher, D. C. Goodman et al., *Tracking the Care of Patients with Severe Chronic Illness: The Dartmouth Atlas of Health Care 2008* (Hanover, N.H.: The Dartmouth Institute for Health Care Policy & Clinical Practice, 2008). The analysis focused on the last two years of life among Medicare patients with one of nine chronic conditions who died between 2001 and 2005, controlling for differences in patients' age, sex, race, and primary chronic diagnosis.
- ²³ Ibid.
- ²⁴ The Minnesota Community Measurement *Health Care Quality Report* (www.mnhealthscores.org) relies primarily on HEDIS (Healthplan Effectiveness Data and Information Set) measures defined by the National Committee for Quality Assurance that are aligned with clinical guidelines established by Minnesota's Institute for Clinical Systems Improvement, of which Mayo Clinic is a member. The measures have been adapted for use to track and report the performance of medical groups in Minnesota and surrounding areas. Results for the Mayo Clinic, Rochester, may not be comparable since it does not have the opportunity to address ongoing needs of patients who visit for onetime expert evaluation or treatment.
- ²⁵ Wennberg, Fisher, Goodman et al., *Tracking the Care of Patients with Severe Chronic Illness*, p. 61.

ABOUT THE AUTHORS

Douglas McCarthy, M.B.A., president of Issues Research, Inc., in Durango, Colorado, is senior research adviser to The Commonwealth Fund. He supports The Commonwealth Fund Commission on a High Performance Health System's scorecard project and is a contributing editor to the bimonthly newsletter *Quality Matters*. On behalf of The Commonwealth Fund, he has conducted more than 40 case studies on high-performing health care organizations and initiatives. His 25-year career has spanned research, policy, operations, and consulting roles for government, corporate, academic, and philanthropic organizations. He has authored and coauthored reports and peer-reviewed articles on a range of health care-related topics. *A Chartbook on the Quality of Health Care in the United States*, coauthored with Sheila Leatherman, was named by AcademyHealth as one of 20 core books in the field of health outcomes. Mr. McCarthy received his bachelor's degree with honors from Yale College and a master's degree in health care management from the University of Connecticut. During 1996-1997, he was a public policy fellow at the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota.

Kimberly Mueller, M.S., is a research assistant for Issues Research, Inc., in Durango, Colorado. She earned an M.S. in social administration from the Mandel School of Applied Social Sciences at Case Western Reserve University and an M.S. in public health from the University of Utah. A licensed clinical social worker, she has over 10 years' experience in end-of-life and tertiary health care settings. She was most recently a project coordinator for the Association for Utah Community Health, where she supported the implementation of chronic care and quality improvement models in community-based primary care clinics.

Jennifer Wrenn has 12 years of experience as a professional grant and technical writer and consultant in the fields of medicine, teaching, youth and family services, and immigrant services, with clients in Washington State and Colorado. Her work in the medical field has included writing case studies on high-performing health care organizations, securing funding for local health care access projects such as a promotora (lay health worker) program and clinic serving immigrant and low-income clients, and working locally with the Citizens Health Advisory Council to research and implement an accessible and affordable community-based integrated health system. She previously worked as a physician assistant, focusing on care for the underserved and women's health. Ms. Wrenn holds a B.S. in zoology from Colorado State University (Phi Beta Kappa) and a B.S. in medicine (physician assistant program) from the University of Iowa School of Medicine.

ACKNOWLEDGMENTS

The authors gratefully acknowledge the following individuals who kindly provided information for the case study: Denis Cortese, M.D., president and CEO of Mayo Clinic; Nina Schwenk, M.D., vice president of Mayo Clinic and vice chair of the Mayo Clinic Board of Trustees; Dawn Milliner, M.D., chair of the Clinical Practice Advisory Group; Terrance Borman, M.D., medical director of Luther Midelfort—Mayo Health System; Jill Lenhart, M.D., chair of the Luther Midelfort Primary Care Council; Kaiser Lim, M.D., Division of Pulmonary and Critical Care Medicine at Mayo Clinic; and Joan Gorden, public affairs consultant in the Mayo Clinic Center for Translational Science Activities. The authors also thank the staff at The Commonwealth Fund for advice and assistance in case-study preparation.

Editorial support was provided by Joris Stuyck.

This study was based on publicly available information and self-reported data provided by the case study institution(s). The Commonwealth Fund is not an accreditor of health care organizations or systems, and the inclusion of an institution in the Fund's case studies series is not an endorsement by the Fund for receipt of health care from the institution.

The aim of Commonwealth Fund-sponsored case studies of this type is to identify institutions that have achieved results indicating high performance in a particular area of interest, have undertaken innovations designed to reach higher performance, or exemplify attributes that can foster high performance. The studies are intended to enable other institutions to draw lessons from the studied institutions' experience that will be helpful in their own efforts to become high performers. It is important to note, however, that even the best-performing organizations may fall short in some areas; doing well in one dimension of quality does not necessarily mean that the same level of quality will be achieved in other dimensions. Similarly, performance may vary from one year to the next. Thus, it is critical to adopt systematic approaches for improving quality and preventing harm to patients and staff.





Case Study

Organized Health Care Delivery System • June 2009

Geisinger Health System: Achieving the Potential of System Integration Through Innovation, Leadership, Measurement, and Incentives

DOUGLAS MCCARTHY, KIMBERLY MUELLER, AND JENNIFER WRENN
ISSUES RESEARCH, INC.

The mission of The Commonwealth Fund is to promote a high performance health care system. The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy. Support for this research was provided by The Commonwealth Fund. The views presented here are those of the authors and not necessarily those of The Commonwealth Fund or its directors, officers, or staff.

For more information about this study, please contact:

Douglas McCarthy, M.B.A.
Issues Research, Inc.
dmccarthy@issuesresearch.com

To download this publication and learn about others as they become available, visit us online at www.commonwealthfund.org and register to receive Fund e-Alerts. Commonwealth Fund pub. 1233 Vol. 9

ABSTRACT: Geisinger Health System is a physician-led, not-for-profit, integrated delivery system serving an area with approximately 2.6 million people in northeastern and central Pennsylvania with innovative products and services designed to drive higher performance. Geisinger's leaders believe that the organization can simultaneously improve quality, satisfaction, and efficiency only by redesigning and reengineering the delivery of care. This philosophy is epitomized by ProvenCare, a portfolio of products (many of which are package-priced) for which care processes have been redesigned to reliably administer a coordinated bundle of evidence-based best practices. Use of the ProvenCare model has improved clinical outcomes while decreasing resource utilization. Fundamental to Geisinger's success are its vision of becoming a national model for care delivery, the leadership to achieve that vision reinforced with a performance-based compensation system strategically aligned with specific goals every year, and timely feedback using an advanced electronic health record to measure progress toward those goals.



OVERVIEW

In August 2008, the Commonwealth Fund Commission on a High Performance Health System released a report, *Organizing the U.S. Health Care Delivery System for High Performance*, that examined problems engendered by fragmentation in the health care system and offered policy recommendations to stimulate greater organization for high performance.¹ In formulating its recommendations, the Commission identified six attributes of an ideal health care delivery system (Exhibit 1).

Geisinger Health System is one of 15 case study sites that the Commission examined to illustrate these six attributes in diverse organizational settings. Exhibit 2 summarizes findings for Geisinger. Information was gathered from the organization's leaders and from a review of supporting documents.² The

Exhibit 1. Six Attributes of an Ideal Health Care Delivery System

- **Information Continuity** Patients' clinically relevant information is available to all providers at the point of care and to patients through electronic health record systems.
- **Care Coordination and Transitions** Patient care is coordinated among multiple providers, and transitions across care settings are actively managed.
- **System Accountability** There is clear accountability for the total care of patients. (We have grouped this attribute with care coordination since one supports the other.)
- **Peer Review and Teamwork for High-Value Care** Providers (including nurses and other members of care teams) both within and across settings have accountability to each other, review each other's work, and collaborate to reliably deliver high-quality, high-value care.
- **Continuous Innovation** The system is continuously innovating and learning in order to improve the quality, value, and patients' experiences of health care delivery.
- **Easy Access to Appropriate Care** Patients have easy access to appropriate care and information at all hours, there are multiple points of entry to the system, and providers are culturally competent and responsive to patients' needs.

case study sites exhibited the six attributes in different ways and to varying degrees. All offered ideas and lessons that may be helpful to other organizations seeking to improve their capabilities for achieving higher levels of performance.³

ORGANIZATIONAL BACKGROUND

Geisinger Health System is a physician-led, not-for-profit, integrated delivery system headquartered in Danville, Pennsylvania. It serves an area with approximately 2.6 million people living in 43 counties of northeastern and central Pennsylvania (Exhibit 3). In general, this population is older, poorer, sicker, more rural, and less transient than the national median. Geisinger's market share is about 30 percent overall (including both primary and secondary markets) and its annual revenue is more than \$2 billion.

The system employs more than 12,000 people, including a multispecialty group of more than 740 physicians practicing at 50 clinical sites. About 200 of these physicians provide primary care in 40 community practice clinics; other physicians provide specialty care, predominantly from three large hubs. Major facilities include three acute/tertiary/quaternary hospitals (Geisinger physicians work exclusively in one

hospital, while both Geisinger and non-Geisinger community physicians treat patients in two hospitals), three ambulatory surgery centers, specialty hospitals, and an inpatient and outpatient drug and alcohol treatment center. Annual patient volume exceeds 40,000 inpatient discharges and 1.5 million ambulatory visits.

Geisinger Health Plan, created in 1985, is a network model health maintenance organization offering group, individual, and Medicare coverage. Approximately 30 percent of Geisinger's patients are insured by Geisinger Health Plan. About half of the health plan's 220,000 members have a Geisinger primary care physician based in one of the 40 community clinics. The health plan also contracts with more than 18,000 independent providers including 90 community hospitals.

Founded in 1915 by Abigail Geisinger, whose aim was to "make it the best," Geisinger's vision is "Heal, Teach, Discover, and Serve." It is a teaching campus for the Temple University School of Medicine and the Philadelphia College of Osteopathic Medicine, and conducts research in its own facilities and through affiliation with other academic institutions. Its Geisinger Center for Health Research conducts health-service, epidemiologic, and population-genetics research with the goal of translating innovative new models of patient care to clinical practice.

INFORMATION CONTINUITY

Since 1995, Geisinger has invested more than \$100 million in hardware, software, and training to implement its electronic health record (EHR) system, built on a third-party platform (EpicCare from Epic Systems Corp.). Installation of the system was completed in 2002 at all Geisinger ambulatory sites and in 2007 at Geisinger Medical Center (the main inpatient campus). Installation is in the final stages at Geisinger Wyoming Valley and Geisinger South Wilkes-Barre hospitals.

Digital radiology images are distributed through a picture archiving and communication system (PACS).

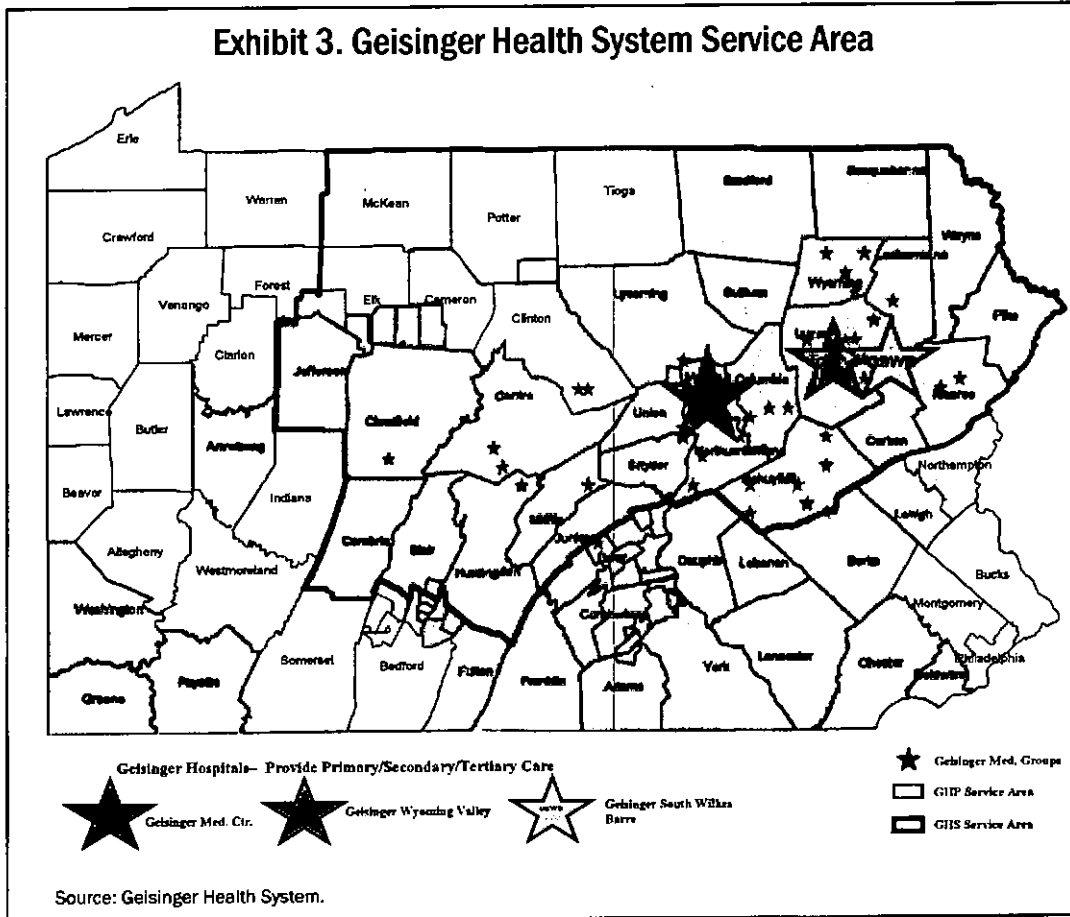
The EHR now contains more than 3 million patient records and acts as a “central nervous system” for the organization, supporting the provision of evidence-based practices at the point of care and enabling performance monitoring at the system, departmental, and physician level. Following implementation of the EHR at Geisinger Medical Center, the number of

Exhibit 2. Case Study Highlights

Overview: A nonprofit, physician-led, integrated health system serving an area with 2.6 million people in 43 counties of rural northeastern and central Pennsylvania through three acute/tertiary/quaternary hospitals and an alcohol/chemical dependency treatment center; a multi-specialty group practice employing more than 740 physicians; 50 practice sites including 40 community practice clinics; the 220,000-member Geisinger Health Plan, which offers group, individual, and Medicare coverage and contracts with more than 18,000 independent providers including 90 hospitals; the Geisinger Center for Health Research; and medical education programs serving medical students, residents, fellows, and other medical professionals. Annual patient volume exceeds 40,000 inpatient discharges and 1.5 million outpatient visits.

Attribute	Examples from Geisinger Health System
<p>Information Continuity</p>	<p>Electronic health record (EHR) with decision support across all group-practice sites (and available to more than 2,000 users in non-Geisinger clinical practices) acts as an organizational “central nervous system” supporting the provision of evidence-based care and enabling system performance monitoring.</p> <p>Collaborated with other regional caregivers and institutions to develop a regional health information exchange that electronically links providers in the service area.</p> <p>Patient web portal used by more than 100,000 patients for health information, appointment scheduling, prescription ordering, and e-mail with clinicians. This innovation is associated with decreased patient “no-show” (missed appointment) rates and telephone calls and increased physician productivity.</p>
<p>Care Coordination and Transitions; System Accountability*</p>	<p>Piloting advanced medical home including round-the-clock primary care coverage, nurse case managers employed by health plan embedded in primary care practices, virtual-care management support, personal care navigator, home-based monitoring, and automated voice-response surveillance. Goals are to increase primary care contacts and timely follow-up after hospital discharge with improved outcomes (e.g., reduced rates of hospital admissions and readmissions) and savings in medical costs.</p>
<p>Peer Review and Teamwork for High-Value Care</p>	<p>Bringing physicians together in cross-disciplinary service lines to plan, budget, and evaluate one another’s performance has transformed the culture for higher performance.</p> <p>ProvenCare packaged pricing products motivate physicians to efficiently and reliably deliver a bundle of evidence-based practices, such as close to 100 percent adherence to 40 heart bypass surgery processes and associated improvement in outcomes.</p>
<p>Continuous Innovation</p>	<p>Innovation architecture uses collaborative teams to redesign care process models and improve value in the prevention and treatment of disease (e.g., increased compliance to a bundle of nine evidence-based measures for diabetes care and other chronic disease control measures).</p> <p>Geisinger’s vision is to become a national model for care delivery and an engine of innovation through: 1) leadership to achieve the vision; 2) a compensation system that is aligned toward the achievement of specific strategic goals; and 3) timely feedback of information on progress toward those goals.</p>
<p>Easy Access to Appropriate Care</p>	<p>Advanced-access redesign increased availability of same-day appointments from 50 percent in 2002 to 95 percent in 2006; 84 percent of sites have lead time of one day or less. Patient satisfaction increased 48 percent.</p> <p>Walk-in clinics in area retail stores, linked via EHR and the patient portal.</p>

* System accountability is grouped with care coordination and transitions, since these attributes are closely related.



paper charts pulled there dropped by 1 million annually. (Clinical examples and results of EHR use are described in the sections that follow.)

