HC HOLY CROSS HEALTH

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October 16, 2015

Mr. Ben Steffen
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Dear Mr. Steffen:

As you know, Holy Cross Health has been serving Montgomery County and the surrounding region for over 50 years. In keeping with the legacy of the Sisters of the Holy Cross, it is our mission to provide safe, accessible, high quality and comprehensive care for all residents of the area. It was with this vision that Holy Cross came before the Commission in 2008 with a proposal to build the first new hospital in Montgomery County in 35 years, Holy Cross Germantown Hospital.

The need for a hospital in the upcounty region was evident then and is clear now, a year after its opening. The upcounty is growing and aging faster than any other portion of Montgomery County. Since it's opening in October 2014, Holy Cross Germantown Hospital has had an average ED census of over 50 patients and that number continues to grow. The size and age distribution of our patients means that significant numbers of them already walk in with symptoms that are either rule out MI or, in fact, acute STEMI. We believe it is essential that we respond to this need with the most effective treatment options, which is often percutaneous coronary interventional pPCI. Beyond the walk-in patients, there is a clear need established by Montgomery County Fire & Rescue for these services.

We have built deep relationships with Montgomery County Fire and Rescue Services, and in submitting this application to you, we are answering their plea for a partner in cardiac care.

This application is only part of a coordinated series of steps Holy Cross Health has taken to improve health in the upcounty. Holy Cross has built a network of services to support the community, most recently including opening a Health Center in Germantown, providing primary care to adults and children who are either uninsured or underinsured. Additionally, we have expanded our primary care and specialty consult services in partnership with Asbury Methodist Village, with an outpatient center on their campus in Gaithersburg.

We will continue to look for ways to provide Montgomery County and the region with much needed acute and community based care. An integral part of this is the provision of emergent interventional cardiac services at Holy Cross Germantown Hospital. It is my pleasure to share with you Holy Cross Health's submission on behalf of Holy Cross Germantown Hospital for a Certificate of Conformance for Primary Percutaneous Coronary Intervention (pPCI).

Sincerely,

Kevin J. Sexton
President and CEO

MARYLAND
HEALTH CARE
COMMISSION

Application for Certificate of Conformance
Primary Percutaneous Coronary Intervention

NOTE: ALL PAGES OF A HOSPITAL'S APPLICATION SHOULD BE NUMBERED CONSECUTIVELY.

Information Regarding Application for a Certificate of Conformance to Provide Primary PCI Services

The following application form is to be used by hospitals without on-site cardiac surgical backup when applying for a **Certificate of Conformance to Perform Primary Percutaneous Coronary Interventions**. Specific provisions of COMAR 10.24.17 are shown in bold, and listed beneath each is the information that the Commission requires to evaluate each application.

The applicant shall cooperate with the Commission, Commission staff, or any authorized representative(s) in supplying additional information in the course of the application's review.

The form is intended to be completed using Microsoft Word. Applicants are expected to enter narrative text where appropriate, complete the provided tables and forms, and/or submit applicant-prepared documents. The applicant must file the following with the Maryland Health Care Commission by the date that corresponds with the letter of intent date specified in the schedule published by the Commission: an original application, including the applicant affidavit with ink signature and supporting documents; and six copies of the application, with the applicant affidavit and supporting documents. The applicant must also submit an electronic copy of its application materials. The filing should be directed to:

Eileen Fleck
Chief, Acute Care Policy and Planning
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

If you have any questions regarding the application form, please contact:

Eileen Fleck
Chief, Acute Care Policy and Planning
Maryland Health Care Commission
410-764-3287
eileen.fleck@maryland.gov

MARYLAND HEALTH CARE COMMISSION

____
MATTER/DOCKET NO.

____
DATE DOCKETED

Application for Certificate of Conformance to Perform Primary Percutaneous Coronary Intervention

Applicant Information

Applicant Holy Cross Germantown Hospital

Street Address 19801 Observation Drive

City Germantown County Montgomery State Maryland Zip Code 20876

Mailing Address (if different) n/a

City n/a County n/a State na/ Zip Code n/a

Medicare Provider Number(s) 210065 National Provider Identifier 1245655638

Primary Person to be contacted on matters involving this application:

Name Kristin H. Feliciano

Title Chief Strategy Officer

Address 1500 Forest Glen Road

City Silver Spring County Montgomery State Maryland Zip Code 20910

Telephone 301-754-7017 Facsimile 301-754-7012 E-mail Kristin.H.Feliciano@holycrosshealth.org

Additional or Alternate Person to be contacted on matters involving this application:

Name Sherri Thompson-Brusca

Title Director, Planning and Business Development

Address 1500 Forest Glen Road

City Silver Spring County Montgomery State Maryland Zip Code 20910

Telephone 301-754-7858 Facsimile 301-754-7705 E-mail Thomps@holycrosshealth.org

Review Criteria for a Certificate of Conformance (COMAR 10.24.17.06B)

(1) An applicant hospital shall demonstrate its compliance with the general standards in COMAR 10.24.10.04A.

Ql. Is the applicant a Medicare provider in good standing? Yes_**X**_ No __
If no, attach an explanation.

Q2. In the previous five years, has the applicant been sanctioned, barred, or otherwise excluded from participating in the Medicare program or been placed on a 23- or 90-day termination track? Yes __
No _**X**__
If yes, attach an explanation.

Q3. Is the applicant accredited by the Joint Commission? Yes_**X**_ No __
If no, attach an explanation.

The Joint Commission (TJC) conducted a 2-day site visit of Holy Cross Germantown Hospital (HCGH) on September 9 and 10, 2015. As a result of the accreditation activity conducted on the above date(s), minimal Requirements for Improvement were identified in TJC's Official Accreditation Report. The hospital submitted a correction plan of action on October 26, 2015 to TJC in response to its findings and expects to be notified before the end of 2015 that TJC has granted HCGH full certification from the State on behalf of CMS as of that date of notification or earlier.