More than 100,000 Geisinger patients are registered to use an online portal called “MyGeisinger” to access their health information and care plans, view laboratory test results and health care reminders, make appointments, pay their medical bills, request prescription renewals, and communicate with their physician about nonurgent medical problems. Almost 30 percent of MyGeisinger users are age 55 and older. Geisinger physicians receive an incentive for their patients who agree to sign up for electronic access on MyGeisinger, with approximately 2,000 new users enrolling each month. This innovation was associated with a decline in patient “no-show” rates (missed appointments) and about 5,000 fewer telephone calls to Geisinger clinics per month (since 90 percent of electronic messages avoid a phone call), leading to improved productivity for physicians and office staff.

Geisinger has collaborated with other regional caregivers and institutions to form a regional health information exchange to link providers electronically. The exchange now includes 10 hospitals and other caregiver support systems (home health services and senior assisted-living centers). More than 2,000 non-Geisinger users (physicians and their practice staff) have been granted online access (with appropriate patient permission) to Geisinger’s EHR for their patients who are treated in Geisinger facilities.

CARE COORDINATION AND TRANSITIONS: TOWARD GREATER ACCOUNTABILITY FOR TOTAL CARE OF THE PATIENT

Geisinger Clinic and Geisinger Health Plan are partnering to test an advanced medical home model (ProvenHealth Navigator) and to redesign care processes so that the primary care team can reliably meet the comprehensive care needs of patients through more intensive outpatient management.⁴ The goal is to

develop a transformative model of care delivery and develop a next-generation medical management capability that draws on best practices to enhance care for patients across all care settings. Implementation of this model has encompassed four key components described below: case management, care systems, information management, and funding/compensation arrangements.

Case Management: Patients receive a risk assessment and those at high risk for complications are assigned to a case manager. These nurse case managers, employed by the health plan, are embedded in primary care practices as integral members of the care teams. They develop and carry out a care plan in coordination with the patient's physician and act as a "personal patient link" to facilitate 24-hour access and smooth transitions in care, provide patient and family education, answer questions, and conduct timely follow-up to prevent exacerbations that can lead to emergency department (ED) visits or hospitalizations. If the case manager sees that a patient with congestive heart failure has gained weight, for example, she/he may institute a diuretic protocol and make follow-up contacts as needed.

To help reduce hospital readmissions, case managers telephone high-risk patients 24 to 48 hours after hospital discharge to assess their status, review their care plan and medications, and confirm or make follow-up appointments including a primary care visit four to seven days after discharge. If the patient is readmitted, the care is analyzed to determine how the readmission might have been prevented.

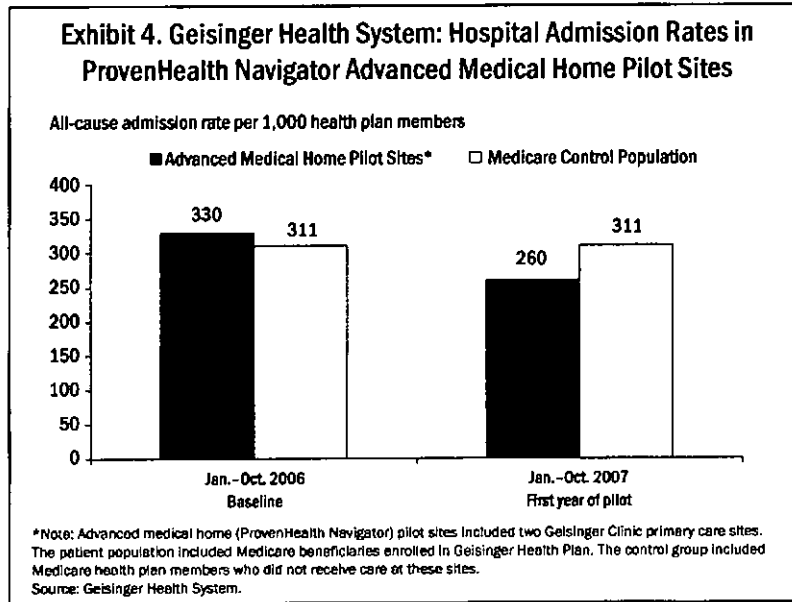
Care Systems: Consistent achievement of improved results requires both technological and organizational systems for identifying high-risk patients, proper sequencing of care processes, grouping of tasks to assure comprehensive care and ease compliance, and measurement of results along with process analysis for efficiency and effectiveness. Such systems include home-based telemonitoring and automated voice-response surveillance of high-risk patients, notification of and communication with the primary care physician

after an ED visit or hospitalization, partnerships with skilled nursing facilities for onsite acute care patient management, and EHR templates and decision-support tools such as predefined order lists, best-practice alerts, and patient-specific after-visit summaries.

Information Management: Building the ProvenHealth Navigator advanced medical home model requires actively engaging the care team to promote awareness and understanding of expected behaviors, processes, and goals. This in turn requires integrating clinical knowledge, change management, and data reporting (using both the EHR and insurance data) to establish the link between clinical behaviors, process changes, and results. Because of the lag time involved in collecting and reporting quantitative data, change is also facilitated through patient-specific case reviews and clinical anecdotes.

Funding/Compensation: The health plan provides financial incentives for physicians to participate in the advanced medical home. These include a time-limited, \$1,000-per-month stipend to promote skills development and office redesign, and expanded quality incentives to promote improved performance on jointly agreed-upon metrics. The plan also hires and trains the nurse case managers and provides support for analytic decision-making and improved information and communications infrastructure. To qualify for the stipend, physicians must demonstrate engagement in the process, as determined by local practice leaders.

The ProvenHealth Navigator was pilot-tested in two Geisinger Clinic sites among 3,000 of Geisinger Health Plan's Medicare members. Preliminary results include increased use of the online patient portal, increased patient adherence to prescriptions and greater use of generic drugs, increased compliance with bundles of evidence-based care practices for diabetes and coronary artery disease, and a slowing in the utilization of skilled nursing facilities. The all-cause hospital admission rate declined by about 20 percent at the two pilot sites from 2006 to 2007, while there was no change in the admission rate among other Medicare health plan members during that time (Exhibit 4). These

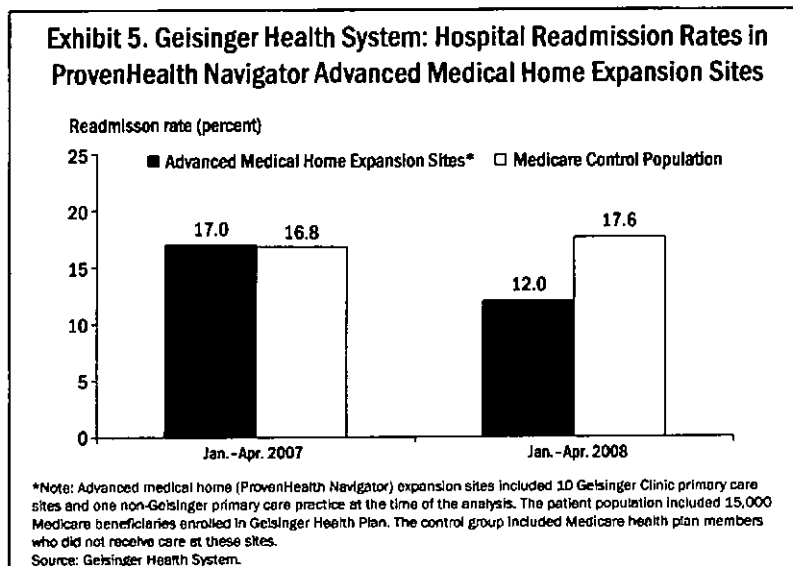


improvements contributed to a 7 percent savings in medical costs among participants at the two pilot sites.⁵

The advanced medical home model has since been expanded to the care of approximately 25,000 Medicare beneficiaries (managed care and fee-for-service patients) who receive their care at 21 Geisinger Clinic primary care sites and four non-Geisinger primary care sites. Example results include a five-percentage-point decrease (29% relative reduction) in the hospital readmission rate among a subset of 15,000 Geisinger Health Plan Medicare members who received care at 11 of these sites from 2007 to 2008,

compared with an almost one-percentage-point increase (4% relative increase) among a control group of Medicare health plan members who did not receive services at these sites (Exhibit 5). Overall medical costs have declined by about 4 percent at these sites since they implemented the medical home model.

Geisinger Health Plan also offers disease management programs for conditions including asthma, chronic obstructive pulmonary disease, congestive heart failure, coronary heart disease, diabetes, hypertension, osteoporosis, and chronic kidney disease. Nurse case managers are assigned to one or more



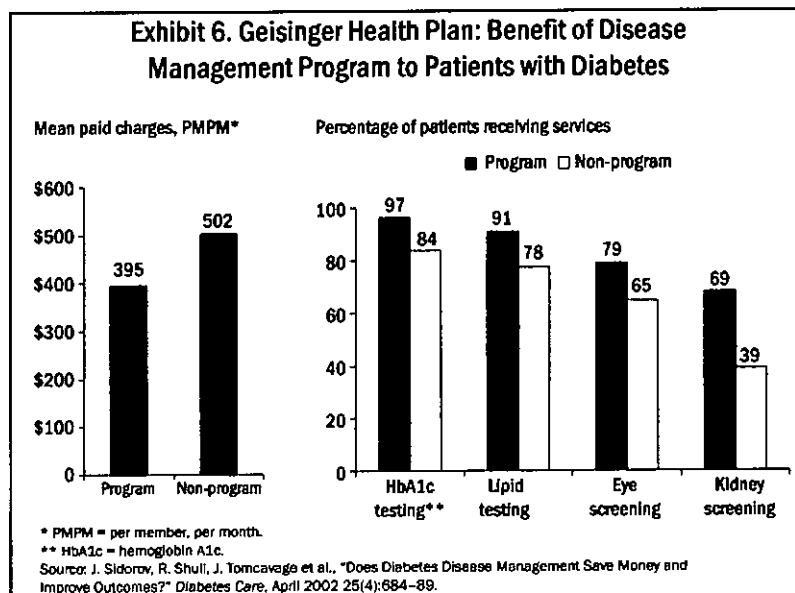
contracted primary care practices to conduct patient education, facilitate referral to specialty clinics as needed, and promote adherence to evidence-based care guidelines. The health plan has documented improvements in care processes and cost savings of over \$100 per member per month from reductions in avoidable hospital use (25% fewer admissions and 43% fewer hospital days) among participating diabetes patients (Exhibit 6).⁶ These disease-specific programs are being converted to a population-management approach to support the advanced medical home model as the ProvenHealth Navigator program is disseminated throughout the Geisinger Health Plan primary care network.

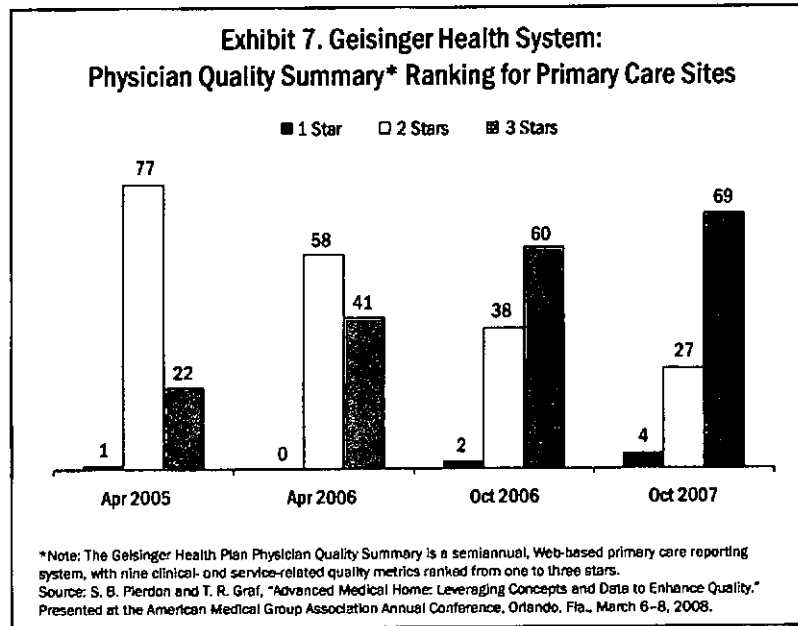
PEER REVIEW AND TEAMWORK FOR HIGH-VALUE CARE

Harnessing Culture and Incentives to Foster Higher Performance: Geisinger’s leaders found that bringing its physicians together in 22 cross-disciplinary service lines (each led by one physician and one administrator) to plan, budget, and evaluate one another’s performance created a team-oriented transformation in the organization’s culture. In Geisinger’s experience, this interdisciplinary model promotes the achievement of higher levels of performance and gives it a competitive advantage in the marketplace and in attracting and retaining physicians.

Geisinger uses internal incentives and recognition to drive improvements in performance. Base compensation for physicians is tied to productivity. About 15 percent to 20 percent of total compensation is based on meeting performance targets including budget, quality of care, patient satisfaction, and citizenship activities such as teaching and committee work. Since the roll-out of this compensation plan five years ago, improvements have been seen in productivity (from the 45th percentile to the 78th percentile using the McGladrey Standard for large clinics) and in patient satisfaction, with 20 percent of Geisinger physicians placing nationally in the top-performing decile of their peers.

In 2005, Geisinger Health Plan introduced the Web-based Physician Quality Summary, which compares the performance of contracted primary care practice sites on nine clinical quality and patient service metrics using a three-star rating system. Practices that achieve three-star rankings are eligible for financial rewards. From 2005 to 2007, Geisinger primary care clinic sites increased their three-star rankings threefold (from 22% to 69% of their rankings) as a result of improvements driven by systems such as patient registries and automated preventive care notifications (Exhibit 7). There was little change in rankings of non-Geisinger-contracted sites during this time, with their three-star rankings remaining at about 6 percent to 7 percent.⁷





Improving Outcomes by Ensuring the Reliable Performance of Acute Care Procedures: ProvenCare is Geisinger's portfolio of evidence-based quality and efficiency programs addressing both acute and chronic conditions; many are also packaged-priced products based on outcome measures. Care processes have been redesigned to reliably deliver a coordinated bundle of evidence-based (or consensus-based) best practices. For Geisinger Health Plan members having certain surgical procedures, Geisinger charges a flat fee that includes preoperative care, surgery, and 90 days of follow-up treatment (at a Geisinger facility) including that of related complications. Pricing the bundle at a discount creates an incentive for efficiency and, in effect, offers a warranty against complications.⁸

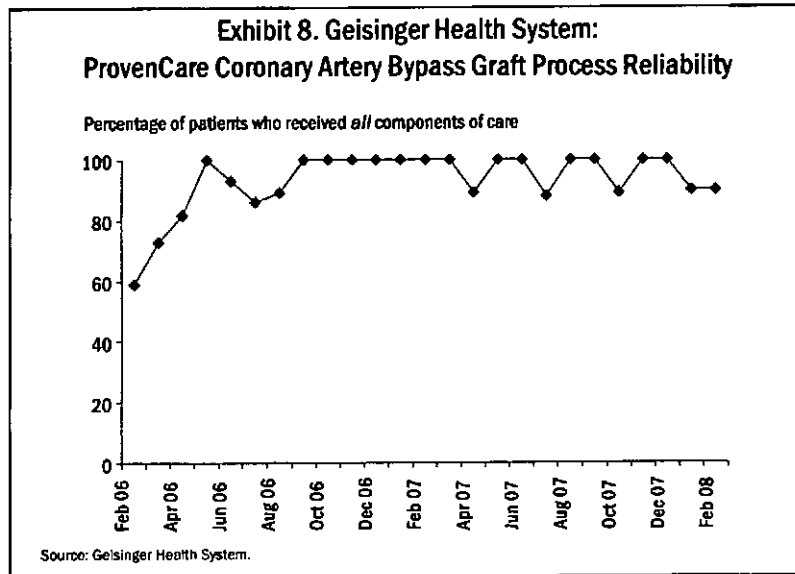
For heart bypass surgery (coronary artery bypass graft), the initial ProvenCare product, clinical workgroups established a bundle of 40 evidence-based practices, developed an improved workflow process with identified points of accountability, and worked with information systems professionals to "hardwire" each element of the bundle into the EHR through templates, order sets, and reminders. The process also includes a "patient compact" to convey the expectation that patients should be active partners in their own care. As a result of these efforts, adherence to the bundle of 40 evidence-based practices increased from 59 percent

at baseline to 100 percent after four months and has remained at or close to that level indicating a relatively stable process (Exhibit 8). Improved process of care was associated with improved clinical outcomes including:

- 100 percent lower in-hospital mortality (which decreased from 1.5% to zero);
- 21 percent decrease in patients with any complications (from 38% to 30%);
- 45 percent decrease in readmissions within 30 days (from 6.9% to 3.8%); and
- 10 percent increase in patients discharged to their homes.

Financial outcomes also improved, including a 16 percent drop in average length of stay (from 6.3 days to 5.3 days) and 5 percent lower hospital charges.⁹

The ProvenCare product portfolio has been expanded to include angioplasty, hip replacement, cataract surgery, erythropoietin use, bariatric surgery, angioplasty with acute myocardial infarction, and perinatal care. A similar management program for biologics is also being developed. Geisinger also has created chronic disease programs based on the same principles of high reliability that underlie its ProvenCare program. These programs address diabetes, congestive



heart failure, coronary artery disease, hypertension, and disease prevention.

CONTINUOUS INNOVATION

Building an Innovation Infrastructure: Geisinger’s leaders believe that the organization can simultaneously improve quality, satisfaction, and efficiency only by redesigning and reengineering how care is delivered, and not by trying to make people work harder the traditional way. Building on the strengths of its integrated system, the organization typically begins its efforts by targeting Geisinger patients insured by Geisinger Health Plan, in whose treatment clinical and financial responsibilities intersect. Once a model is proven, the innovation may be expanded to encompass additional patients or groups. In a recent article, Geisinger’s executive vice president and chief technology officer, Ronald Paulus, M.D., M.B.A., and coauthors described the key elements of Geisinger’s “innovation architecture” as follows¹⁰:

- convening teams of diverse stakeholders to identify the best care model for enhancing value in the prevention and treatment of disease;
- setting targets for care model redesign based on factors such as impact on populations and cost, variation in outcomes, interest among physicians, and gaps in performance;

- developing a clinical business case for the redesign including identifying efficiency and quality goals and developing a road map of needed changes and linkages in processes, analytic support, and financial and non-financial incentives;
- applying a variety of improvement approaches, including borrowing and adapting approaches that have worked in previous initiatives; and
- culling promising innovations for expansion.

Redesigning Ambulatory Care Processes for Higher Reliability:

Geisinger uses the ProvenCare model to identify “bundles” of evidence-based processes and metrics as part of redesign efforts to promote improved performance in several areas of ambulatory care, including pediatric and adult immunizations, adult diabetes, coronary artery disease, congestive heart failure, hypertension, and adult preventive care. The EHR supports these improved practices through automatic health-maintenance and best-practice alerts to the physician, automatic patient-reminder letters, drug-drug interaction and drug-allergy warnings, laboratory test alerts, notice of drug and vaccine recalls, and other decision-support tools. Exemplary results include the following:

- Compliance with a bundle of nine diabetes measures nearly tripled (from 2.4% to 6.5% of diabetes patients) during a one-year period when a disease registry derived from the EHR was used to provide electronic reminders to physicians in combination with performance feedback and financial incentives.¹¹ Some measures increased to an even greater degree, e.g., the pneumococcal vaccination rate rose from 57 percent to 81 percent.
- Electronic medication alerts have led to increased use of generic drugs, with estimated savings of \$1,000 per year per physician.

Another example of process redesign to test and prove new approaches for meeting patients' preventive care needs is an outreach campaign targeting elderly women at risk of developing osteoporosis.¹² The EHR identified eligible patients—women over age 65 who were not taking osteoporosis medications and had not received a bone mineral density (DXA) scan in the last two years—in two Geisinger primary care clinics. These women each received a personalized letter from a rheumatologist explaining the importance of screening and encouraging them to schedule an appointment for a DXA scan. Those who did not respond to the letter received a follow-up phone call from a nurse. Women identified by the scan as being at high risk of osteoporosis were invited to a group medical visit that included a two-hour educational session with a rheumatologist and nurse followed by a physical exam. Results included the following:

- Almost half (49%) of women in the intervention clinics scheduled a DXA scan, as compared with 13 percent of women in two control clinics.
- Women attending the group follow-up visit were more likely to receive medication to reduce their risk of bone fractures than were women who opted for follow-up care with their physician (100% vs. 69%) and were also more likely to be assessed for vitamin D deficiency

(100% vs. 3%) and given a prescription for vitamin D and calcium (97% vs. 50%).

Improving Medication Safety: Geisinger recently initiated a program to improve patient safety by reducing the use of dangerous (potentially confusing or unclear) abbreviations in medication orders and by improving medication reconciliation, which is a process to assure an accurate medication list at “handoffs” such as hospital admission and discharge. This effort involved redesigning care processes to enhance communication, “hardwiring” the medication list update into nursing workflows, using the EHR to alert physicians when they use a dangerous abbreviation, regularly monitoring and reporting on progress, and reeducating top offenders. In the first six months of the program, the use of dangerous abbreviations in outpatient orders fell from 5,000 per month to 1,000 per month.

“We’re applying a quality and value product to everybody, regardless of the insurance. All of the reengineering and redesign of patient care accrues to the benefit of every single patient.”

Geisinger CEO Glenn Steele, Jr., M.D., Ph.D.

EASY ACCESS TO APPROPRIATE CARE

Geisinger recently completed the first phase of an advanced access redesign of its clinic appointment system, which grew out of its participation in an Institute for Healthcare Improvement collaboration called the Idealized Design of Clinical Office Practice. Following a successful test in two pilot sites, a work group developed an implementation plan that emphasized local initiative by providing education, training, and support to improvement teams at each site. As a result of these efforts, same-day appointments in primary care sites increased from 50 percent in 2002 to 95 percent in 2006, and 84 percent of network sites now have a lead time of one day or less. Improved access has been associated with a 48 percent increase in patient satisfaction (across the network) and an 8 percent increase in physician productivity.¹³

During 2006, Geisinger began opening walk-in CareWorks clinics in area grocery stores. Staffed by nurse practitioners and physician assistants, these clinics offer extended hours and handle routine treatment for minor illnesses, health screenings, immunizations, and common laboratory tests, with an average total

cost of \$55 per visit. Providers coordinate care with the patient's personal physician using the system's EHR and offer all patients an opportunity to register with MyGeisinger for remote Web access to their medical record.

Exhibit 9. Selected Externally Reported Results and Recognition*

<p>Inpatient Care Quality¹⁴ (CMS Hospital Compare Jan.–Dec. 2007)</p>	<p><i>Four-topic clinical composite (24 measures):</i> Geisinger Medical Center ranked in the top quartile of U.S. hospitals evaluated.</p> <p><i>Heart attack treatment (8 measures):</i> Geisinger Medical Center ranked in the top decile of U.S. hospitals evaluated.</p> <p><i>Overall patient rating of care (HCAHPS):</i> Geisinger Medical Center ranked in the top quartile of all U.S. hospitals and of large hospitals reporting.</p>
<p>Ambulatory Care Quality (NCQA Quality Compass 2008)</p>	<p><i>Clinical quality (34 measures):</i> Geisinger Health Plan ranked in the top quartile of commercial health plans nationally or regionally on 21 measures, 12 of which were in the top decile.</p> <p><i>Patient experience (10 measures):</i> Geisinger Health Plan ranked in the top quartile of commercial health plans nationally or regionally on eight measures, six of which were in the top decile.</p>
<p>National Recognition and Ratings</p>	<p><i>Verispan Top 100 Integrated Health Networks (2005–2008).</i></p> <p><i>Hospitals and Health Networks Top 100 Most Wired (2006–2009).</i></p> <p><i>Thomson/Solucient 100 Top Hospitals: National Benchmarks for Success</i> (Geisinger Medical Center in 2005 and 2006; Geisinger Wyoming Valley Medical Center in 2004); <i>Performance Improvement Leaders</i> (Geisinger Medical Center in 2003 and 2005).</p> <p><i>National Research Corporation Consumer Choice Award:</i> Geisinger Wyoming Valley Medical Center in 2006/2007.</p> <p><i>National Committee for Quality Assurance:</i> Health Plan Excellent Accreditation; Quality Plus Distinction in Care Management and Health Improvement; Disease Management Patient and Practitioner Full Accreditation; Diabetes Physician Recognition Program (Geisinger Clinic Primary Care Network and Endocrinology Dept.).</p> <p><i>US News & World Report Best Health Plans:</i> Geisinger Health Plan ranked among the top 50 commercial plans in 2005, 2007, and 2008 and among the top 25 Medicare plans in 2007 and 2008.</p> <p><i>JD Power and Associates National Health Insurance Plan Study:</i> Geisinger Health Plan ranked in the top quartile of 128 commercial health plans evaluated nationally in 2009.</p> <p><i>American Medical Group Association: Preeminence Award (2007).</i></p>

* See the Series Overview, Findings, and Methods for analytic methodology and explanation of performance recognition. CMS = Centers for Medicare and Medicaid Services; HCAHPS = Hospital Consumer Assessment of Healthcare Providers and Systems (large hospitals means 300 or more beds and patient surveys); NCQA = National Committee for Quality Assurance (Quality Compass 2008 represents the 2007 measurement year).

RECOGNITION OF PERFORMANCE

In addition to the results of the specific interventions described above, Geisinger Health System has achieved notable results on selected externally reported performance indicators and has received recognition for its performance on several national benchmarking or award programs (Exhibit 9). In terms of efficiency, data from the *Dartmouth Atlas of Health Care*, which examined care at the end of life for Medicare patients with chronic illness, indicate that those who received the majority of their care at Geisinger Medical Center from 2001 to 2005 had relatively lower Medicare spending per person (83%) and fewer hospital days (64%) and physician visits (73%) compared with the U.S. average.¹⁵

The identification of areas of excellence does not mean that Geisinger has achieved perfection, however. Like the other organizations in this case study series, Geisinger has room for improvement in several areas of care. For example, 30-day mortality among Medicare patients with pneumonia was higher than the national average at Geisinger South Wilkes Barre Hospital in 2006–2007, as reported on the Centers for Medicare and Medicaid Services' Hospital Compare Web site. Geisinger's track record of improvement suggests that the organization will address such issues and continue to innovate so as to achieve higher performance over time.

INSIGHTS AND LESSONS LEARNED

Geisinger's leaders attribute the organization's success in improving its performance to three main factors:

1) a vision of becoming a national model for care delivery as an engine of innovation; 2) leadership to achieve that vision reinforced with a compensation system that is aligned toward specific goals every year in a strategic planning process; and 3) timely feedback of information on progress toward goals. In short, "alignment, reinforcement, and ability to measure and correct in near real time," said chief medical officer emeritus Bruce Hamory, M.D. Physician leadership of improvement initiatives, coupled with a group culture that emphasizes interdisciplinary collaboration, fosters

a "pride of purpose" among physicians that aligns the professional desire for enhancing reputation with the organization's goals for improvement, according to Geisinger's CEO, Glenn Steele, Jr., M.D., Ph.D.

Geisinger's experience instituting a performance-based compensation system shows how the organization provides explicit reinforcement for a culture of excellence. The compensation system was implemented over seven years by reconfiguring pay increases to incentives rather than through salary reductions. Nevertheless, the organization sustained a higher rate of turnover among physicians and leaders early in the process of making this change—a cost that the organization was willing to bear to enhance its organizational culture of high performance.

Developing a specific innovation such as the ProvenCare program required a large organizational commitment of resources. To specify a highly reliable process, Geisinger's physicians had to translate the general principles found in clinical guidelines into specific measurable process steps and behaviors for the care team. In a discussion forum, Geisinger surgeon Alfred Casalc, M.D., explained the effort this way:

The [professional] guidelines for coronary grafting are about as good as any guidelines we have focusing on surgical procedure. But even they are very general, almost like 'eat your vegetables.' It is hard to measure that. We then translated those generalizations into specifics like 'eat 2 cups of broccoli every 24 hours,' because that could be measured...and followed.¹⁶

Having an open and integrated delivery system enables Geisinger to create incentives and innovations that can drive higher performance, both internally and externally. Redesigned care processes such as ProvenCare and the advanced medical home can be codesigned and incentivized by the health plan, yet the benefits accrue to all of Geisinger's patients, not just those enrolled in the health plan. "We're applying a quality and value product to everybody regardless of the insurance," Steele said. "All of the reengineering

and redesign of patient care accrues to the benefit of every single patient.”

Similarly, a mixed-health-plan provider network allows Geisinger to collaborate with and influence care practices in non-Geisinger physician groups and hospitals (Geisinger patients account for 40 percent or more of the patient volume in 13 non-Geisinger hospitals). For example, placing nurse case managers employed by the health plan into both Geisinger and non-Geisinger primary care practices extends the system’s integration and efficiency outside its organizational boundaries. This arrangement allows collaborative follow-up and performance reporting using the system-wide EHR.

Geisinger is seeking to demonstrate greater value in the care it provides to purchasers (private and public) as a market-based proof of principle and in the belief that Medicare reimbursement will move toward continuum-of-care payment and outcomes-based reimbursement. This transformation will require real-time information and electronic linkages of the kind that Geisinger is developing. Given Geisinger’s unique market, its leaders view the organization’s ability to create efficiencies as an opportunity to increase system capacity and avoid making unnecessary capital expenditures for new facilities as demand for services continues to rise with an aging population.

For a complete list of case studies in this series, along with an introduction and description of methods, see *Organizing for Higher Performance: Case Studies of Organized Health Care Delivery Systems—Series Overview, Findings, and Methods*, available at www.commonwealthfund.org.

NOTES

- ¹ T. Shih, K. Davis, S. C. Schocnbaum, A. Gauthier, R. Nuzum, and D. McCarthy, *Organizing the U.S. Health Care Delivery System for High Performance* (New York: Commonwealth Fund Commission on a High Performance Health System, Aug. 2008).
- ² Information on Geisinger Health System was synthesized from a telephone interview with the individuals named in the acknowledgments; from presentations by Steven Pierdon, M.D., Thomas Graf, M.D., Frederick Bloom, Jr., M.D., and Mark Selna, M.D., at the American Medical Group Association 2008 Annual Conference, Orlando, Fla., March 2008; from information from the organization's Web site (www.geisinger.org), and from other sources noted below.
- ³ A summary of findings from all case studies in the series can be found in D. McCarthy and K. Mueller, *Organizing for Higher Performance: Case Studies of Organized Delivery Systems—Series Overview, Findings, and Methods* (New York: The Commonwealth Fund, 2009).
- ⁴ Information in this section was drawn in part from S. B. Pierdon and T. R. Graf, "Advanced Medical Home—Leveraging Concepts and Data to Enhance Quality," a presentation at the American Medical Group Association 2008 Annual Conference, Orlando, Fla., March 2008.
- ⁵ R. A. Paulus, K. Davis, and G. D. Steele, "Continuous Innovation in Health Care: Implications of the Geisinger Experience," *Health Affairs*, Sept./Oct. 2008 27(5):1235–45.
- ⁶ J. Sidorov, R. Shull, J. Tomcavage et al., "Does Diabetes Disease Management Save Money and Improve Outcomes?" *Diabetes Care*, April 2002 25(4):684–89.
- ⁷ Pierdon & Graf, "Advanced Medical Home," 2008.
- ⁸ For example: "Out of recognition that not every complication can be eliminated, the episode payment rate [for coronary artery bypass graft surgery] included a discount of 50 percent from the average related postoperative readmission cost experienced in a two-year historical comparison group. As a result, the financial risk of managing increased or unchanged rates of complications was transferred wholly to the clinical enterprise" (Paulus, Davis & Steele, "Continuous Innovation," 2008).
- ⁹ A. S. Casale, R. A. Paulus, M. J. Selna et al., "ProvenCare: A Provider-Driven Pay-for-Performance Program for Acute Episodic Cardiac Surgical Care," *Annals of Surgery*, Oct. 2007 246(4):613–21. Note: Improvement trend in process reliability was statistically significant but only discharge to home was statistically significant among the clinical outcomes described.
- ¹⁰ Paulus, Davis & Steele, "Continuous Innovation," 2008.
- ¹¹ V. Weber, F. Bloom, S. Pierdon et al., "Employing the Electronic Health Record to Improve Diabetes Care: A Multifaceted Intervention in an Integrated Delivery System," *Journal of General Internal Medicine*, April 2007 23(4):379–82.
- ¹² W. T. Ayoub, E. D. Newman, M. A. Blosky et al., "Improving Detection and Treatment of Osteoporosis: Redesigning Care Using the Electronic Medical Record and Shared Medical Appointments," *Osteoporosis International*, Jan. 2009 20(1):37–42.
- ¹³ S. Pierdon, T. Charles, K. McKinley et al., "Implementing Advanced Access in a Group Practice Network," *Family Practice Management*, May 2004 11(5):35–38.
- ¹⁴ Three Geisinger hospitals were evaluated on CMS Hospital Compare (only results in the top quartile are noted in the table). Rankings for the four clinical topics (heart attack, heart failure, pneumonia treatment, and surgical care improvement) included hospitals that reported on all measures and recorded at least 30 patients in each topic.
- ¹⁵ J. E. Wennberg, E. S. Fisher, D. C. Goodman et al., *Tracking the Care of Patients with Severe Chronic Illness: The Dartmouth Atlas of Health Care 2008* (Hanover, N.H.: Dartmouth Institute for Health Care Policy & Clinical Practice, 2008). The analysis focused on the last two years of life among Medicare patients with one of nine chronic conditions who died between 2001 and 2005, controlling for differences in patients' age, sex, race, and primary chronic diagnosis. Data on Geisinger Medical Center are available online at: www.dartmouthatlas.org.
- ¹⁶ Casale, Paulus, Selna et al., "Provider-Driven Pay-for-Performance," 2007.

ABOUT THE AUTHORS

Douglas McCarthy, M.B.A., president of Issues Research, Inc., in Durango, Colorado, is senior research adviser to The Commonwealth Fund. He supports the Commonwealth Fund Commission on a High Performance Health System's scorecard project, conducts case studies on high-performing health care organizations, and is a contributing editor to the bimonthly newsletter *Quality Matters*. He has more than 20 years of experience working and consulting for government, corporate, academic, and philanthropic organizations in research, policy, and operational roles, and has authored or coauthored reports and peer-reviewed articles on a range of health care-related topics. Mr. McCarthy received his bachelor's degree with honors from Yale College and a master's degree in health care management from the University of Connecticut. During 1996-1997, he was a public policy fellow at the Hubert H. Humphrey Institute of Public Affairs at the University of Minnesota.

Kimberly Mueller, M.S., is a research assistant for Issues Research, Inc., in Durango, Colorado. She earned an M.S. in social administration from the Mandel School of Applied Social Sciences at Case Western Reserve University and an M.S. in public health from the University of Utah. A licensed clinical social worker, she has over 10 years' experience in end-of-life and tertiary health care settings. She was most recently a project coordinator for the Association for Utah Community Health, where she supported the implementation of chronic care and quality improvement models in community-based primary care clinics.