Q4. In the previous three years, has the applicant had its accreditation denied, limited, suspended, withdrawn, or revoked by the Joint Commission or other accreditation organization, or had any other adverse action taken against it by an accreditation organization , including Provisional or Conditional Accreditation, Preliminary Denial of Accreditation, or Denial of Accreditation?
Yes___ No_**X**__

If yes, attach an explanation and provide copies of correspondence from the accreditation organization notifying the hospital of each change in its accreditation status and any relevant resulting correspondence.

Q5. In the previous five years, has the applicant been placed on Accreditation Watch by the Joint Commission?
Yes __ No_**X**__

If yes, attach an explanation and provide copies of correspondence from the accreditation organization notifying the hospital of each change in its accreditation status.

Q6. Please provide a copy of the written policy for the provision of information to the public concerning charges for its services. At a minimum this policy shall include:

(a) Maintenance of a representative list of services and charges that is readily available to the public in written form at the hospital and on the hospital's internet website.

(b) Procedures for promptly responding to individual requests for current charges for specific services/procedures; and

(c) Requirements for staff training to ensure that inquiries regarding charges for its services are appropriately handled.

*Please see Exhibit 1 for: a copy of the policy, **Billing and Collection of Patient Payment Obligations**. The section in the policy labeled, Information Regarding Charges addresses the above requirements. The Exhibit also includes an example of Holy Cross Germantown Hospital's representative list of common services and charges, is prominently displayed in all hospital registration and cashier's areas, the emergency center, and on Holy Cross Health's website at http://www.holycrosshealth.org/charge-estimates. This list is updated quarterly and based on the actual patient charges in the prior three months.*

Q7. Each hospital shall have a written policy for the provision of charity care for indigent patients to ensure access to services regardless of an individual's ability to pay. Please provide a copy of this policy and details regarding its posting in the hospital and notice to the public, including the methods used to insure that public notice will reach the relevant population.

*Please see Exhibit 1 for a copy of the policy, **Patient Financial Assistance***

Q8. A hospital with a level of charity care, defined as the percentage of total operating expenses that falls within the bottom quartile of all hospitals, as reported in the most recent Health Services Cost Review Commission Community Benefit Report, shall demonstrate that its level of charity care is appropriate to the needs of its service area population.

In the HSCRC's recently published Community Benefit Report (July 1, 2013 through June 30, 2014), the bottom quartile of all hospitals reporting charity care as a percentage of total operating expenses ranged from .3% to 2.1%. Holy Cross Germantown Hospital was not included in the report, since it did not open until October 1, 2014. The hospital's level of charity care for October 1, 2014 through June 30, 2015 was $2,108,744, which comprised 3.1 percent of its total operating expenses of $68,283,993 for that period.

Montgomery County, as a whole, is Maryland's most populous jurisdiction with more than one million residents. It is also one of the most affluent counties in the country with an average income of $94,965. In the Holy Cross Germantown Hospital service area the average household income is $121,787 (The Nielsen Company, 2013). The service area also has a high-rate of insured residents. According to the Community Need Index, developed by Dignity Health and Truven Health Analytics, 4.2% of the service area are uninsured compared to 7.24% statewide (Dignity Health, 2014). As a result, the service area for the hospital has a lower need for charity care for uninsured residents compared to other areas of Montgomery County and Maryland. Despite that fact, as our commitment to the underserved in the community Holy Cross Health opened its second Maternity Partnership clinic on the campus of Holy Cross Germantown Hospital in October 2014 and opened a primary care Health Center for adults and children in May 2015 in Germantown, Maryland.

Q9. A hospital with a measure value for a Quality Measure included in the most recent update of the Maryland Hospital Performance Evaluation Guide that falls within the bottom quartile of all hospitals' reported performance measured for that Quality Measure and also falls below a 90% level of compliance with the Quality Measure, shall document each action it has taken or is taking to improve performance for that Quality Measure.

Holy Cross Germantown Hospital is not yet included in the Maryland Hospital Performance Guide. Data collection for quality measures began with January 2015 discharges, the quarter

after initial certification and opening of the hospital on October 1, 2014. The guide's required quality measure data submissions have begun to MHCC and will begin to TJC next quarter. In order to provide quality care and maintain a high level of compliance, Holy Cross Germantown Hospital has established a concurrent review process that assesses compliance daily with critical quality measures. Our EMR has a Quality Measures component that helps the care team to identify appropriate patients and pertinent indicators. A Performance Improvement RN reviews each record, communicates potential needs to the physicians and nurses caring for the patient, and follows up to assure clear documentation.

(2) An applicant shall demonstrate that the proposed program is needed for its service area population through an analysis of current utilization patterns of the population for primary PCI services

Q10. Please provide information on the number of primary PCI cases for the population originating in your hospital's service area and the estimated travel time for this population to reach the nearest existing primary PCI provider. Please identify the sources and assumptions used to estimate case volume and travel time

Holy Cross Germantown Hospital (HCGH) is located in upper-Montgomery County, Maryland. The zip codes in its service area appear in Table 1, below:

Table 1. HCGH Service Area Zip Codes		
Service Area	Zip Code	City
HCGHPSA	20874	Germantown
HCGHPSA	20875	Germantown
HCGHPSA	20876	Germantown
HCGHPSA	20877	Gaithersburg
HCGHPSA	20878	Gaithersburg
HCGHPSA	20879	Gaithersburg
HCGHPSA	20882	Gaithersburg
HCGHPSA	20883	Gaithersburg
HCGHPSA	20884	Gaithersburg
HCGHPSA	20885	Gaithersburg
HCGHPSA	20886	Montgomery Village
HCGHPSA	20898	Gaithersburg
HCGHPSA	20899	Gaithersburg
HCGHSSA	20837	Poolesville
HCGHSSA	20838	Barnesville
HCGHSSA	20839	Beallsville
HCGHSSA	20841	Boyds
HCGHSSA	20842	Dickerson
HCGHSSA	20850	Rockville
HCGHSSA	20851	Rockville
HCGHSSA	20853	Rockville
HCGHSSA	20855	Derwood
HCGHSSA	20871	Clarksburg
HCGHSSA	20872	Damascus

The number of primary PCI cases originating in the HCGH service area is detailed in Table 2, below. The 2013 and 2104 primary PCI volumes were summarized from data provided by the Maryland Health Care Commission. Table 2 only includes cases with a zip code originating in the HCGH service area (as identified in Table 1).