Jennifer Wrenn has 12 years of experience as a professional grant and technical writer and consultant in the fields of medicine, teaching, youth and family services, and immigrant services, with clients in Washington State and Colorado. Her work in the medical field has included writing case studies on high-performing health care organizations, securing funding for local health care access projects such as a Promotora (lay health worker) program and clinic serving immigrant and low-income clients, and working locally with the Citizens Health Advisory Council to research and implement an accessible and affordable community-based integrated health system. She previously worked as a physician assistant, focusing on care for the underserved and women's health. Ms. Wrenn holds a B.S. in zoology from Colorado State University (Phi Beta Kappa) and a B.S. in medicine (physician assistant program) from the University of Iowa School of Medicine.

ACKNOWLEDGMENTS

The authors gratefully acknowledge the following individuals who kindly provided information for the case study: Glenn Steele, Jr., M.D., Ph.D., president and chief executive officer; Joseph Bisordi, M.D., formerly regional chief medical officer; Albert Bothe, Jr., M.D., chief quality officer; Duane Davis, M.D., vice president and chief medical officer, Geisinger Health Plan; Nick Dermes, actuarial informatics analyst; Bruce Hamory, M.D., executive vice president and system chief medical officer emeritus; Ronald Paulus, M.D., M.B.A., executive vice president and chief technology and innovation officer; Steven Pierdon, M.D., executive vice president and regional chief medical officer, Geisinger Northeast; and Sandra Buckley, special assistant to Dr. Steele. The authors also thank the staff at The Commonwealth Fund for advice on and assistance with case study preparation.

Editorial support was provided by Joris Stuyck.

This study was based on publicly available information and self-reported data provided by the case study institution(s). The Commonwealth Fund is not an accreditor of health care organizations or systems, and the inclusion of an institution in the Fund's case studies series is not an endorsement by the Fund for receipt of health care from the institution.

The aim of Commonwealth Fund-sponsored case studies of this type is to identify institutions that have achieved results indicating high performance in a particular area of interest, have undertaken innovations designed to reach higher performance, or exemplify attributes that can foster high performance. The studies are intended to enable other institutions to draw lessons from the studied institutions' experience that will be helpful in their own efforts to become high performers. It is important to note, however, that even the best-performing organizations may fall short in some areas; doing well in one dimension of quality does not necessarily mean that the same level of quality will be achieved in other dimensions. Similarly, performance may vary from one year to the next. Thus, it is critical to adopt systematic approaches for improving quality and preventing harm to patients and staff.



Alternatives to the Proposed Project

The Applicants believe that the proposed project, the acquisition of Carle Clinic Association ("CCA") is, on balance, the most effective and least costly alternative to the other alternatives considered. The following narrative consists of a comparison of the proposed project to alternative options. In this narrative, the substantive issues of cost, patient access, quality, and financial impact on the community and payors are addressed.

The Applicants have considered a number of alternatives to the proposed transaction as follows:

- 1) Do nothing – do not undertake the transaction and maintain the status quo;
- 2A) Proposing a project of greater or lesser scope and cost – Acquire Hospital capacity for only the physician services most essential to Hospital operations without integration of CCA;
- 2B) Proposing a project of greater or lesser scope and cost – Recruit physicians from outside the community to develop a single health care system; and
- 3) Integrate CCA and its related assets and create a single health care system.

1) Do nothing – do not undertake the transaction and maintain the status quo.

With limited capital available to augment and expand existing service lines as well as in consideration of limited health care resources, the alternative of not undertaking a transaction and maintaining the status quo is always the starting point in project planning. It was discarded for the reasons discussed below.

The status quo presents several key problems. Many goods and services can be readily provided through a series of unconnected transactions. In health care, however, close coordination over time and within care episodes improves both health outcomes and efficiency. Close coordination is problematic in the U.S. health care system because the financing and delivery of care is distributed across a variety of distinct entities, each with its own objectives, obligations and capabilities. These fragmented organizational structures lead to disrupted relationships, poor information flows, and misaligned incentives that combine to degrade care quality and increase costs. Specific barriers that the Hospital is currently seeking to address are discussed below.

In the current environment of separately organized providers, there are many barriers to providing the highest quality and highest value care:

- Efficient and seamless care coordination is difficult to achieve among multiple providers and transitions across care settings are managed with less efficiency and more administrative burden;

- The existing care delivery system does not provide for fully aligned collaboration. The current system is structured to optimize outcomes for the episode of care rather than the global level for the continuum of care. Providers (including nurses and other members of care teams) across care settings are not responsible to nor overseen by the same management team. In separate care systems it is more difficult to effectively and reliably collaborate to deliver high-quality, high-value care. Also, physician and hospital quality and care goals and initiatives are developed independently and commitment to risk and quality management processes is not maximized;
- The electronic medical record is an enabling technology for providers to pursue quality improvement in potentially powerful ways. Separate information technology systems, however, exist and for much of the country, linking the electronic medical record of doctors, hospitals and clinics remains an elusive goal. Patients' clinically relevant information is not always efficiently available to all providers at the point of care through electronic medical record systems. Delays exist because providers must create interfaces to be able to share patient information. Moreover, there are inherent issues in the current system limiting providers' ability to share electronic medical record data in a timely and efficient manner. Specifically, privacy laws have been a barrier to electronic medical record linkages amongst health care providers. Privately, information systems manufacturers have been slow to create systems that work together because they've wanted to emphasize their uniqueness in order to gain market share;
- In a fragmented care system where there are multiple points of entry, it is more difficult for patients to access the appropriate level of care, access pertinent information at all hours and for providers to be fully responsive to patients' needs. An integrated system provides transparency between the episodes of care so that providers within the system can optimally manage disease states and generally make the best care decisions;
- The Hospital is charged with developing and adhering to multiple, discrepant quality standards and, in the status quo, these standards are often difficult to mesh with independent physicians' medical practices. For example, physician practices are not under the jurisdiction of the Joint Commission and the accreditation process does not currently apply to CCA; however, CCA, as part of the Hospital's accredited organization, will be subject to the Joint Commission's quality standards after integration; and
- Disparate medical research platforms and goals remain. Incongruent research priorities, commitments, and incentives deter innovation in care delivery and result in suboptimal clinical and educational advances.

The alternative of maintaining the status quo might in the short term reduce capital costs by postponing the payment of the purchase price but it is not the best option. Abandoning the full integration option will not provide the long-term access and quality benefits for patients and cost savings that the merger with CCA will provide. Nor will the current state of affairs provide the benefits associated with long term capital cost savings including centralized budgeting, patient access improvements, and quality improvements that the proposed project presents. Also, the Applicants rejected this alternative because of the inability of separate providers to obtain the full benefits of economies of scale which provide for reduced operating costs. Many of the savings and quality benefits of the proposed transaction are impossible to quantify particularly in light of the uncertain impact of any national health care reform initiative. However, other specific examples of how the current environment is more costly than the planned project are described below.

- The current environment causes patient confusion and increases administrative burden and cost. One basic example is the unnecessary expenditure of human resources in connection with duplicate form completion and counseling patients on the distinctions between the two organizations (and, thus, separate financial responsibilities to each provider). This confusion also results in slower coordination of claims payments and the associated loss of the time value of money.
- Approximately 45% of Americans are living with a chronic condition, and half of these have multiple chronic conditions.¹ Disease management promises to achieve cost savings by improving the quality of care for chronic diseases but better vertical integration of care is essential to the success of disease management programs. The rationale for disease state management programs rest not only on their cost saving but also on their effectiveness and value including reducing hospitalizations and lowering morbidity and mortality rates. Disease management programs are a potential "win-win" proposition for patients, payors and health care providers. Patients, employers and taxpayers alike will benefit when disease management programs improve care and reduce costs.
- The Hospital's community care policy (charity care policy) does not currently apply to CCA services. In FY 2009, this policy for Hospital services alone provided a benefit to the community of almost \$8,000,000.

Also, a significant revenue stream enhancement comes along with the capital cost of the proposed project. Accordingly, there is no simple capital cost dollar to dollar comparison between the proposed project and the option of "doing nothing."

¹ Johns Hopkins University. Chronic conditions: making the case for ongoing care. Baltimore, Md. Johns Hopkins University Partnership for Solutions. Available at: <http://www.rwjf.org/research/researchdetail.jsp?id=1502&ia=142>

2A) Acquire Hospital capacity for only those physician services essential to support the Hospital services without integration of CCA

A second alternative considered was to address physician services integration on a reactive, piecemeal basis to meet essential physician services requirements to support the Hospital service lines through expansion of Carle Foundation Physician Services ("CFPS"). The core goals of this minimal integration strategy, which would be accomplished through contractual relationships and funding initiatives, would be as follows:

- For the physician services most essential to support Hospital functions, hiring individual CCA physicians for employment with the Hospital;
- Further development of physician leadership roles at the Hospital to maximize quality improvement initiatives;
- Implementation of a Regional Health Information Exchange (a local health information network) and a more fully integrated electronic medical record system between CCA and the Hospital; and
- Expansion of the Hospital's support of outlying community hospitals (most of which are Critical Access Hospitals) in the Hospital's secondary service area.

The hiring of additional physicians is essential to the goals of integration. The Hospital currently provides a limited amount of physician services through a Carle Foundation subsidiary, CFPS. CFPS includes approximately 14 emergency department physicians, 14 hospitalists, 3 neonatologists, 1 maternal fetal medicine specialist, 5.5 pediatric hospitalists/intensivists, 4.5 pathologists, and one sports medicine physician. CFPS also has approximately 12 physicians and mid-level providers providing outpatient services. Through the organization, the Hospital invests resources to partner with physicians in order to meet needs in the Hospital's core service lines. This strategy could be continued, but it has been developed and used to date only to meet specific needs of the Hospital's core inpatient and ED service lines, not the overall spectrum of physician services in the clinic setting.

The Applicants concluded that offering employment to only a portion of the CCA practitioners was not a viable alternative. Hiring some but not all of the individual CCA physicians would interfere with the CCA physician collaboration that currently exists. Also, it is not possible because of the non-competition restrictions to which each CCA physician is bound. Because of this inherent problem, a physician acquisition strategy of a lesser scope involving the CCA physicians is not possible. Also, any system design with less than full integration would not achieve the same benefits offered by a complete integration, and would interfere with the high degree of physician collaboration, and policies, procedures, and practices to facilitate same, which currently exist among CCA and its physicians. The more modest level of benefits that would result would not justify the effort and expenditure particularly in light of the costs and disadvantages of

the status quo. These costs and disadvantages of doing nothing would not, for the most part, be addressed. Each of the integration strategies noted above offered a solution to improve upon the delivery of health care in the community served; but, keeping the Hospital and CCA as two distinct entities would not maximize service coordination, eliminate redundancies in care delivery, or foster continuity within electronic medical record. Moreover, retaining two separate entities would not eliminate duplicative administrative functions and continue inefficiency, thus perpetuating unnecessary spending by each provider.

2B) Recruit physicians from outside the community to develop a single health care system.

Another strategy for integration of physicians into the organizations would be for the Hospital to recruit new physicians to the area and employ them, rather than merging with CCA. This alternative provides for substantially increased cost and administrative burden on the Hospital without eliminating similar CCA costs, it would be contrary to the interests of both the Hospital and CCA and is not likely to meet with substantial success in either the short term or the long term. While the Hospital would be attempting to entice new physicians, patient access and quality would continue to suffer. Furthermore, this would create duplication of physician services because the quantity of physicians in the community in the various practice areas is generally adequate and bringing in physicians to the area to duplicate the services provided by CCA would create an enormous oversupply and duplicate services. This oversupply would most certainly result in many medical specialties failing financially.

The cost of building physician offices ranges from \$125/gsf-\$175/gsf (to renovate existing space) to \$275/gsf-\$300/gsf (to acquire land and build new buildings). The CCA currently occupies over 800,000 gsf. Assuming just 500,000 gsf of space for new physicians, that means that procuring new space rather than taking over CCA space would cost in the range of \$62,500,000 to \$150,000,000. With regard to recruiting costs, the current cost on average to recruit and relocate a new physician to Champaign/Urbana is \$40,000. Physician recruitment costs for just 250 physicians (which is roughly two-thirds of the CCA group) would cost \$10,000,000. These capital expenditures would range from \$72,500,000 to \$160,000,000.

Beyond these initial capital expenditures and operating costs, there are always additional start-up operating costs involved in developing a new physician's practice which can be significant depending on the specialty. For example, the operating losses for a successful primary care physician are usually about \$85,000 in the first year of practice. As is apparent from these figures, this alternative is also very impractical from a cost perspective when compared to the option selected.

3) Integrate CCA and its related assets and create a single health care system.

The proposed project's purpose is the integration of the Hospital with CCA to advance the joint goal of creating an ideal health care delivery system to provide high-quality, cost-effective care to the community. An integrated system will maximize the ability of

the organizations to provide the right care at the right time and will assist with the standardization of treatment guidelines as well as improve provider adherence to such guidelines. The proposed project will unite the complementary strengths of the two organizations and enable them to provide the best care to every patient through integrated clinical practice, education, and research. The integration will encourage health care providers to coordinate patient care among multiple sites and across various health care settings through active management and will strive towards information continuity by creating consistent, electronic medical record systems which are available to all providers within the system. This will significantly benefit the treatment of patients with complex, chronic, and serious problems in emergency settings.

Sustaining change in clinical practice requires aligning management structure and care processes both horizontally and vertically and the Hospital desires full integration to accomplish these goals. The Applicants believe that many of the inherent problems which exist in the current care delivery system will be significantly remedied through the planned integration. Planned benefits are as follows:

- Maximize integration of the electronic medical record and better position the new electronic medical record system to participate in a Regional Health Information Exchange. A fully integrated electronic medical record will not just change the way doctors and nurses work in hospitals and doctors' offices; it will improve the quality of care and lower costs;
- Efficiently facilitate effective care coordination to deliver high-quality, high-value care;
- Help ensure the availability of safety net services as discussed in the safety net impact statement including improving access to ambulatory care services
- Expand the Hospital's charity care policy to the broad array of ambulatory care services that will be integrated into the Hospital system;
- Create clear accountability for the total care of patients through unified management and clear chains of command;
- Support a teamwork approach across care settings and align physician and Hospital quality and care goals and initiatives including participation in the various government-sponsored demonstration projects relating to the vertical integration of care delivery;
- Maximize provider commitment to risk and quality management processes and enable coordination of effort for patient safety and quality improvement initiatives;
- Ensure the right care is delivered at the right time in the right place and eliminate access barriers to appropriate care;

- Establish and implement unified research priorities, commitments, and incentives to encourage innovation in care delivery and deliver clinical and educational advances;
- Maintain centralized capital planning to eliminate unnecessary technology investments;
- Reduce hospitalizations by improving access to ambulatory services for conditions which are potentially preventable through greater coordination and use of such services;
- Enable the implementation of disease state management programs to provide a systematic population-based approach to medical care designed to standardize and improve provider adherence to treatment guidelines. Integration gives the flexibility and efficiency of utilizing staff for inpatient and outpatient services when appropriate and focus on a defined patient population rather than a point of care; and
- Facilitate the Hospital's regional outreach efforts to smaller, rural hospitals in outlying areas.

Finally, health care reform proposals emerging from Washington are signaling a shift away from fragmented, volume-based payments to more unified payments based on episodes or populations with more accountability for high-value care. Health care reform requires a high level of systemic integration between all health providers and delivery systems across the many places in which care is provided. Through this coordination people will be able to receive the right care at the right time in the right place. The Hospital will be better positioned to respond to federal mandates for care delivery in an integrated environment.

Cost/Benefit Analysis

The highlights of a cost-benefits analysis of the various alternatives are as follows:

Doing Nothing: If the Applicants do nothing, community need will not be fully met, and access and quality will remain at the current level or will erode. The U.S. health care system threatens the economy with an ominous future. Without prompt and significant changes in the way that health care is organized in this country, the breakdown of care systems is imminent. Doing nothing is likely to result in even higher costs for lower quality of care, reduced access, rising inefficiency, and more patient dissatisfaction. The health care crisis in this country implicates more than the quality of health care but plays into the economic stability of the nation as a whole.

Avoidable hospitalizations and suboptimal management of chronic illnesses are just two of many dilemmas that exacerbate the nation's health care crisis. At many levels, the

Hospital is pleased with the level of care that is offered in its community but its community is not immune to the national threats to the care delivery system and it has certainly been affected by the rising costs of health care. With each barrier to the highest quality, highest value care described above, there is a cost. Sometimes these costs can be described as direct costs but many times the subjective value of life and good health are inexorably intertwined and it is impossible to fully identify all the costs to society of a missed opportunity to overcome the impediments to better, more cost effective care. Less integrated care increases costs not just for the providers but also for patients and payors alike.

As for economies of scale, in 2007, health care spending in the United States accounted for 16.2 percent of the nation's Gross Domestic Product and, according to the Henry J. Kaiser Family Foundation, one of the major factors driving the cost of health care today is administrative costs.² In this report, the Kaiser Foundation estimates that at least 7 percent of health care expenditures is made on "administrative" functions, and may even exceed 30 percent in some provider systems which is substantially higher than government health care administration and, therefore, a signal of inefficiencies in the private system.³ The Kaiser report continues by stating "controlling health care costs" is a "key tenet for broader economic stability and growth, and President Obama has made cost control a focus of health reform efforts under way."⁴ Moreover, the report highlights the major proposals that exist to contain costs, which include "greater use of technology . . . [and] improving quality and efficiency [by] . . . decreasing unwarranted variation in medical practice and unnecessary care."⁵

Lesser Scope Project: In contrast to doing nothing, a minimal physician affiliation strategy may better address community need as the charity care policy would be extended to these services. Quality of care also has some potential for improvement. The capital costs for the acquisition of physician services through recruitment was discussed above and could be as high as \$160,000,000 plus start up costs for each physician. Given that the \$250 million purchase price for the option selected includes a number of non-clinical assets such as the health insurance plan and some joint venture interests, the selected option of merging with CCA is a better option when comparing the capital expenditures associated with the two options.

Integrate CCA and its related assets and create a single health care system: As delineated above, there are numerous benefits to the proposed transaction. As described, these

² U.S. Health Care Costs, Background Brief (The Henry J. Kaiser Family Found., Washington, DC, July 2009) available at http://www.kaiseredu.org/topics_im.asp?imID=1&parentID=61&id=358.

³ *Id.*; see also Steffie Woolhandler, et al., Costs of Health Care Administration in the United States and Canada, N. ENGL. J. MED. 349, at 768 (Aug. 21, 2003) (reporting that health care administrative expenses are as high as 31 percent of health care expenditures in the U.S.).

⁴ U.S. Health Care Costs, BACKGROUND BRIEF *supra* note 4.

⁵ *Id.*

benefits will improve access and quality of care for the community as a whole. The project will expand the availability of charity care services in the community and will also bolster the position of the Hospital as a safety net services provider as further described in the Safety Net Impact statement. The \$250,000,000 transaction price involves the acquisition of not only the medical practice but also of its investments in health insurance businesses as well as certain other investments.

With regard to disease management, the Applicants believe more comprehensive evidence of savings from these programs will emerge as programs evolve and are further tested. If the two organizations remain separate, no economies of scale will be achieved.

\9990085

Size of Project

This project involves the acquisition of a medical practice to be operated in existing spaces that will not be modified. There is no construction, modernization or demolition of spaces involved in this project, therefore this section is not applicable.

Project Services Utilization

The proposed project does not include the establishment, expansion, modernization or discontinuation of any health care facility or category of service as those terms are defined under applicable HFSRB law and rules. Nor does the proposed transaction involve the change of ownership of a health care facility. Rather, the project involves a capital expenditure for clinical service areas other than a category of service in excess of the current capital expenditure minimum (\$11.5 million). The services affected and their associated units of service and volumes are included in the chart below.

The chart provides a summary of units of service provided by CCA and CFH during the last calendar year, separated by categories of service.

Summary of Service Volumes - CY 2008

Service	Units / Equipment Type	# of Pieces of Equipment	#of Rooms	Historical Utilization
Clinical Professional Services	Work RVU's	NA	NA	2,159,650
	Total RVU's	NA	NA	5,284,822
MRI	Machine	6 ¹	6	13,610 exams
Lab Tests	Number of Tests	NA	NA	1,377,658 tests
General X-Ray and Radiology ²	Machines	36	21	130,852 exams
Breast Imaging	Machines	6	6	38,919 exams
Ultrasound & OB Sono	Machines	18	14	37,531 exams
Angiography Room ³	Machines	10	10	6,729 exams
CT & PET/CT	Machines	6	6	38,658 exams
Nuclear Medicine	Machines	4	4	6,142 exams
Cardiac Diagnostic	Visits	38	NA	60,421 exams
Carle SurgiCenter	Operating Rooms	NA	5	5,718 cases ⁴
DEXA	Machines	3	3	5,476 exams

¹ Data provided consists of 5 rooms and 1 mobile unit.

² This data row represents diagnostic and interventional radiology and/or imaging and therapeutic radiology.

³ The data here will be repeated for cardiac diagnostic because the same rooms and equipment are used for different procedures types.

⁴ The data provided for Carle SurgiCare represents the period of July 1, 2008 to June 30, 2009, not calendar year 2008.

Section VI Mergers, Consolidations, and Acquisitions

This transaction does not involve regulated facilities (that is, an Ambulatory Surgical Treatment Center, a hospital, a dialysis facility, or a nursing home). Therefore this section is not applicable.

Section VII Categories of Service Review

This transaction does not propose establishment, expansion, or modernization of any category of service that is subject to Certificate of Need review, as provided in the Illinois Health Facilities Planning Act [20 ILCS 3960]. Therefore this entire section is not applicable.

Section VIII H – Non-Hospital Based Ambulatory Surgery

Section 8.H on page 33 of the CON application, entitled “Non-Hospital Based Ambulatory Surgery” is applicable to projects proposing to establish or modernize a non-hospital based ambulatory surgical treatment center or to the addition of surgical specialties to such a facility. Neither such action is contemplated and this criterion is not applicable.

Currently, the Carle Foundation has a 51% interest in and controls Champaign SurgiCenter. As part of the proposed transaction, The Carle Foundation will acquire the remaining 49% interest. Therefore, upon completion of the proposed project, the Carle Foundation will operate the surgery center as a wholly-owned subsidiary.

Section VII R – Clinical Service Areas Other Than Categories of Service

The proposed project does not include the establishment, expansion, modernization or discontinuation of any health care facility or category of service as those terms are defined under applicable HFSRB law and rules. Nor does the proposed transaction involve the change of ownership of a health care facility. Rather, the project involves a capital expenditure for clinical service areas other than a category of service in excess of the current capital expenditure minimum (\$11.5 million). The services affected and their associated units of service and volumes are included in the chart below.

The chart provides a summary of units of service provided by CCA and CFH during the last calendar year, separated by categories of service.

Summary of Service Volumes - CY 2008

Service	Units / Equipment Type	# of Pieces of Equipment	#of Rooms	Historical Utilization
Clinical Professional Services	Work RVU's	NA	NA	2,159,650
	Total RVU's	NA	NA	5,284,822
MRI	Machine	6 ¹	6	13,610 exams
Lab Tests	Number of Tests	NA	NA	1,377,658 tests
General X-Ray and Radiology ²	Machines	36	21	130,852 exams
Breast Imaging	Machines	6	6	38,919 exams
Ultrasound & OB Sono	Machines	18	14	37,531 exams
Angiography Room ³	Machines	10	10	6,729 exams
CT & PET/CT	Machines	6	6	38,658 exams
Nuclear Medicine	Machines	4	4	6,142 exams
Cardiac Diagnostic	Visits	38	NA	60,421 exams
Carle SurgiCenter	Operating Rooms	NA	5	5,718 cases ⁴
DEXA	Machines	3	3	5,476 exams

¹ Data provided consists of 5 rooms and 1 mobile unit.

² This data row represents diagnostic and interventional radiology and/or imaging and therapeutic radiology.

³ The data here will be repeated for cardiac diagnostic because the same rooms and equipment are used for different procedures types.

⁴ The data provided for Carle SurgiCare represents the period of July 1, 2008 to June 30, 2009, not calendar year 2008.

Financial Feasibility

October, 2009

Note regarding bond letter:

Fitch Ratings has issued that attached rating letter which provides The Carle Foundation an "A" range bond rating. This rating applies to both The Carle Foundation and Carle Foundation Hospital which are both members of the Obligated Group under the Master Trust Indenture dated March 1, 2009. As such, they are jointly and severally liable for the outstanding note obligations issued under the Master Trust Indenture that secure the outstanding bonds issued on their behalf. Attached (also at Attachment 75) are selected pages from the Master Trust Indenture to confirm that both of these entities are members of the Obligated Group and, therefore, the subject of Fitch's "A" rating.

Fitch Ratings

One State Street Plaza
New York, NY 10004

T 212 908 0500 / 800 75 FITCH
www.fitchratings.com

March 6, 2009

Mr. Scott Hendrie
Director of Finance
The Carle Foundation
611 West Park Street
Urbana, IL 61801

Re: \$25,000,000 Illinois Finance Authority
Variable Rate Demand Revenue Bonds, Series 2009B
(The Carle Foundation)

Dear Mr. Hendrie:

Fitch Ratings ("Fitch") has assigned a rating of 'AA-/F1+' to the above-referenced bonds. The rating is based on the support of the irrevocable, direct-pay letter of credit provided by The Northern Trust Company. The rating on the bonds will expire on the earliest of: March 18, 2012, the stated expiration date of the letter of credit, unless such date is extended; any prior termination of the letter of credit; or defeasance of the bonds.

Ratings assigned by Fitch are based on the documents and information provided to us by the issuer and its experts and agents and are subject to receipt of final closing documents in form satisfactory to Fitch. Fitch does not audit or verify the truth or accuracy of such information.

The assignment of a rating by Fitch shall not constitute a consent by Fitch to the use of its name as an expert in connection with any registration statement or other filing under U.S., U.K, or any other relevant securities laws.

Ratings are not a recommendation or suggestion, directly or indirectly, to you or any other person, to buy, sell, make or hold any investment, loan or security or to undertake any investment strategy with respect to any investment, loan or security or any issuer. Ratings do not comment on the adequacy of market price, the suitability of any investment, loan or security for a particular investor (including without limitation, any accounting and/or regulatory treatment), or the tax-exempt nature or taxability of payments made in respect of any investment, loan or security. Fitch is not your advisor, nor is Fitch providing to you or any other party any financial advice, or any legal, auditing, accounting, appraisal or actuarial services. A rating should not be viewed as a replacement for such advice or services.

It is important that you promptly provide us with all information that may be material to the rating so that our ratings continue to be accurate. Ratings may be raised, lowered, withdrawn, suspended or placed on Rating Watch due to changes in, additions to, the accuracy of or the inadequacy of information or for any other reason Fitch deems sufficient.

///

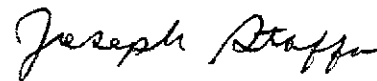
Attachment - 75

Mr. Scott Hendrie
The Carle Foundation
Rating letter of March 6, 2009
Page Two

Nothing in this letter is intended to or should be construed as creating a fiduciary relationship between Fitch and you or between us and any user of the ratings. Nothing in this letter shall limit our right to publish, disseminate or license others to publish or otherwise disseminate the ratings or the rationale for the ratings.

We are pleased to have had the opportunity to be of service to you. If we can be of further assistance, please contact us.

Sincerely,



Joseph Staffa
Senior Director
Public Finance

cc: Jeffrey Ellis—Goldman Sachs
David J. Kates—Jones Day
Mary Wilson—Sonnenschein Nath & Rosenthal LLP
Michael Schrader—Orrick Herrington & Sutcliffe

MASTER TRUST INDENTURE
AMONG
THE CARLE FOUNDATION,
THE CARLE FOUNDATION HOSPITAL,
CARLE HEALTH CARE INCORPORATED,
CARLE RETIREMENT CENTERS, INC.

AND
WELLS FARGO BANK, NATIONAL ASSOCIATION,
as Master Trustee

Dated as of March 1, 2009

THIS IS A MASTER TRUST INDENTURE dated as of March 1, 2009 (the "Master Indenture") among The Carle Foundation (the "Corporation"), The Carle Foundation Hospital (the "Hospital"), Carle Health Care Incorporated ("Health Care") and Carle Retirement Centers, Inc. ("Retirement Centers"), each, an Illinois not for profit corporation, and Wells Fargo Bank, National Association, a national banking institution duly established, existing and authorized to accept and execute trusts of the character herein set out under and by virtue of the laws of the United States of America, with its designated corporate trust office, domicile at post office address in Chicago, Illinois, herein called the "*Master Trustee*".

RECITALS:

WHEREAS, the Corporation, the Hospital, Health Care and Retirement Centers are authorized by law, and deem it necessary and desirable that they be able, to issue evidences of indebtedness secured hereby of several series (collectively, the "*Obligations*") in order to secure the financing or refinancing of health care facilities and for other lawful and proper corporate purposes; and

WHEREAS, the Corporation, the Hospital, Health Care and Retirement Centers also desire to provide in this Master Indenture for other legal entities to join with the Corporation, the Hospital, Health Care and Retirement Centers in the future in pooling credit resources in order to achieve lower borrowing costs and to become jointly and severally liable with the Corporation, the Hospital, Health Care and Retirement Centers and other such entities for the payment of the Obligations and the performance of all covenants contained herein; the Corporation, the Hospital, Health Care and Retirement Centers and each legal entity incurring such joint and several liability in accordance with the terms hereof are herein referred to individually as a "*Member*" and collectively as the "*Members*" or the "*Obligated Group*;" and

WHEREAS, in order to declare the terms and conditions upon which Obligations of each series are authenticated, issued and delivered, and in consideration of the premises, of the purchase and acceptance of Obligations of each series by the holders thereof and of the sum of One Dollar to it duly paid by the Master Trustee at the execution of these presents, the receipt whereof is hereby acknowledged, the Corporation, the Hospital, Health Care and Retirement Centers (and each future Obligated Group Member) covenant and agree with the Master Trustee, for the equal and proportionate benefit of the respective holders from time to time of Obligations of each series, as follows:

Granting Clauses

That each Obligated Group Member, in consideration of the premises and of the purchase of the Obligations and of other good and lawful consideration, the receipt of which is hereby acknowledged, and to secure the payment of the principal of, premium, if any, and interest on the Obligations, and payments on Obligations securing Derivative Agreement Scheduled Payments and Derivative Agreement Termination Payments on Interest Rate Agreements, and the performance and observance of all of the covenants and conditions herein or therein contained, has executed and delivered this Master



Carle Foundation Hospital

611 West Park Street, Urbana, IL 61801-2595 Phone: (217) 383-3311

October, 2009

Ms. Courtney Avery
Acting Chairperson
Illinois Health Facilities and Services Review Board
525 West Jefferson Street
Springfield, Illinois 62761

RE: Carle Foundation Hospital and the Carle Foundation acquisition of the Carle Clinic Association: Conditions of Debt Financing

Dear Ms. Avery:

The selected form of debt financing the 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 (years), financing costs, and other factors.

Sincerely,

John M. Snyder
Executive Vice President
and COO

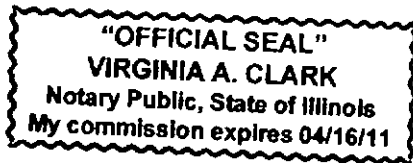
Robert Tonkinson
Senior Vice President
and CFO

Notarization:

Subscribed and sworn to before
me this 8th day of October

Signature of Notary

seal



Cost and Gross Square Feet by Department or Service

This project involves the acquisition of a medical practice to be operated in a existing spaces that will not be modified. There is no construction, modernization or demolition of spaces involved in this project, therefore this section is not applicable.

Major Medical Equipment

This project does not involve the acquisition of Major Medical Equipment, defined by the Code as medical equipment exceeding \$11,500,000, therefore this section is not applicable.

Itemization of Other Costs to be Capitalized

The \$245,377,783 fair market value purchase price being paid for Carle Clinic Association ("Clinic") by Carle Foundation Hospital was determined in consideration of both the Clinic assets being acquired as well as the Clinic liabilities being assumed by Carle Foundation Hospital. Therefore, the Other Costs to be Capitalized figure contained in the Project Costs and Sources of Funds table reflects the following assets and liabilities:

\$45,528,000	Cash
\$112,728,000	Net Working Capital
\$94,771,000	Fixed Assets
\$24,000,000	Joint Venture Minority Interests
\$121,872,000	Intangible Assets and Goodwill
(\$59,188,000)	Interest-bearing Debt
(\$50,400,000)	Pension Liability
(\$11,500,000)	Retiree Medical Liability
<u>(\$27,811,000)</u>	<u>Other Operating Liabilities</u>
\$250,000,000	TOTAL including land
- \$ 4,622,217	Land Value
<hr/>	
\$245,377,783	TOTAL excluding land

Notes:

The Carle Foundation is also acquiring land with a value of \$4,622,217 for a total purchase price of \$250,000,000.

"Other operating liabilities" reflect certain liabilities to be assumed by Carle Foundation Hospital related to employee time off, professional tail liability coverage, ancillary contract adjustments and adjustments for potential future taxes payable by Carle Foundation Hospital.

Review Criteria Relating to Economic Feasibility

The table below provides information regarding costs as they relate to patient days.

Line 4 of the tables addresses Criterion 1120.310(d), Projected Operating Costs.

Line 5 of the tables addresses Criterion 1120.310(e), Total Effect of the Project on Capital Costs.

Line	Projected	FY 2011
1	Equivalent Patient Days	311,045
2	Total Capital Cost	\$53,298.00
3	Total Operating Expense	\$786,209.00
4	Capital Cost per Equivalent Patient Day	\$171.35
5	Operating Cost per Equivalent Patient Day	\$2,527.64

Safety Net Impact Statement

This Safety Net Impact Statement provides information to show:

- How the proposed application positively impacts safety net services within the community served by Carle Foundation Hospital; and
- Specifically details how the charity care policy of the Hospital will be extended to the integrated physician services being brought into the Hospital organization.

One of the goals of a health care system should be to provide the same health care experience regardless of patient demographics and socioeconomic status. Despite being the richest nation in the world, the U.S. health care system leaves millions without insurance coverage and ranks poorly on measures of health system performance and equity in access relative to our massive investment in health care. The Institute of Medicine's 2000 report on safety net health care services entitled, "*America's Health Care Safety Net: Intact but Endangered*" cited three dynamics that providers and policymakers were urged to focus on in making decisions affecting the health care delivery and reimbursement system. Those factors were:

- The precarious financial situation of many providers that render care to Medicaid, uninsured, and other vulnerable patients;
- The changing financial, economic, and social environment in which these providers operate; and
- The highly localized and fragmented "patchwork" structure of the safety net.