Table 2. pPCI Volume in HCGH Zip Codes		
Zip Code	**2013 Volume**	**2014 Volume**
HCGH PSA		
20874	20	18
20876	8	5
20877	13	9
20878	14	16
20879	9	14
20882	2	7
20886	6	6
HCGH SSA		
20837	3	6
20841	1	4
20850	14	21
20851	3	2
20853	13	12
20855	6	6
20871	7	3
20872	3	7
TOTAL	**122**	**136**

Between 2013 and 2014, primary PCI volumes increased by over 11% in the Holy Cross Germantown Hospital service area. This growth is counter to the trend both in the US and in Maryland which both show declines in percutaneous coronary intervention.

The upper portion of Montgomery County is aging faster than the County or State as a whole. Data indicate that the number of residents over age 65 in the up-county area will double in just 12 years, while the rest of the county will double in 20 years. This growth will lead to an increase in the number of PCI cases in the future.

Estimated travel times to current MIEMMS designated interventional cardiac centers (CIC's) for the population in the Holy Cross Germantown Hospital service area are summarized in Table 3, below. The nearest existing primary PCI provider was identified using the shortest mileage route according to Google Maps. Travel times were also estimated using Google Maps. Travel times listed are for non-rush hour travel.

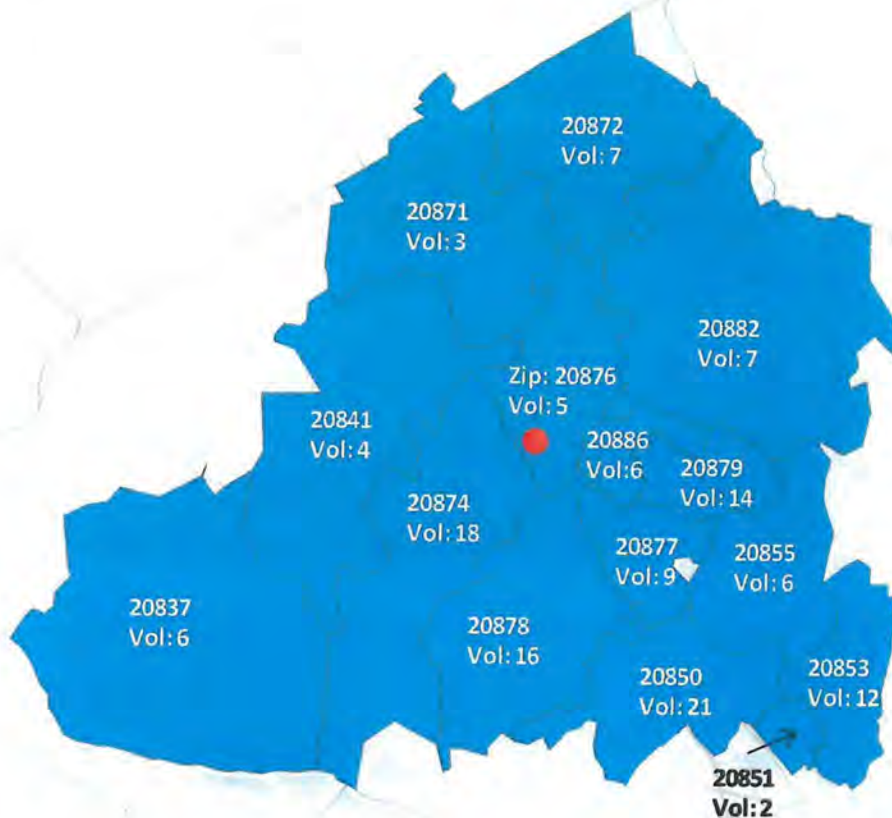
Table 3. Estimated Travel Times to current MIEMSS Designated CICs							
Service Area	Zip Code	City	Nearest Existing pPCI Provider	Mileage	Travel Time	Mileage to HCGH	Travel Time
HCGHPSA	20874	Germantown	Shady Grove Adventist Hospital	8.6	0:14	5.3	0:09
HCGHPSA	20875	Germantown	Shady Grove Adventist Hospital	8.9	0:14	2.8	0:07
HCGHPSA	20876	Germantown	Shady Grove Adventist Hospital	11.4	0:17	3.6	0:08
HCGHPSA	20877	Gaithersburg	Shady Grove Adventist Hospital	4.4	0:13	5.2	0:13
HCGHPSA	20878	Gaithersburg	Shady Grove Adventist Hospital	5.0	0:11	7.3	0:13
HCGHPSA	20879	Gaithersburg	Shady Grove Adventist Hospital	7.3	0:16	6.4	0:12
HCGHPSA	20882	Gaithersburg	Shady Grove Adventist Hospital	13.8	0:26	10.9	0:21
HCGHPSA	20883	Gaithersburg	Shady Grove Adventist Hospital	7.0	0:13	5.4	0:10
HCGHPSA	20884	Gaithersburg	Shady Grove Adventist Hospital	3.8	0:10	5.0	0:10
HCGHPSA	20885	Gaithersburg	Shady Grove Adventist Hospital	4.5	0:08	4.9	0:08
HCGHPSA	20886	Montgomery Village	Shady Grove Adventist Hospital	7.6	0:14	3.5	0:10
HCGHPSA	20898	Gaithersburg	Shady Grove Adventist Hospital	2.2	0:07	6.8	0:09
HCGHPSA	20899	Gaithersburg	Shady Grove Adventist Hospital	4.2	0:08	3.8	0:06
HCGHSSA	20837	Poolesville	Shady Grove Adventist Hospital	15.1	0:24	14.9	0:23
HCGHSSA	20838	Barnesville	Frederick Memorial Hospital	17.7	0:20	13.8	0:17
HCGHSSA	20839	Beallsville	Shady Grove Adventist Hospital	16.6	0:25	15.6	0:24
HCGHSSA	20841	Boyds	Shady Grove Adventist Hospital	11.0	0:19	6.5	0:13
HCGHSSA	20842	Dickerson	Shady Grove Adventist Hospital	16.4	0:26	12.0	0:19
HCGHSSA	20850	Rockville	Shady Grove Adventist Hospital	3.1	0:08	9.0	0:11
HCGHSSA	20851	Rockville	Shady Grove Adventist Hospital	5.1	0:15	11.7	0:16
HCGHSSA	20853	Rockville	Shady Grove Adventist Hospital	6.9	0:14	14.9	0:17
HCGHSSA	20855	Derwood	Shady Grove Adventist Hospital	6.3	0:15	11.1	0:16
HCGHSSA	20871	Clarksburg	Shady Grove Adventist Hospital	13.0	0:16	6.1	0:11
HCGHSSA	20872	Damascus	Shady Grove Adventist Hospital	17.0	0:23	8.5	0:16