1. Impact on Essential Safety Net Services in the Community.

The proposed integration will have a positive impact on the community's essential safety net services and will address all of the dynamics cited above.

Carle Foundation Hospital's Safety Net Services.

By creating an integrated health care delivery system, the Hospital will be able to emphasize the strengths of each organization and improve the delivery of health care services in central Illinois. As an integrated organization, Carle will coordinate core services more effectively and fill crucial service gaps. The project will support the development of infrastructure, such as information systems, seamless care delivery and clinical protocols that will help providers improve access to existing services and promote the efficiency of the care that is delivered. As a result, the vulnerable populations in the community, such as low income families, individuals coping with chronic illness, uninsured patients, and the population as a whole will benefit.

The Hospital directly operates numerous safety net programs, including pediatric services, obstetrics services, neonatal intensive care services and a Level 1 trauma center emergency department. Its Neonatal Intensive Care Unit and obstetrics programs support its designation as a Level III perinatal program in the State's network which provides necessary care for high-risk obstetrics patients and their babies. The Hospital's intensive care and surgical programs support complex neurosurgical procedures which are not otherwise available in the community. Further, the stroke program it operates is of foremost importance in safeguarding against the otherwise significant mortality and co-morbid conditions experienced by stroke patients.

This transaction will not only support all of these safety net services, but will actually enhance the delivery of health care by creating an integrated health care system that increases efficiencies and better-coordinates care delivery to each patient served. As a unified entity, there will be a reduction in administrative hurdles and increased ability to provide patients both hospital and ambulatory care services as coordination of care becomes streamlined and does not have to be managed between multiple entities. The proposed project will bring local health care delivery in line with some of the greatest health care delivery models in our nation, replicating best practices used at leading institutions such as the Mayo Clinic, Kaiser Permanente and Geisinger Health System.

Essential Ambulatory Care Services.

Primary gaps and barriers that exist in the current ambulatory care delivery system include:

- Over-reliance on hospital emergency rooms due to access barriers for ambulatory care;
- Disparate and fragmented delivery systems;
- Issues of access to primary and specialty health care providers available for certain populations;
- Lack of health insurance; and
- Underfunded and historically low Medicaid reimbursement rates that compromise access.

Carle Foundation Hospital, like most other hospitals, is profoundly affected by the availability of safety net ambulatory care throughout the community. Hospitals serve as the provider of last resort and deficiencies in the ambulatory care system ultimately manifest themselves in hospital emergency rooms. This proposed integration stands ready to ameliorate many of the service gaps.

Both the Hospital and Carle Clinic Association share the vision of working together to bring quality, affordable health care to all patients. Based on the planned integration, the Hospital will acquire essential primary care physician services as well as specialty

physician services. Accordingly, these physician services will be provided by a fully integrated health care system. This is an essential step towards enhancing primary care services because patient care benefits from improved coordination between physicians and other providers in a health care provider network. Also, the provision of physician services by the Hospital will help ensure that the physician practice serves as a medical home for patients through which to receive acute, chronic, and preventive health care services. The goal is to reduce episodic care based on illnesses and patient complaints. Care coordination will be enhanced with an emphasis on patient health literacy and a long-term healing relationship. The initial focus for establishing these "homes" will be directed on the most medically vulnerable populations including high-risk obstetrics patients and chronically-ill patients, including those affected by childhood obesity.

Of paramount importance, the Hospital plans to extend its charity care policy to include the acquired physician services. This charity care policy is included with this attachment. Due to poor allocation of payor funding for some of the core safety net services, this issue is one that is often confronted within a private medical practice.

With further regard to ambulatory care, the Hospital will be better positioned to continue its collaboration with other public providers of safety net services. One of these providers to which the Hospital provides direct financial support is Frances Nelson Health Center, the Federally Qualified Health Center in Champaign County. This Federally Qualified Health Center provides access to care regardless of a patient's insurance status or ability to pay.¹ The Hospital also makes grant money available to the Champaign-Urbana Public Health District. These funds are used in part for the Adult Dental Access Partnership, which provides dental services for people of all ages with Medicaid, children with limited ability to pay, and adults. The Hospital's funding also paid for a 40-foot RV to serve as a mobile unit for dental and vision screenings, portable dental equipment, and equipment for two dental treatment rooms at the Champaign-Urbana Public Health District.

Ensuring a Safety Net in Outlying Rural Communities

The Hospital also works with other area hospitals to strengthen the overall health care network in the region using the motto "exceptional patient care, close to home." Outlying community hospital partners are essential in the Hospital's mission to elevate the level of care accessible to the families of east central Illinois. These outlying hospital partners have vital roles in the spectrum of health care services and their mission is thoroughly enhanced through collaboration with our tertiary care facility.

The availability of health care services in outlying areas provides essential primary and acute care services. Carle, as a regional tertiary care partner assists in providing the next tier of specialty services when needed. The collaboration between the two levels of care

¹ In November of 2006, Frances Nelson Health Center opened its new doors to the community in a new 14,000-square-foot facility featuring 17 exam rooms to accommodate an estimated 6,500 additional patient visits during its first two years of operation. The Hospital purchased the building and upgraded it at a cost of about \$1.1 million. The Hospital rented the building to Frances Nelson Health Center for \$1 per year for the first three years and pays a large portion of its facility operating expenses on an ongoing basis.

facilitates the expeditious, cost effective and respectful movement of patients between the local and tertiary care facilities according to pre-determined care protocols. This system supports, develops and enhances local health care services, while insuring the safety net of a partner tertiary care hospital.

This partnership involves not only the inpatient hospital services and specialty outpatient diagnostic and treatment facilities provided by the Hospital. Physician services are also essential. For example, Hoopston Regional Health Center is supported by visiting specialist physicians who visit on a regular basis to provide otherwise unavailable specialty care services. The ultimate goal that will be achieved by the integration is to create a coordinated health care system that finds the best way to meet community needs, especially when there is a need to manage complex medical conditions being treated by multiple health care providers. This transaction will further bolster the Hospital's ability to improve access to physician services at those outlying hospitals as well as to deliver specialty services that allow community members to stay in the area to receive a broad array of services to diagnose and treat complex illnesses and injuries.

The Hospital provides further safety net support for outlying rural community residents through telemedicine services for the delivery of clinical care.² Telemedicine is shown to be most beneficial for populations living in isolated communities and remote regions, such as the sparsely populated communities in the Hospital's outlying service area, and is currently being applied in virtually all medical domains. Specialists residing in more populated areas use telemedicine often and find it as a useful communication tool with the general practitioners who routinely provide care in more rural areas. The Hospital will be able to widen the access to specialist services as a result of this integration because more physician specialists will be employed directly by the Hospital, making their services available to a larger service area.

2. Impact on the Ability of Other Providers or Health Care Systems to Cross-Subsidize Safety Net Services.

The proposed transaction will not impair the ability of other safety net providers in the community to care for, nor place any barriers upon, area residents seeking health care services because of a lack of insurance, an inability to pay, special needs, ethnic or cultural characteristics, or geographic isolation. The proposed transaction will not adversely impact the ability of other hospital providers or community health providers to serve patients seeking safety net services.

Five hospitals provide health care services in Hospital Planning Area D-01, including the Hospital. Of these providers, the Hospital continues to be a community leader in providing both Medicaid and charity care services. The Hospital supports vulnerable populations by providing both inpatient and outpatient care to Medicaid patients and the uninsured. This commitment to provide safety net services will only be enhanced upon the integration of

² Telemedicine is a rapidly developing application of clinical medicine where medical information is transferred through modern technology (*i.e.* the Internet) for the purpose of consulting on or performing medical procedures or examinations on patients.

services provided by the Hospital and Carle Clinic Association by allowing a greater level of physician services to be provided.

Furthermore, this project will not impair the Frances Nelson Health Center's ability to care for patients. Upon approval of this application, the Hospital intends to continue supporting vital health care providers by continuing to support the local Federally Qualified Health Center to ensure that the health care needs of area residents are addressed at all points of entry into the community's health care system. In sum, the proposed transaction will actually help other providers because the Hospital is a key provider of safety net services to persons on Medicaid and charity care in central Illinois and will continue its commitment to the community well beyond this transaction.

3. No Discontinuation of Safety Net Services

No services or equipment will be reduced or eliminated as part of this transaction. Accordingly, other providers or health care systems will not be required to cross-subsidize safety net services because this transaction does not alter the amount or scope of services or equipment that is currently provided independently by both the Hospital and Carle Clinic Association.

Furthermore, the proposed transaction does not propose the discontinuation of any facility or category of service. As a result, an analysis regarding how reduced services will impact the community is not applicable.

Additional Safety Net Impact Statement Information

I. Charity Care Information

Charity Care		FY 07	FY 08	FY 09
Inpatient	# of patients	1,971	2,225	1,842
	Actual cost	\$4,834,624	\$5,946,848	\$4,931,157
Outpatient	# of patients	9,230	10,615	10,043
	Actual cost	\$2,039,822	\$2,712,484	\$2,869,650
Total	Actual Cost	\$6,874,446	\$8,659,332	\$7,800,807

2. Medicaid Information

Medicaid		FY 07	FY 08	FY 09
Inpatient	# of patients	2,292	2,432	2,818
	Actual cost	\$23,487,706	\$22,353,016	\$30,556,974
Outpatient	# of patients	17,360	18,643	20,304
	Actual cost	\$3,316,478	\$4,228,656	\$5,570,834
Total	Actual Cost	\$26,804,184	\$26,581,672	\$36,127,808

3. Additional Information Relevant to Safety Net Services

The following documents are included in this application because they are relevant to safety net services in the applicant's planning area.

Annual Community Benefit Report for 2008 (Attachment-77)

POLICY AND PROCEDURE

Revised: October 8th, 2009

CARLE FOUNDATION

SUBJECT: Community Care Discount Program

PURPOSE: To identify and assist those patients who are uninsured or underinsured and who are financially eligible to receive discounts for specified medical expenses through the Community Care Discount Program. The Carle Foundation will consider each patient's ability to contribute to the cost of his or her care and Carle Foundation's financial ability to provide discounts for the care received.

SCOPE: Medically necessary care rendered by an eligible Carle Foundation entity. Eligible entities are:

- Carle Foundation Hospital
- Carle Clinic Physician Group
- Carle Foundation Physician Services
- Carle Arrow Ambulance
- Champaign Surgicenter, LLC
- Carle HomeCare including Carle Hospice and Carle Home Infusion

STATEMENTS OF POLICY:

- A. Any patient or responsible party may apply for Community Care. Patients must reside in a primary or secondary service area or be referred to Carle from another hospital or provider. Primary and secondary service areas are listed on Attachment 1.
- B. Carle Foundation desires that all patients be aware of the Community Care program, that those eligible be identified as early in the care and billing process as possible, and that the process be as simple as possible for the patient while maintaining the financial controls and stewardship necessary to protect the organization. Consistent with these principles, the following items are required from applicants:
 1. Verification of income for the previous 12 months is required. Income eligibility will be based upon the most current Federal Poverty Guidelines.
 2. An application for government assistance must be completed if the patient appears to meet eligibility criteria. When appropriate,

Social Services will use a screening checklist to assist in determining if the patient would qualify for government assistance.

- a. Failure to complete the government program application process and/or failure to cooperate during the application process will result in an automatic denial for Community Care.
 - b. Patients who are determined to be homeless with no verifiable address, phone, or income can be exempted from the government program application requirement. However, if these homeless patients have inpatient services, a referral should be initiated to assist with the completion of the government program application process.
 - c. Patients who have a third party payment source that will reimburse more than the government program reimbursement will be exempted from the application requirement.
 - d. Patients who qualify for Public Aid without a spend down will be eligible for a 100% discount for those visits prior to the three month backdating that Public Aid allows. A copy of the Public Aid eligibility will be maintained as documentation of financial need, a community care application will not be required.
3. Liquid assets will be taken into consideration during the Community Care application process. Liquid assets exceeding \$2000 will be added to the applicant's income total for the past 12 months. IRAs, 401ks, and 403b retirement funds will not be considered as liquid assets. Distributions from these funds will be considered as income to the applicant for the income determination.
 4. If the applicant's income is equal to or less than 200% of the federal poverty level at the time of submission, the Community Care discount will be 100%, greater than 200% but less than or equal to 230% of the federal poverty level will receive a 75% discount, greater than 230% but less than or equal to 270% of the federal poverty level will receive a 50% discount, and greater than 270% but less than or equal to 300% of the federal poverty level will receive a 25% discount.

5. Patients that receive a determination under the Community Care Program may reapply in six months in the event there are substantial or unforeseen material changes in their financial situation. The Supervisor and Director of Patient Accounting will conduct the review jointly.
 6. Applicants may appeal Community Care discount determinations to the Director of the Patient Accounting Office or the Chief Financial Officer.
- B. The Community Care discount will apply to the patient balance of the account after all other payments from sources such as Medicare, Insurance Companies, or lawsuit settlement funds are received and posted. If the patient has been making personal payments the Community Care discount will be applied to the financial responsibility that was remaining three months prior to the date the application was signed.
 - C. Long-term patients that have been approved for the Community Care Discount Program must re-apply annually.
 - D. Patients that have been referred to a collection agency may request a Community Care Discount application if a judgment has not yet been obtained in court.
 - E. Carle will not:
 - Authorize body attachments
 - Assert liens against owner occupied homes or other personal property (which does not include the proceeds from any third party liability claim(s))
 - Institute "no more service" actions for financial reasons against patients eligible for Community Care discounts
 - F. Medical care that does not meet medical necessity guidelines as defined by The Carle Foundation is excluded from Community Care Program discounts. Services such as cosmetic surgeries, infertility services, dental services, experimental services, screenings and bariatric surgeries are not eligible for Community Care Program discounts. Non-emergent out-of-network care that would be paid by the patient's insurance company elsewhere will not be eligible for Community Care since the patient has the ability to have their health care needs met.
 - G. A minimum copay of \$10 will be collected from or billed to the patient for physician office visits. If a patient qualifies for less than a 100% discount and has a financial obligation remaining after the discount is applied of greater than \$10, this larger amount will be collected from or billed to the patient.

PROCEDURE:

A. Patients with financial concerns should be identified as soon as possible in the registration or treatment process.

1. A referral to Social Services or directly to a government program should be completed to obtain a determination of eligibility for Public Assistance. Patients who fail to cooperate with the government program during the application process will automatically be denied for Community Care.

- a. If the patient does not meet the eligibility criteria for a government program or if they have a spenddown, they may be eligible for a Community Care discount.
- b. The application for Community Care discounts will be available in registration areas, the Patient Accounting offices, SBU Business Offices, the Cashier areas, Social Services or on the Carle website (www.carle.org).
- c. The Community Care application should be completed and returned within 60 days of discharge or service whenever possible.
- d. If the Community Care application is not returned, a notification letter will be mailed to the patient/responsible party that indicates the billing will commence unless the application is received.

2. The completed application should include:

- a. Income and asset verification for the 12 months immediately prior to the date of the application and the most recent income tax return form, if applicable. This verification may consist of:
 1. Pay stubs or check with year-to-date totals or
 2. Letter from employer showing current salary and year to date income.
 3. Verification from Social Security of the monthly benefit amount or deposit slips showing the amount of the Social Security checks.
 4. Copies of bank statement to verify checking and savings account balances.

b. The patient or responsible party must provide verification of family size.

1. Family size will include only those dependents listed on tax returns or otherwise verified.

- B. A written determination will be sent to the applicant within 10 working days of receipt of the complete application. If the application is approved, the patient's account will be adjusted as soon as possible to reflect the discount.
- C. Patients that qualify for a partial discount of the balance will be required to pay the remaining balance due and will be allowed as any other private pay account to make reasonable payment plan arrangements.
- D. Individuals with income up to 400% of the Federal Poverty level will have their personal financial responsibility capped at 40% of their annual gross income.
- E. When the application has been processed and the determination is made, a record of each application will be maintained.
- F. When the Patient Accounting Department or any SBU receives an application for Community Care that indicates treatment at any eligible Carle Foundation facility, the application, verification and determination will be shared with all other eligible and involved Carle businesses.
- G. The application, verification of income and the Community Care records will be maintained by fiscal year.
- H. The Community Care applications should be approved by the Supervisor of Accounts Receivable and the SBU director or designee.
- I. The total of the Community Care Discount Program write-offs will be regularly reported to the Chief Financial Officer

Patricia Owens
Director - Patient Accounting

Date

ATTACHMENT 1

Counties in Primary Service Area:

Champaign
Dewitt
Douglas
Ford
Edgar
Iroquois
Livingston
McLean
Piatt

Counties in Secondary Service Area:

Benton, IN
Christian
Clark
Clay
Coles
Crawford
Cumberland
Effingham
Fayette
Fountain, IN
Grundy
Jasper
Kankakee
LaSalle
Lawrence
Logan
Macon
Montgomery
Montgomery, IN
Moultrie
Park, IN
Putnam, IN
Richland
Sangamon
Shelby
Tazewell
Vermilion
Vermillion, IN
Warren, IN
Will
Woodford

Annual Non Profit Hospital Community Benefits Plan Report

Hospital or Hospital System: CARLE FOUNDATION HOSPITAL

Mailing Address: 611 WEST PARK STREET, URBANA, IL 61801
(Street Address/P.O. Box) (City, State, Zip)

Physical Address (if different than mailing address):

(Street Address/P.O. Box) (City, State, Zip)

Reporting Period: 7 1 07 through 6 30 08 Taxpayer Number: 31-114538
Month Day Year Month Day Year

If filing a consolidated financial report for a health system, list below the Illinois hospitals included in the consolidated report.