Of the 24 zip codes in the Holy Cross Germantown Hospital service area, 15 (62.5%) have a shorter travel time to Holy Cross Germantown Hospital than the nearest existing primary PCI provider. On average, non-rush hour patient travel time in these 15 zip codes would be reduced by 4 minutes if these patients traveled to Holy Cross Germanton as compared to the nearest existing pPCI provider.

(3) An applicant shall document that its proposed primary PCI program will achieve a volume of at least 36 PCI cases by the end of the second year of providing primary PCI services if the hospital is located in a rural area or an annual volume of at least 49 cases if the hospital is located in a non-rural area.

Q11. Please provide information that supports your projection of primary PCI case volume at your hospital by the end of the second full year of operation as a provider of primary PCI.

The map below depicts the 2014 primary PCI volume for all zip codes in the Holy Cross Germantown Hospital service area. Please note: not all zip codes had patients who received primary PCI in 2014.



Using 2014 volumes combined with estimated travel times and geographic proximity yields a projected primary PCI case volume of 68 cases for Holy Cross Germantown Hospital. This model is based on allocating cases between HCGH and the nearest existing facility using the following methodology:

- *All zip codes that border only the HCGH zip code and have a faster drive time to HCGH, allocated 100% of cases to HCGH*
- *Zip codes that border both HCGH and SGAH or border neither hospital and are roughly equidistant, allocated 50% of cases to HCGH*
- *All zip codes that border only SGAH and have faster drive times to SGAH, allocated 0% of cases to HCGH*

The following table summarizes the volume of primary PCI cases in the Holy Cross Germantown Hospital service area, and projected baseline volumes for HCGH.

Table 4. pPCI Volume in HCGH Zip Codes				
Zip Code	2013 Volume	2014 Volume	% Allocated HCGH	HCGH Volume Baseline
HCGH PSA				
20874	20	18	100%	18
20876	8	5	100%	5
20877	13	9	0%	0
20878	14	16	50%	8
20879	9	14	50%	7
20882	2	7	100%	7
20886	6	6	100%	6
HCGH SSA				
20837	3	6	50%	3
20841	1	4	100%	4
20850	14	21	0%	0
20851	3	2	0%	0
20853	13	12	0%	0
20855	6	6	0%	0
20871	7	3	100%	3
20872	3	7	100%	7
TOTAL	**122**	**136**		**68**

Projected annual primary PCI cases for Holy Cross Germantown Hospital are summarized in Table 5.

Table 5. HCGH Projected pPCI Volumes based on 1.4% growth rate					
	CY2015	CY2016	CY2017	CY2018	CY2019
pPCI Volume	69	70	71	72	73

The volume projections are based on the Milliman average annual growth rate of 1.4% for Cardiac Services in the Montgomery County area for 2015 – 2019, as seen in Table 6, below.

Table 6. Milliman Average Annual Growth Rates for Cardiac Services		
Service Line	2015 - 2019 Growth Rate	Avg/Yr
Cardiac Medicine	1.9%	0.5%
Cardiac/Thoracic Surgery	7.9%	2.0%
Catheterization	6.9%	1.7%
Average	**5.6%**	**1.4%**

(4) An applicant shall present evidence, including emergency transport data and patient-level data that demonstrate that the proposed program's service area population has insufficient access to emergency PCI services and is receiving suboptimal therapy for STEMI.

Q12. Please provide information that demonstrates that the population to be served by the proposed program has insufficient access to primary PCI services and currently receives suboptimal therapy for STEMI.

Montgomery County Fire & Rescue provided data on all STEMI calls received in the Holy Cross Germantown Hospital primary service area for calendar years 2013 and 2014. In both 2013 and 2014, there were 70 calls to 911 where the chief complaint was "Chest Pain/Cardiac – STEMI." Analysis of this data shows that the average transport time, defined as the time between when the ambulance departed for and arrived at the hospital, was 14 minutes in 2013 and 13 minutes in 2013. Approximately 30% of transports in 2013 and 39% of transports in 2014 were during rush hour, defined as 6:00am – 9:30am and 3:30pm – 7pm, Monday – Friday. Of the 70 cases in both 2013 and 2014, 5 cases in 2014 (7%) and 3 cases in 2013 (4%) took longer than 30 minutes to transport to the nearest facility authorized to handle pPCI patients. Further analysis shows that average time from dispatch to arrival at the nearest hospital that performs pPCI was 32 minutes in 2013 and 31 minutes in 2014.

Holy Cross Germantown Hospital has not needed to nor administered tPA for any STEMI patients who needed to be transported to a certified interventional cardiac center.

An examination of diversion time at the two nearest cardiac interventional centers showed that Holy Cross Germantown Hospital had the lowest average hours/month for yellow diversion in the first 9 months of calendar year 2015 (25.14 vs 30.76 \ at Shady Grove Adventist). It also had significantly lower average hours/month for red diversion compared to Shady Grove Adventist Hospital during that same time period (18.94 vs 45.22) If EMS had been able to take STEMI patients to HCGH instead of SGAH, that would have translated into EMS being diverted approximately 18% less (yellow diversion) to 58% less (red diversion)

Table 7. Yellow and Red Diversion Hours, Jan. 1 – Sept. 30, 2015			
Yellow Diversion	**Total hours**	**Average Hours/Month**	**HCGH % variance from other Hospital**
Holy Cross Germantown Hospital	226.28	25.14	
Shady Grove Adventist Hospital	276.84	30.76	- 18%
Red Diversion	**Total hours**	**Average Hours/Month**	**HCGH % variance from other Hospital**
Holy Cross Germantown Hospital	170.50	18.94	
Shady Grove Adventist Hospital	406.97	45.22	- 58%

(5) The hospital shall demonstrate that primary PCI services will be available for all appropriate patients with acute myocardial infarction 24 hours per day, seven days per week.

Q13. Please provide information plans for handling downtime that may occur due to required equipment maintenance or unforeseen circumstances.

HCGH will follow similar protocols as HCH, which has been a port of the pPCI waiver program since its inception.

In the event that the CCL is unable to function due to equipment maintenance or other unforeseen circumstances, the hospital will coordinate transfer of STEMI patients to the nearest CIC (see attached transfer agreements). If it appears that the transfer time will be greater than 30 minutes, the ED physician will initiate the administration of tPA.

(6) The hospital shall commit to providing primary PCI services as soon as possible and not to exceed 90 minutes from patient arrival at the hospital, excluding transfer cases, for at least 75 percent of appropriate patients. The hospital shall also track the door-to-balloon times for transfer cases and evaluate areas for improvement.

Q14. Please provide a signed statement from the hospital's chief executive officer acknowledging agreement with the above statement.

Please see Exhibit 2 for a copy of the Letter of Commitment regarding establishment of a primary PCI program at Holy Cross Germantown Hospital

(8) The hospital shall have adequate physician, nursing, and technical staff to provide cardiac catheterization laboratory and coronary care unit services to patients with acute myocardial infarction 24 hours per day, seven days per week.

Q15. Please provide information on the proposed staffing pattern, including on-call coverage, and backup coverage that demonstrates the hospital will be able to meet the requirement that cardiac catheterization laboratory and coronary care unit services are available to patients with acute myocardial infarction 24 hours per day, seven days per week.

CCL Room	***Proposed Staffing Pattern Days and Hours of Operation***							
	Staffing	***Mon***	***Tue***	***Wed***	***Thu***	***Fri***	***Sat***	***Sun***
	Regular staffing: 2RNs and 2RTs , 1 MD	*7:00 am to 3:30 pm Except Holidays*	*7:00 am to 3:30 pm Except Holidays*	*7:00 am to 3:30 pm Except Holidays*	*7:00 am to 3:30 pm Except Holidays*	*7:00 am to 3:30 pm Except Holidays*		
	On-Call staffing: 1RN & 2 RTs or 2RNs & 1RT, 1 MD	*3:30 pm to 6:59 am. 24 hrs on holidays*	*3:30 pm to 6:59 am. 24 hrs on holidays*	*3:30 pm to 6:59 am. 24 hrs on holidays*	*3:30 pm to 6:59 am. 24 hrs on holidays*	*3:30 pm to 6:59 am. 24 hrs on holidays*	*7:00 am to 6:59 am. 24 hours*	*7:00 am to 6:59 am. 24 hours*

Proposed Call Rotation			
Type of Clinical Staff on Team	***Number of Staff***	***Call Rotation***	***Response Time***
MD	*4*	*Every 4 weeks*	*5 min to call in 30 minutes to arrive at the hospital*
*Fellow**	*0*		
Nurses	*3*	*Every 3 weeks*	*5 min to call in 30 minutes to arrive at the hospital*
Technicians			
RCIS	*0*		
RT	*4*	*Bi-weekly*	*5 min to call in 30 minutes to arrive at the hospital*
Other (specify)			
RN (PRN)	*3*	*As needed*	*5 min to call in 30 minutes to arrive at the hospital*
RCIS (PRN)	*0*		
RT (PRN)	*4*	*As needed*	*5 min to call in 30 minutes to arrive at the hospital*

Note: *The on-call team always consists of 1 MD, 1 RN, and 2 Technicians (the techs may be 2 RCIS or 2 RT or 1 of each depending on the skill mix required for the procedure or 2RNs and 1 Technician.*

HCGH will follow similar on-call coverage and backup coverage protocols as HCH, which has been a port of the pPCI waiver program since its inception.

On Call Processes

- ***The on-call staff member(s), prior to the beginning of the on-call shift, will:***
  - *Validate the proper working condition of paging equipment*
  - *Ensure their correct phone number(s) is/are posted in the department*

- ***The on-call Cardiac Catheterization Lab staff member, while on duty during their assigned shift, will:***
  - *Respond within 5 minutes of a page to the initiating department.*
  - *Report to the hospital within 30 minutes of being contacted.*
  - *May not be scheduled to work in another department within Holy Cross Hospital simultaneously.*

Backup Call Plan

The hospital's primary objective related to PCI call will be to ensure that coverage by a participating interventional cardiologist is always available to meet the needs of the patients. Interventional cardiologists will be assigned to the Cardiac Catheterization Lab on-call schedule through the Medical Staff Office. The on-call schedule will be issued every four months. If there are any scheduling conflicts, cardiologists must contact the Medical Staff Office and a revised schedule will be reissued. For those occurrences when the primary on-call interventional cardiologist may not be available, it will be the responsibility of the primary on-call interventional cardiologist to notify the Medical Staff Office with the name of the back-up interventional cardiologist. The on-call cardiologist must respond within 5 minutes of receiving a page and be available via pager or cell phone, when not at home, or at designated telephone number. The on-call interventional cardiologist also may not schedule themselves for pPCI call at another institution simultaneously.