Hospital Name	Address	FEIN #

1. **ATTACH Mission Statement: ATTACHMENT A**
The reporting entity must provide an organizational mission statement that identifies the hospital's commitment to serving the health care needs of the community and the date it was adopted.

2. **ATTACH Community Benefits Plan: ATTACHMENT B**
The reporting entity must provide it's most recent Community Benefits Plan and specify the date it was adopted. The plan should be an operational plan for serving health care needs of the community. The plan must:

1. Set out goals and objectives for providing community benefits including charity care and government-sponsored indigent health care.
2. Identify the populations and communities served by the hospital.
3. Disclose health care needs that were considered in developing the plan.

3. **REPORT Charity Care:**
Charity care is care for which the provider does not expect to receive payment from the patient or a third-party payer. Charity care does not include bad debt. In reporting charity care, the reporting entity must report the actual cost of services provided, based on the total cost to charge ratio derived from the hospital's Medicare cost report (CMS 2552-96 Worksheet C, Part 1, PPS Inpatient Ratios), not the charges for the services.

Charity Care: s. 8,659,332

ATTACH Charity Care Policy: Attachment C
Reporting entity must attach a copy of its current charity care policy and specify the date it was adopted.

4. **REPORT** Community Benefits actually provided other than charity care: ATTACHMENT D
 See instructions for completing Section 4 of the Annual Non Profit Hospital Community Benefits Plan Report.

Community Benefit Type

Language Assistant Services \$ _____
 Government Sponsored Indigent Health Care \$ _____
 Donations \$ _____
 Volunteer Services
 a) Employee Volunteer Services \$ _____
 b) Non-Employee Volunteer Services \$ _____
 c) Total (add lines a and b) \$ _____
 Education \$ _____
 Government-sponsored program services \$ _____
 Research \$ _____
 Subsidized health services \$ _____
 Bad debts \$ _____
 Other Community Benefits \$ _____

Attach a schedule for any additional community benefits not detailed above. ATTACHMENT B-1

5. **ATTACH** Audited Financial Statements for the reporting period. Attachment E

Under penalty of perjury, I the undersigned declare and certify that I have examined this Annual Non Profit Hospital Community Benefits Plan Report and the documents attached thereto. I further declare and certify that the Plan and the Annual Non Profit Hospital Community Benefits Plan Report and the documents attached thereto are true and complete.

JAMES L. LEONARD, M.D., President
 Name / Title (Please Print) OF THE CARLE FOUNDATION
 Signature [Handwritten Signature]

217-383-3020
 Phone: Area Code / Telephone No.
12/19/05
 Date

GRECIEN S. ROBBINS, Director Public
 Name of Person Completing Form
RELATIONS, CARLE Foundation Hospital
GRECIEN.S.ROBBINS@CARLE.COM
 Electronic / Internet Mail Address

217-383-3016
 Phone: Area Code / Telephone No.
217-383-3540
 FAX: Area Code / FAX No.

1) Mission Statement—Attachment A

Carle Foundation Hospital Mission Statement

Adopted by the Carle Foundation Hospital Board of Trustees
March 10, 2006

**We serve people through high quality care,
medical research, and education.**

Our mission statement, in the broadest sense, defines who we are, what we stand for, and the importance of our relationship with our patients, staff and community. As a locally-based private, not-for-profit organization, we take seriously our obligation to treat and provide high quality care to everyone, regardless of their ability to pay. However, this mission statement looks beyond medicine to include research and education, both of which have been highly valued by our organization over the years. In 2006, our Board of Trustees altered the mission statement to acknowledge that research and education spark the ideas that lead to new discoveries, which in turn enable us to deliver even better patient care and make a significant investment in the future of health care.

From this mission statement, our vision, and our greater strategic plan flows our Community Benefit Plan.

2) Community Benefit Plan—Attachment B

In recent years, and FY 08 is no exception, Carle Foundation Hospital administration has encouraged its leadership to be guided in their planning, including for community benefits, by these questions: *How will/does this affect health care in our community? Since those we treat are our neighbors, friends, and family members, is this consistent with what we expect for them?*

Besides emphasizing quality health care, our leadership is striving to assure that the medical needs of the people we serve are met—and met close to home. More than ever before, **access** to health care has become a predominant theme.

We believe that we exist to serve everyone and to provide everyone with the best care possible while being good stewards of our community's resources. In FY 08, we focused on the needs of low-income elderly, 65 and older, finding ways to help them to be healthier. Using funds set aside in FY 07, we created the Senior Impact Project which is central to this year's community benefit programming.

While community benefit has been tracked at least every other year since the early '90s, Carle Foundation Hospital has had a structured Community Health and Wellness program in place since 1997. That program and our Community Care Discount Program are at the core of our Community Benefit Plan.

In FY 08, Carle Foundation Hospital's community benefit contribution totaled \$61,826,062.

Since 2004, community benefit has been calculated by Carle Foundation Hospital using the CBISA (Community Benefit Inventory for Social Accountability) software and accompanying guidelines, established by the Catholic Health Association. This software and these guidelines have become the gold standard for tracking and reporting, especially with the national focus on tax exemption for not-for-profit hospitals.

Carle Foundation Hospital's Community Benefit Plan is comprised of **four components**:

1. The Carle Foundation Hospital Community Care Discount Program (charity care)
2. The Community Health and Wellness Program
3. Research and education initiatives
4. Emergency preparedness leadership

1. The Carle Community Care Discount Program (charity care)

As a tax-exempt organization, Carle Foundation Hospital provides care to patients regardless of their ability to pay for that care or source of payment. We also recognize that some patients need help to pay their hospital bills. As a locally-owned community hospital, we always provide the care first and then help with the financial challenges. Carle Foundation Hospital's **Community Care Discount Program (charity care)** provides discounts or free care to those who need it. The most current policy was revised June 10, 2008. (See Attachment C.) This program is continually evaluated and expanded as needed to meet the needs of our community. Evaluation involves input from administrative leaders, billing office staff, local consumer advocacy groups and patients.

Goal 1: Regularly review and continually improve practices relating to the hospital's charity care program—Carle Foundation Hospital Community Care Discount Program.

Outcomes:

Review status

Representatives from the Hospital's administration, Patient Accounting, Registration, Case Management and Public Relations departments meet monthly with the local Medical Debt Task Force of the Champaign County Health Care Consumers, which also includes representation from the Land of Lincoln Legal Assistance Foundation and Frances Nelson Health Center, to gain input, ideas and reactions to related services and situations.

Increased Charity Care

By focusing on determining the financial status of patients up-front, we have been able to pinpoint those needing financial assistance early in the process, minimizing bad debt and optimizing our ability to help them. A generous Community Care Discount Program has also resulted in our ability to reach more people. **In FY 08, charity care increased a remarkable 26%—from \$6,874,446 in FY 07 to \$8,659,332.** We fully believe that this increase is the cumulative benefit of our sustained commitment over the past 5 years to work with local organizations and to communicate the availability of the program through a wide variety of channels.

The number of people served continues to steadily increase to 5,033 in FY 08. That number was just more than 4,500 in FY 07; 4,000 in FY 06.

We also looked at the number of individuals covered by the program versus those who actually used services at the Hospital, comparing the 2008

applications to those on file in 2005. (These numbers do not include IDPA auto-qualify patients or homeless individuals.) **In 2008, we had 6,442 family members registered versus 2,596 in 2005.**

When people qualify for Community Care, we are essentially providing them and their family a one-year insurance policy that covers their healthcare needs for all services provided through Carle Foundation Hospital. **In FY 08, 1,409 people who were qualified for our Community Care Discount Program did not receive services from us, but had the peace of mind that comes with knowing they would not have to worry about a hospital bill if someone in their family needed hospitalization.**

Communicating Available Financial Assistance: Finding Ways to Make it Easier to Get Help

Carle Foundation Hospital has made a concerted, continuous effort to be sure that people have access to information that will help them with their hospital bills. These include:

- Billing envelopes that carry the message, *Need help with your hospital bill? Call 888-479-0008*, prominently on the outside of the envelope.
- Community Care application forms available at all registration points, as well as in the Hospital's main lobby. Continuation of regular newspaper ads in Champaign, Vermilion and Coles counties, as well as appropriate special event programs.
- A simplified application form.
- Information and application forms on our Web-site, with the information also translated into Spanish and Chinese.
- Working with Land of Lincoln Legal Assistance Foundation, a pre-qualifying system is in place so that all area Section 8 residents and homeless people are able to qualify without filling out an application.
- Extended evening hours in Patient Accounting so that the working uninsured or underinsured have easier and more worker-friendly access to for financial assistance.

2. The Community Health and Wellness Program

Based on a variety of community needs assessments, the Hospital's **Community Health and Wellness** program is organized into three categories:

1. Initiatives—programs that are Hospital-based and managed and branded with our name.
2. Grants and donations—financial support of community programs and events, primarily those that match our mission and meet identified needs in the community.
3. Partnerships—programs executed collaboratively or community-need solutions that are sought with input and leadership from multiple organizations.

Goal 2: Continue existing community health and wellness programs, designed to meet identified needs and to improve the health of the community primarily through education and prevention. Programs may be Hospital-based initiatives or accomplished in partnership with community organizations. Programs are evaluated annually for effectiveness in meeting needs and community acceptance in conjunction with the budget process.

Outcomes—Partnerships and Initiatives (not inclusive):

- **The Community Parish Nurse program**—trained 15 additional nurses this year, and all together the active 231 nurses logged 12,129 hours of volunteer services to their congregations. This program is the largest and most established in the nation, with 414 nurses trained from 214 congregations in 30 counties in three states.
- **Playing It Safe**—free family safety fair—co-sponsored with Champaign County SAFE KIDS®. It was planned for the 12th consecutive year, and, for the first year ever, was cancelled due to lightning and thunderstorms. It promised to be the best yet with participation from county-wide and local public safety agencies as well as other community organizations concerned with our children's safety. More than 50 interactive displays were planned. Typically more than 2,200 people of all ages attend.
- **Center for Rural Health and Farm Safety**—functioning with partners at the University of Illinois and area farm bureaus and extension services. Programs included five Progressive Agriculture Farm Safety Days which reached 1,012 children; 16 evening and weekend Agricultural Emergency Response Classes for EMTs and firefighters reaching 220 providers, 15 schools safety programs reaching 1,756 children and 195 teachers, 47 community CPR classes certifying 310 participants and 10 Farm Family Emergency Response programs with 96 participants; as well as health screenings specific to farmers—such as pulmonary and hearing screenings at the Farm Progress Show.

- **Poison prevention education**—We are a satellite education center for the Illinois Poison Center, serving school children, healthcare professionals, and consumers in our region. Last year in the Champaign and Urbana school districts, we reached 2,000 children. Besides reaching elementary schools, there has been a focus on Emergency Medical Services staff education.
- **Risk Watch**—a safety curriculum integrated into local schools, coordinated by a Carle Foundation Hospital staff member and involving representatives from area public safety agencies as instructors. In school year 2007-2008, the Risk Watch program reached thousands of students through presentations of 11 different safety subjects. Carle trends current safety topics, and adapts to the needs of the students through changes in the Risk Watch curriculum. For an example, an increase in dog bites was noted and animal safety officers were invited to present information to the children on how to avoid being harmed by dogs.
- **Interpersonal violence prevention**—community education with a focus on the reduction of domestic violence as well as training for Sexual Assault Nurse Examiners (SANE) and others who deal with rape and abuse victims. We currently have six SANE nurses on staff in our Emergency Department, treating and assisting 100-150 adult/adolescent and pediatric sexually assaulted patients annually.
- **Carle/Salvation Army Toy Drive**—For the 23rd year, Carle Foundation Hospital was one of the primary corporate sponsors of this annual holiday event. We share this sponsorship honor with Carle Clinic and WHMS/WDWS radio. Nearly 4,000 toys and \$800 were collected at Clinic drop off locations and through a one-day drive-through collection.
- **www.HelpSource.org**—Taking a leadership role in its development nearly 10 years ago, we have continued to support HelpSource.org and provide guidance to the maintenance and promotion of this on-line directory of human services in east central Illinois.

Outcomes—Donations and Grants (not inclusive):

Financial, in-kind and leadership support of health and human service organizations with similar/compatible missions. In total, 129 community organizations received financial support this year. Some of those are:

- United Way of Champaign County**
- Danville Area United Way
- United Way of Coles County
- American Red Cross
- Center for Women in Transition
- Coles County Council on Aging
- Cunningham Children's Home
- Catholic Charities
- Crisis Nursery
- Don Moyer Boys and Girls Club
- Developmental Services Center
- Danville Family YMCA
- Champaign County YMCA
- Mattoon Area Family YMCA
- Big Brothers Big Sisters of Champaign County
- Eastern Illinois Food Bank
- American Cancer Society
- American Heart Association
- American Diabetes Association
- Arthritis Foundation
- MDA
- PACE

**Carle Foundation Hospital annually matches our employees' contribution to United Way and this year our contribution exceeded 100%. This year, that donation amounted to \$65,520 and was *once again* designated for Frances Nelson Health Center.

Goal 3: Maintain support of current programs and find new ways to improve access to healthcare and to reach out to the underserved, uninsured and underinsured populations.

Outcomes—Programs:

Senior Impact Project

With money set aside in FY 07, we proceeded to determine how we could make an impact on the health and well-being of the low-income, 65 and older population. Based on a needs assessment, the following six areas of impact were targeted and benefited:

1. *Transportation*

Many seniors, especially those with low incomes, struggle with traveling to and from medical appointments, shopping trips, social gatherings, community events and more. Being unable to drive or

not having access to a vehicle is not only frustrating, but it can also affect your health. With limited transportation, seniors often put off medical appointments, screenings or miss out on getting refills for vital prescription medications. With money from Carle's Senior Impact Project, two local organizations specializing in transportation for seniors are now able to offer expanded and improved services for low-income seniors.

2. *Isolation and Health Education*

For many people over the age of 65, isolation is a serious problem. Isolation can occur for a variety of reasons, whether it is the loss of a spouse, the lack of nearby family members or a scarcity of community social events. Apart from the psychological impact of loneliness, which can lead to depression, lack of contact with others can also impact seniors' overall health. Carle's Senior Impact Project is increasing funding for community facilities where seniors come together. These facilities help to battle isolation, while at the same time offer educational programs where seniors may learn more about a range of health issues.

3. *Medication Management*

Keeping tabs on medications can be difficult, especially when there is a possibility of dangerous interactions between them. Prescription medications can be purchased at a variety of locations, which can lead to serious problems if the pharmacists at each of the locations are not aware of your complete prescription history. With a two-year demonstration project grant to the East Central Illinois Area Agency on Aging from Carle's Senior Impact Project, a local case management organization is able to send staff to visit patients and catalog their full inventory of medications. This list is then sent to a pharmacist who reviews it for possible drug interactions. If one is found, the pharmacist contacts the physician who can make the proper adjustments.

4. *Workforce Development*

As the population ages, there will be a steady increase in the demand for health workers, especially those working with older patients. Through a partnership with Parkland College, Carle's Senior Impact Project has created scholarships to provide healthcare workers with the opportunity to become educated in caring for seniors, ideally providing more trained people to help seniors who wish to stay in their own homes. In addition to funding CNA training, this money will also go towards educational programming on geriatrics for non-physician healthcare providers, students and community members with an interest in caring for family elders.

5. *Communication*

Although health resources are widely available online, low-income seniors are perhaps the least likely population to have access to them. Carle's Senior Impact Project is helping to educate those seniors by devoting funds to assist in the distribution of *Healthwise for Life*, an informative, self-care book aimed specifically at older adults. In its pages, readers can find a wealth of reliable information—presented with reader-friendly language and visuals—on topics ranging from symptom identification, diets, wellness and emergency care. For seniors that have internet access, the Senior Impact Project has enhanced Carle's funding of www.HelpSource.org, an online resource for information pertaining to human services within east central Illinois.

6. *Dental Care*

A number of communities around the country have attempted to tackle the growing problem of inadequate dental care for seniors. The Champaign-Urbana United Way has agreed to address the issue in our community. With money from the Senior Impact Project, they will embark on a two-stage process: first identifying how the community can meet this need and then bringing together the appropriate people to set up systems to address those needs.

Access Improved Through Collaboration, Carle Initiatives

Multiple community organizations continue to advocate for the need for access to dental and healthcare services for people of all ages, keeping the awareness at a high level. Carle Foundation Hospital continues to respond to this need, as already pointed out in the Senior Impact Project allocation.

- ***\$14,000 SmileHealthy (formerly Central Illinois Dental Education and Services) donation***

SmileHealthy provides dental care to over 1,000 children from low-income families each year at county grade schools as well as at the Rantoul Head Start Dental Clinic serving enrolled children and their families and income eligible county children.

SmileHealthy also provides education programs and dental supplies to over 3,000 each year in settings from classrooms to health fairs. This donation helped to purchase supplies and pay a part-time provider.

- **Frances Nelson Health Center**

Frances Nelson Health Center is a Federally Qualified Health Center that provides primary care clinic services on a sliding fee scale to the underserved and underinsured.

- In 2005, in concert with a community effort, Carle Foundation Hospital purchased a former furniture store in Champaign and renovated it for \$1.2 million.

Carle is now renting the facility back to Frances Nelson for \$1 a year for the first three years. This year's value to the Center is \$72,359 in lease payments.

- The Hospital is also paying their utilities, which totaled \$53,872.

- **Coles County Community Health Clinic**

We continued to provide leadership to the establishment of a Federally Qualified Health Center to serve the indigent, uninsured and underinsured in Coles County in conjunction with other community partners. A Carle representative continues to serve as the Board president of the Coles Community Health Program, created to support the Center through fund-raising.

Officials estimated that more than 17 percent of the Coles County population is without health care: about 9,300 people use public aid, while more than 7,100 workers have no health insurance. Officials hope to have the clinic up and running in less than two years.

- **Champaign County Christian Health Center**

Founded in 2003, this free clinic provides care, screenings, health education—and to those who want it, spiritual support—to the uninsured and indigent in our community

Since 2004, Carle Foundation Hospital has donated \$40,700 in cash to the Champaign County Christian Health Center. During this time, we donated thousands of dollars in medications, as well.

- In FY 08, we donated \$20,000 in cash and made a further commitment to providing an additional \$10,000 of in-kind supplies and equipment.

- **Carle Mobile Clinic's involvement in Wellness on Wheels (WOW)**

This program provided screenings for STDs and HIV, as well as other health conditions, to community locations in partnership with Champaign-Urbana Public Health District, from August 2007 through December 2007, the Carle Mobile Clinic rotated weekly between Catholic Worker House, Restoration Urban Ministries (transitional living program for families), Skelton Place (mixed-income Housing Unit), and Washington Square (Housing Unit).

- Staff on WOW saw a total of 66 clients: 19 were female (29%) and 47 male (71%). Clients reported their race/ethnicity as 19 White (29%), 47 Black (71%), 0 Native American, 0 Asian American/Pacific Islander, 0 Hispanic.

- **Miscellaneous**

- Community Prenatal Care—funding of this program provided low-cost, high-quality prenatal care and birthing in partnership with Planned Parenthood of East Central Illinois and United Way. Planned Parenthood dropped this service; having put an interim service in place in cooperation with Carle Clinic Association, Carle Foundation Hospital is currently looking at ways to restore this service in our community.
- Free Breastfeeding Clinic—24-hour service open to the community.
- Discounted prenatal and family education programs, open to the community.
- Telemedicine initiatives, providing greater access for rural residents. The Hospital has been offering telemedicine services since 1994, and is now connected to 20 hospitals and clinics.

Goal 4: Maintain low and negative margin programs within the hospital, initiated to improve the health of the community.

Outcomes—Programs:

- Neonatal Intensive Care Unit
- Mills Breast Cancer Institute
- Carle Foundation Hospital's Low Vision Center
- ECHO (Expanding Children's Hearing Opportunities)
- Carle Auditory Oral School (formerly St. Joseph Institute for the Deaf)

- Palliative Medicine
- Pulmonary Rehabilitation

Several programs listed under Miscellaneous under Goal 3 also operate at a loss.

3. Research and Education Initiatives

Carle Foundation Hospital is actively involved in **research and education** initiatives. The overall purpose of the research program is helping to discover new diagnostic and treatment technologies and methods that will improve the delivery and/or quality of healthcare. The research program is done in conjunction with area physicians and scientists, the University of Illinois, and entrepreneurial companies. Carle Foundation Hospital's efforts in research and education have steadily grown in recent years, with strategic emphasis now placed on translational research with the University of Illinois.

Besides patient and community education, significant resources are expended on the education and training of medical students, physician residents, nurses, allied health professionals and the general health care workforce.

Goal 5: Shape our vision and expand our involvement in translational research, exploring additional ways to collaborate with the University of Illinois and entrepreneurial high-tech businesses.

Outcomes

- Emphasis has been on creating the infrastructure for a robust translational research program.
- As of June 2008, there were 113 active research projects affiliated with Carle Foundation Hospital, with another 17 pending. Topics of investigation vary widely.
 - We are now working with Carle Clinic physicians and University of Illinois scientists on projects related to breast cancer, aging, cardiology, gastroenterology, imaging, genomic research and more.
- Carle Foundation Hospital received Institutional Review Board (IRB) approval in June 2008 to build its own tissue repository. Prior to that approval, staff researched the best and most effective way to create this resource. A tissue repository is a collection of human biological specimens, or tissue, that have been obtained with consent as part of usual care and serve as valuable resources for future medical research. The specimens are stored securely and adhere to strict rules that protect the

privacy of the donors and ensure the appropriateness of the research for which it will be used.

Goal 6: Contribute toward health care workforce development.

Outcomes—Hospital-based programs and community partnerships

- Carle Scholars at Parkland College—includes scholarships and staffing support for nurse education and nursing student recruitment.
- Support of nursing scholarship program at Lake Land College.
- Support of the University of Illinois College of Medicine at Urbana-Champaign, with monies earmarked for the MD/PhD program.
- Graduate Medical Education programs:
 - Maintaining a geriatric fellowship as well as three medical residency programs, and serving as a clinical site for a fourth.
- Continuing Medical Education programs for regional providers who are not members of the Carle Foundation Hospital medical staff, including Carle Foundation Day.

4. Emergency Preparedness

Emergency Preparedness continued to be a strategic objective of Carle Foundation Hospital and our initiatives in this area include disaster training for our facility and our community, leadership in planning community-wide responses to various disaster scenarios, and state-level leadership for our 21-county region.

Goal 7: Continue to prepare our hospital and those in our 21-county POD region to be ready to respond to any natural disaster or act of terrorism.

Outcomes

Management of government grants totaling approximately \$810,000. We were able to enhance an already robust preparedness program within our region, including these additions:

- Added a second care, or surge, facility for use in the event of a large disaster.
- Purchased medical supplies, medical equipment, hospital bed mattresses and personal grooming kits for patients.
- Increased the ventilator supply to care for critically ill or injured patients.

- Purchased an on-line disaster education program for Hospital employees to better prepare them to care for patients during a disaster.
- Purchased 800 MHz radios to increase the interoperability communications capabilities with other local emergency providers.
- Purchased additional personal protective equipment to allow staff to care for victims inflicted by a hazardous materials incident or an infectious disease.

Populations and communities served

Carle Foundation Hospital serves Champaign-Urbana and rural communities reaching residents in 38 counties in east central Illinois and western Indiana. The programs within our community benefit plan are directed generally to all of the residents in our communities, with certain programs directed at specific populations and with a focus on residents of Champaign County. Targeted populations include the uninsured and underinsured, and children at risk—from conception through childhood.

Carle Foundation Hospital serves as the region's only Level I Trauma Center and maintains a 25-bed, Level III Neonatal Intensive Care Unit. As the area's Co-Perinatal Center, our service area extends all the way south down the eastern side of the state.

Dates adopted/approved

This Community Benefit Plan is driven by a 5-year strategic plan adopted in 2007.

Strategic initiatives of the Community Benefit Plan included in the 2007 5-Year Strategic Plan are as follows:

- Care for uninsured, underinsured and indigent; partner with community resources to provide access to inpatient and outpatient services. Charity Care goal in 2008 was to meet or exceed 3% of gross revenue.
- Partner with the University of Illinois in research, education and program offerings.
- Further develop Emergency Preparedness plan to meet Carle Foundation Hospital affiliates' and community needs.

The Community Health and Wellness program, emergency preparedness efforts, and research initiatives are reviewed and confirmed through the

annual budgeting process. *The Board of Trustees approved the FY 08 budget on June 8, 2007.*

The current Community Care Discount Program (Charity Care) was adopted October 14, 2005. The Finance Committee of The Board of Trustees reviews charity care numbers monthly, and the full Board receives a report at least semi-annually.

The Community Benefit Report, which details our efforts and discloses our community benefit dollars and allocation, is also presented to the Board annually.

Health care needs addressed

Use existing data, informal discussions, and community needs assessments to determine if existing programs are on track: what needs to be added, deleted or enhanced; and where our focus needs to be placed.

Data was drawn from these sources and used to affirm and re-shape our plan, as needed:

- Community Needs Assessment, published in 2004 as a community effort coordinated by the Champaign County Regional Planning Commission. This continues to be the primary guiding resource for the United Way.
- United Way Summer Summit, a full-day planning session to assess current need and to set priorities.
- Current and future workforce shortage statistics
- Homeland Security initiatives
- Input from CU Public Health and human service agencies (on-going)
- A Senior Needs Assessment Focus Group, commissioned by Carle Foundation Hospital.
- Oral Health in Champaign-Urbana, IL, a review prepared by the Champaign-Urbana Public Health District.
- A study by the Health Care Advisory Board requested by Carle Foundation Hospital to look at ways in which other communities were tackling the problem of providing dental services to older seniors.

POLICY AND PROCEDURE

Revised: June 10th, 2008

CARLE FOUNDATION

SUBJECT: Community Care

PURPOSE: To identify and assist those patients who are financially eligible to receive discounts for medical expenses through the Community Care Discount Program.

STATEMENTS OF POLICY:

- A. Any patient and/or guardian may apply for Community Care regardless of citizenship or residency status.
1. Verification of income for the previous 12 months is required. Income eligibility will be based upon the most current Federal Poverty Guidelines.
 2. An application for assistance must be completed through the Department of Public Aid if the patient appears to meet IDPA eligibility criteria. When appropriate, Social Services will use a screening checklist called IDPA Eligibility/Community Care Determination to assist in determining if the patient would qualify for IDPA assistance.
 - a. Failure to complete the Public Aid application process and/or failure to cooperate with Accordis during the Public Aid application process will result in an automatic denial for Community Care.
 - b. Patients who are determined to be homeless with no verifiable address, phone, or income can be exempted from the Public Aid application requirement. However, if these homeless patients have inpatient services, a referral to Accordis should be initiated to complete the Public Aid application process.
 - c. Patients who have a third party payment source that will reimburse more than the Public Aid reimbursement will be exempted from the Public Aid application requirement.
 - d. Patients who qualify for Public Aid without a spend down will be eligible for a 100% discount for those visits prior to the three month backdating that Public Aid allows. A copy

of the Public Aid eligibility will be maintained as documentation of financial need, a community care application will not be required.

3. Liquid assets will be taken into consideration during the Community Care application process. Liquid assets exceeding \$2000 will be added to the applicant's income total for the past 12 months. IRAs, 401ks, and 403b retirement funds will not be considered as liquid assets. Distributions from these funds will be considered as income to the applicant for the income determination.
 4. If the applicant's income is equal to or less than 200% of the federal poverty level at the time of submission, the Community Care discount will be 100%, greater than 200% but less than or equal to 230% of the federal poverty level will receive a 75% discount, greater than 230% but less than or equal to 270% of the federal poverty level will receive a 50% discount, and greater than 270% but less than or equal to 300% of the federal poverty level will receive a 25% discount.
 5. Patients that receive a determination under the Community Care Program may reapply in six months in the event there are substantial and/or unforeseen material changes in their financial situation. The Manager and Director will conduct the review jointly.
 6. Applicants may appeal Community Care discount determinations to the Director of the Patient Accounting Office or the Chief Financial Officer.
- B. The Community Care discount will apply to the patient balance of the account after all other payments, such as Medicare, Insurance Company, or lawsuit settlement funds are received and posted. If the patient has been making personal payments the Community Care discount will be applied to their financial responsibility that was remaining three months prior to the date the application was signed.
- C. Long-term patients that have been approved for uncompensated care must re-apply annually for the Community Care Discount Program.
- D. Patients that have been referred to a collection agency may request a Community Care Discount application if a judgment has not been obtained yet in court
- E. Cosmetic Surgeries, Infertility Services, Dental services, experimental services, screenings and bariatric surgeries that do not meet medical necessity guidelines are excluded from Community Care. Non-emergent out-of-network care that would be paid by the patient's insurance company

elsewhere will not be eligible for community care since the patient has the ability to have their health care needs met.

PROCEDURE:

A. Patients with financial concerns should be identified as soon as possible in the registration or treatment process.

1. A referral to Social Services or directly to Public Aid should be completed to obtain a determination of eligibility for Public Assistance. Patients who fail to cooperate with Public Aid and/or Accordis during the Public Aid application process will automatically be denied for Community Care.

- a. If the patient does not meet the eligibility criteria for Public Aid or if they have a spenddown, they may be eligible for a Community Care discount.**
- b. The application for Community Care Discounts will be available in registration areas, the Hospital Patient Accounting office, SBU Business Offices, the Hospital Cashiers, Social Services or the Carle website.**
- c. The Community Care application should be completed and returned within 60 days of discharge or service.**
- d. If the Community Care application is not returned a notification letter will be mailed to the patient/guarantor that indicates the billing will commence unless we receive the application.**

2. The completed application should include:

- a. Income and asset verification for the 12 months immediately prior to the date of the application and the most recent income tax return form, if applicable. This verification may consist of:**
 - 1. Pay stubs or check with year-to-date totals or**
 - 2. Letter from employer showing current salary and year to date income.**
 - 3. Verification from Social Security of the monthly benefit amount or deposit slips showing the amount of the Social Security checks.**
 - 4. Copies of bank statement to verify checking and savings account balances.**

b. Patient must provide verification of family size.

1. Family size will include only those dependents listed on tax returns.

B. A written determination will be sent to the applicant within 10 working days of receipt of the complete application.

1. If the application is approved, the patient's account should be adjusted as soon as possible to reflect the discount.

C. Patients that qualify for a partial discount of the balance will be required to pay the remaining balance due and will be treated as any other private pay account.

D. Individuals with income up to 400% of the Federal Poverty level will have their personal financial responsibility capped at 40% of their annual gross income.

E. When the application has been processed and the determination is made, each application should be logged and a record should be completed.

F. When HPA or any SBU receives an application for Community Care that indicates treatment at another Carle Foundation facility that participates in the Community Care program; the application, verification and determination will be shared with all other involved businesses. Carle Hospital, Carle Hospice, Carle Home Infusion, Arrow Ambulance, Carle Homecare, Carle Medical Supply, Carle Surgicenter, and Carle Foundation Physician Services participate in the Community Care program.

1. The application, verification of income and the Community Care records will be maintained by fiscal year.

G. The Community Care applications should be approved by the Manager of Accounts Receivable, the SBU director or designee, and the total of the write-offs will be reported to the V.P. of Finance.

Pat Owens

6-10-08

Patricia Owens

Date

Director - Patient Accounting

Attachment - 77

**Carle Foundation Hospital
Attachment D**

4) REPORT Community Benefits actually provided other than charity care:
See instructions for completing Section 4 of the Annual Non Profit Hospital Community
Benefits Plan Report.

Community Benefit Type

Language Assistant Services.....	\$133,361
Government Sponsored Indigent Health Care.....	\$34,203,246
Donations.....	\$2,207,370
Volunteer Services	
a) Employee Volunteer Services.....	\$ 21,094
b) Non-Employee Volunteer Services.....	\$530,030
c) Total (add lines a and b).....	\$551,124
Education.....	\$ 3,886,202
Government-sponsored program services.....	0
Research.....	\$2,544,618
Subsidized health services.....	\$4,494,831
Bad debts.....	\$4,578,036
Other community benefits.....	\$567,942

See attached Schedule 4-1

**Carle Foundation Hospital
Community Benefit Report FY 08**

**Attachment D-1
Introduction to Schedule 4-1**

Carle Foundation Hospital uses the Community Benefit Inventory for Social Accountability (CBISA) software and guidelines for determining inclusions. Originally created collaboratively by the Catholic Hospital Association of the United States of America and VHA Inc. to track their mission activities, these standardized reporting categories, definitions, and guidelines are now universally accepted in the not-for-profit hospital arena.

Additional community benefits reported are in CBISA categories F and G. Category F documents Community Building Activities and Category G includes Community Benefit Operations.

Attachment D-1
 Schedule 4-1
 Carle Foundation Hospital
 Selected Categories - Detail
 For period from 7/1/2007 through 6/30/2008

<u>Category</u>	<u>Benefit</u>
Community Building Activities (F)	
Physical Improvements/Housing (F1)	
Affordable Housing	36,536
City Tree Pruning	3,000
Engineering Work on City Walkways/Streets	31,071
Neighborhood Landscaping/Yardwork	37,104
Neighborhood Lighting	36,858
Neighborhood Snow Removal	7,000
Transitional House	14,398
*** Physical Improvements/Housing	165,967
Community Support (F3)	
Business/Education Partnerships	4,500
Disaster Readiness	470
*** Community Support	4,970
Environmental Improvements (F4)	
Waste Reduction Efforts	159,640
*** Environmental Improvements	159,640
Coalition Building (F6)	
HelpSource	121
Neighborhood Meetings	81
Representation on Community Coalitions	5,329
YMCA Partnership	1,706
*** Coalition Building	7,237
Community Health Improvement Advocacy (F7)	
Advocacy for Access to Healthcare	6,755
Champaign County Healthcare Consumers	3,765
*** Community Health Improvement Advocacy	10,520
Workforce Development (F8)	
Adult Immunizations	

			50,394
	Community Workforce Building		95,483
	Health Career Programs		889
	*** Workforce Development		146,766
	**** Community Building Activities		485,100
	Dedicated Staff (G1)		
	Dedicated Staff		52,200
	*** Dedicated Staff		52,200
	Community Health Needs Assessment		4,386
	*** Community Needs/Health Assets Assessment		4,386
	Other Resources (G3)		
	Costs Associated with the Development of a CB Plan		11,617
	Salvation Army Toy Drive		4,639
	*** Other Resources		16,256
	**** Community Benefit Operations		72,842
	Number of Activities	24	
	Grand Total		567,942