The Director of Surgical Services/Cardiac Catheterization Lab/Interventional Radiology will assign nurses and technicians to the on-call schedule, which is issued monthly. Each member of the on-call team will be scheduled for one week.

Please see Exhibit 1 for a copy of the relevant policy that will be adapted and adopted for the HCGH pPCI program: On Call: Staff and Interventional Cardiologists in the Cardia Catheterization Laboratory

Q16. Complete the following table to show the number of physicians, nurses, and technicians who are able to provide cardiac catheterization services to acute myocardial infarction patients (as of one week before the due date of the application). Also indicate whether the nursing and technical staff are cross-trained to scrub (S), circulate (C), and monitor (M).

Total Number of CCL Physician, Nursing, and Technical Staff as of the due date of the application:

	Number/FTEs	*Cross-Training (S/C/M)*
Physician	*4*	
Nurse	*1.5(FTE)*	*S/C/M*
	1 PRN	*S/C/M*
Technician	*2(FTE)*	*S/M*
	0 PRN	*S/M*

Total Number of CCL Physician, Nursing, and Technical Staff to be in place if the primary PCI program application were to be approved:

		Number/FTEs	*Cross-Training (S/C/M)*
Physician		*4*	
Nurse	*(includes 1.5 new)*	*3(FTE)*	*S/C/M*
	(includes 2 new)	*3 PRN*	*S/C/M*
Technician	*(includes 2 new)*	*4(FTE)*	*S/M*
	(includes 4 new)	*4 PRN*	*S/M*

(9) The hospital president or Chief Executive Officer, as applicable, shall provide a written commitment stating the hospital administration will support the program.

Q17. Submit a letter of commitment, signed by the hospital chief executive officer acknowledging that the hospital will provide primary PCI services in accord with the requirements for primary PCI programs established by the Maryland Health Care Commission.

Please see Exhibit 2 for a copy of the Letter of Commitment regarding establishment of a primary PCI program at Holy Cross Germantown Hospital

(10) The hospital shall maintain the dedicated staff necessary for data collection, management, reporting, and coordination with institutional quality improvement efforts.

Q19. Please list each position responsible for these activities for primary PCI services and the number of staff FTEs dedicated to these activities.

A designated Cath Lab RN and Technician (up to 0.5 FTE, combined) will jointly collect and enter primary PCI services data into the CathPCI registry, the ICD registry, and the AMI Mission Lifeline registry; ensure data integrity; and, perform timely uploading of data for reporting.

Designated, NCDR experienced data abstractors within the Holy Cross Health Performance Improvement Department, in collaboration with the Emergency Department, Cardiac Catheterization Lab and Critical Care staff, will enter data into the NCDR ACTION Registry.

The Director of Surgical Services, Cath Lab, and Interventional Radiology, will be responsible for coordinating with and implementing institutional quality improvement efforts related to the pPCI program.

Data will be carefully collected from patient records and administrative data systems, systematically aggregated and analyzed on an on-going basis. Comparative and/or benchmark data used, where feasible, to establish internal goals and to determine if there is excessive variability or unacceptable levels of performance. Whenever undesirable patterns or trends are identified, or measured performance does not meet established goals, appropriate statistical tools are used to further refine and examine data.

Outcomes and action plans will be shared with organizational leaders, physicians, and staff through established Holy Cross Germantown Hospital quality structures. Examples include the Holy Cross Germantown Quality and Patient Safety Council and the CEO Review on Quality.

Holy Cross Health's Quality and Patient Safety Plan identifies five key systems to achieve ongoing improvement in performance:

- *Systems to support continuous process improvement*
- *Systems to enhance safety and limit risk to patients, staff and visitors*
- *Systems to ensure the competency of medical staff and hospital staff*
- *Systems for identifying and replicating "best practices"*
- *Systems to support compliance with accreditation/regulatory standards*

Existing hospital structures and processes which support compliance monitoring and enhance performance improvement activities include:

- *Performance Improvement staff with clinical, Six Sigma, and LEAN education and experience*
- *Concurrent and retrospective review of AMI care provided*
- *Daily performance feedback to nursing and medical staff*
- *Prompt referrals of system or process defects*
- *Established process for physician peer review, OPPE and FPPE*
- *Timely referrals for event reporting and peer review*
- *Aggregate data reviewed quarterly with hospital leadership*

The organization employs Six Sigma analytical methods and certified Performance Improvement Specialists to facilitate use of the DMAIC (Define-Measure-Analyze-Improve-Control) methodology for process improvement. Performance Improvement staff are responsible for concurrent and retrospective review which encompasses the evaluation of key elements of care and documentation. Feedback on individual performance is provided to physicians, nurses, and support staff on a daily basis. Aggregate data are reported monthly to department staff and progress towards the goals is posted.

(11) A hospital shall develop and complete a PCI development plan that includes an on-call coverage back-up plan for primary PCI cases, when an on-call interventionalist covers more than one hospital on a given shift, as well as when two simultaneous STEMI patients present at the hospital.

Q20. Please submit a copy of the applicable policies and procedures. If simultaneous on-call coverage is not permitted, please state this.

Holy Cross Germantown Hospital will replicate and adapt the pPCI program, policies and procedures at Holy Cross Hospital in Silver Spring, which has been a part of the pPCI waiver program since its inception. The program development and implementation plan is in Exhibit 3. The associated system policies and procedures can be found in Exhibit 1. These include a policy regarding simultaneous call, which is not permitted, and a policy for instances when two simultaneous STEMI patients may present at the hospital.

Please see Exhibit 1 for a copy of the following policies, protocols, and procedures:

1. ***STEMI Process Flow Chart***
2. ***Emergency Center Pathways Relevant to Acute Coronary Syndrome***
    a. *Emergency Center Cardiac Monitoring Policy*
    b. *STEMI in the Emergency Center*
    c. *ESI Patient Flow Plan*
    d. *Cardiac TPA administration*
3. ***Written Care Protocols for the Treatment of Acute Coronary Syndrome***
    a. *Myocardial Infarction (STEMI) Acute Care Admit*
    b. *Myocardial Infarction Fibrinolysis Pre Procedure*
    c. *Myocardial Infarction Thrombolysis*
4. ***Cardiac Cath Lab Protocols Relevant to ST-Elevation Myocardial Infarction***
    a. *Simultaneous STEMI Patients Arriving to the CCL*
    b. *Patients Requiring a Percutaneous Cardiac Interventional Procedure (PCI)/Angioplasty/Stent*
    c. *Cardiac Monitoring and Pulse Oximetry of OR and Endo/Minor Surgery Patients Receiving IV Moderate Sedation or Local*
    d. *Cardiac Cath Post PCI Procedure*
    e. *Cardiac Cath Post Diagnostic Procedure – Inpatient*
    f. *Intra-Aortic Balloon Pump Policy*
    g. *Guidelines for Monitoring Duties in the Cardiac Cath Lab*
    h. *Guidelines for Circulating Duties in the Cardiac Cath Lab*
    i. *Guidelines for Scrub Duties in the Cardiac Cath Lab*
    j. *Arterial Venous Sheath Removal* (both the current policy and the replacement policy in the review process are attached)
    k. *On Call: Staff and Interventional Cardiologists in the Cardiac Catheterization Laboratory* (both the current policy and the replacement policy in the approval process are attached)
5. ***Policy or Protocol for Inter-Hospital Transfers***
    a. *Holy Cross Health: EMTALA: Examination, Treatment, and Transfer of Patients with Potential Emergency Medical Conditions*
    b. *Admission, Transfer and Discharge Criteria*
6. ***Back-Up Plan for When the CCU is Full***
7. ***Cardiac Services Committee Charter***

(12)The hospital shall identify a physician director of interventional cardiology services responsible for defining and implementing credentialing criteria for the catheterization laboratory and for overall primary PCI program management, including responsibility for equipment, personnel, physician call schedules, quality and error management, review conferences, and termination of primary PCI privileges.

Q21. Please name the anticipated director of interventional cardiology services, or if unknown, please commit to providing this information to Commission staff 90 days prior to first use approval.

Per this standard, the hospital will provide the following information to the Commission staff 90 days prior to first use approval:

- *Name of the physician director*
- *Evidence of the physician having achieved an average annual case volume of 50 or more PCI cases over a two-year period (using Form C in the Certificate of Conformance application)*
- *Evidence of the physician having met the ACCF/AHA/SCAI 2013 Update of the Clinical Competence Statement on Coronary Artery Interventional Procedures:*
  - *board certification in interventional cardiology, unless that individual performed interventional procedures before 1998 or completed training before 1998 and did not seek board certification before 2003*
  - *completion of a minimum of 30 CME hours in the area of interventional cardiology during every two years of practice*
- *Copy of the physician's signed agreement to participate in an on-call schedule and not to participate in simultaneous call*

Please see Exhibit 2 for a copy of the Letter of Commitment regarding establishment of a primary PCI program at Holy Cross Germantown Hospital, which includes the above statement.

(13) The hospital shall design and implement a formal continuing medical education program for staff, particularly the cardiac catheterization laboratory and coronary care unit.

Q22. Please provide a list of continuing educational programs and activities in which staff in the CCL and the Coronary Care Unit will participate in the first year of operation of the PCI program.

Holy Cross Germantown Hospital is licensed for 15 ICU beds which also function as CCU beds. Therefore, the table below lists the ICU as one of the care areas instead of a CCU.

Care Area	Type/Topic of Activity	Date	Audience	CEU* Approved		Internal Program	External Program
				Y/N	# Credits	Y/N	Y/N
CCL ICU	Intra-aortic balloon pump	January 2016	RNs and RTs, ICU and CCL	TBD	TBD	Y	
CCL ICU ER	STEMI drills (from ED to the Cath Lab)	Quarterly as of February 2016	Interdisciplinary	No	0	Y	
CCL ICU ER	Mock Code Blue drills	Annual as of October 2014	Interdisciplinary	No	0	Y	
CCL ER	Pharmacological training, i.e., tPA administration and protocol	January 2016	RNs and RTs, ER and CCL	TBD	TBD	Y	
CCL	Thrombectomy catheter training	January 2016	RNs and RTs, CCL	TBD	TBD		Y
CCL	Vitrea 3D cardiac imaging	January 2016	MDs, RNs, RTs ,CCL	TBD	TBD		y
CCL	Acist System in-service	January 2016	MDs, RNs, RTs ,CCL	TBD	TBD		y
CCL ICU ER	Cardiac Services Committee – STEMI review	Monthly, Starting January 2016	MDs, RNs, RTs ,CCL, PI	No	0	y	
CCL ICU ER	Cardiac Services Committee – NCDR cath PCI data review	Quarterly, starting with first NCDR report	MDs, RNs, RTs ,CCL, PI	No	0	y	
CCL	Contrast Injector	February 2016	MDs, RNs, RTs ,CCL	TBD	TBD		y
CCL	Possis Angiojet	February 2016	MDs, RNs, RTs ,CCL	TBD	TBD		y
CCL	McKesson Cardio documentation training	September 2014, February 2016	MDs, RNs, RTs ,CCL	No	0	y	
CCL ICU ER	Medtronic Pacer review	September 2014, February 2016	MDs, RNs, RTs ,CCL	No	0	y	
CCL ICU	Defibrillator Inservice	September 2015, February 2016	MDs, RNs, RTs ,CCL	No	0	y	
CCL	Toshiba dual plane x-ray equipment	September 2015, February 2016	MDs, RNs, RTs ,CCL	No	0		y

(14) The hospital shall maintain a formal and properly executed written agreement with a tertiary care center that provides for the unconditional transfer of each primary PCI patient who requires additional care, including emergent or non-primary cardiac surgery or PCI, from the applicant hospital to the tertiary institution.

Q23. Does the hospital have a current signed and dated agreement with a tertiary care center that provides for the unconditional transfer of primary PCI patients from the applicant hospital to the tertiary institution and that covers the transfer of each non-primary PCI patient who requires additional care, including emergent or non-primary cardiac surgery or PCI?
Yes _X_ No ___

If yes, please provide a copy. If no, provide either a new agreement or a signed and dated amendment to an existing agreement.

Please see Exhibit 4 for a copy of the transfer agreement with Suburban Hospital and Washington Hospital Center (WHC), the latter of which is in the process of being signed and will be forwarded to the Commission upon receipt.

(15) A hospital shall maintain its agreement with a licensed specialty care ambulance service that, when clinically necessary, guarantees arrival of the air or ground ambulance at the applicant hospital within 30 minutes of a request for primary PCI patient transport by the applicant.

Q25. Does the hospital's signed and dated formal written agreement with a currently licensed advanced cardiac support emergency medical services provider guarantee the arrival of an air or ground ambulance at the applicant hospital within 30 minutes of a request from that hospital for the transport of a primary PCI patient to a tertiary care center? Yes _X_ No ___

If yes, please provide a copy. If no, provide either a new agreement or a signed and dated amendment to an existing agreement with a currently licensed advanced cardiac support emergency medical services provider that provides such a guarantee.

Please see Exhibit 5 for a copy of the transport agreement between Holy Cross Germantown Hospital and Butler Medical Transport, LLC. Note: In the event Butler is not available to arrive within 30 minutes, EMS will be called for pPCI transport.

(16) A hospital shall develop a formal, regularly scheduled (meetings at least every other month) interventional case review that requires attendance by interventionalists and other physicians, nurses, and technicians who care for primary PCI patients.

Q26. Please submit a signed letter of commitment from the hospital chief executive officer acknowledging that the hospital will meet this standard, if the applicant hospital obtains Commission approval to establish a primary PCI program.

Please see Exhibit 2 for a copy of the Letter of Commitment regarding establishment of a primary PCI program at Holy Cross Germantown Hospital

(17) A hospital shall create a multiple care area group (emergency department, coronary care unit, and cardiac catheterization laboratory) that includes, at a minimum, the physician and nursing leadership of each care area and meets monthly to review any and all issues related to the primary PCI system, identify problem areas, and develop solutions.

Q27. Please submit a signed letter of commitment from the hospital chief executive officer acknowledging that the hospital will meet this standard, if the applicant hospital obtains Commission approval to establish a primary PCI program.

Please see Exhibit 2 for a copy of the Letter of Commitment regarding establishment of a primary PCI program at Holy Cross Germantown Hospital

(18) At least semi-annually, as determined by the Commission, the hospital shall conduct an external review of at least five percent of randomly selected PCI cases performed in the applicable time period and an internal review of at least 10 percent of randomly selected PCI cases performed in the applicable time period.**

Q28. Please submit a signed letter of commitment from the hospital chief executive officer acknowledging that if the applicant hospital obtains Commission approval to establish a primary PCI program, the hospital will meet this standard.[**]

Please see Exhibit 2 for a copy of the Letter of Commitment regarding establishment of a primary PCI program at Holy Cross Germantown Hospital

(19) Each physician who performs primary PCI services at a hospital that provides primary PCI without on-site cardiac surgery shall achieve an average annual case volume of 50 or more PCI cases over a two-year period.

Q29. Please submit a signed letter from the hospital chief executive officer acknowledging that if the applicant hospital obtains Commission approval to establish a primary PCI program, it will submit documentation that demonstrates compliance with this standard 90 days prior to first use. The applicant shall submit to Commission staff a roster of all physicians who will be performing primary PCI with documentation showing that each currently meets the case volume requirement, using Form C.

Please see Exhibit 2 for a copy of the Letter of Commitment regarding establishment of a primary PCI program at Holy Cross Germantown Hospital

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[**] Although this is the current standard, a new standard was adopted in proposed regulations, COMAR 10.24.17, on July 16, 2015 that does not requires hospitals with only primary PCI programs to conduct an external review. If COMAR 10.24.17 is adopted by the Commission as final regulations then the new standard would be applicable.

(20) An applicant shall commit to providing primary PCI services only for suitable patients. Suitable patients are patients described as appropriate for primary PCI in the Guidelines of the American College of Cardiology Foundation/American Heart Association (ACCF/AHS) for Management of Patients with Acute Myocardial Infarction or in the Guidelines of the American College of Cardiology Foundation/American Heart Association/Society for Cardiovascular Angiography and Interventions (ACCF/AHA/SCAI) for Percutaneous Coronary Intervention.

Q30. Please provide a signed statement from the hospital's chief executive officer and medical director of cardiac interventional services attesting to the hospital's commitment to meeting the required standards for patient selection.

Please see Exhibit 2 for a copy of the Letter of Commitment regarding provision of PCI only for suitable patients

(21) An applicant shall document that its proposed primary PCI program will achieve financial viability.

Q31. Will the introduction of primary PCI services require a capital expenditure by the hospital?
Yes_**X**__ No ___

If yes, please provide a project budget detailing the anticipated expenditures using Form A.
Form A is attached.

Q32. Please complete and submit a schedule of projected revenues and expenses for PCI services, using Form B. Please note that this schedule requires the reporting of projected revenues and expenses for future years through the third year of operation.
Form B is attached.

Section E – Applicant Affidavit

I solemnly affirm under penalties of perjury that the contents of this application, including all attachments, are true and correct to the best of my knowledge, information, and belief. I understand that if any of the facts, statements, or representations made in this application change, the hospital is required to notify the Commission in writing.

If the Commission issues a Certificate of Conformance to permit the hospital to perform primary PCI procedures, the hospital agrees to timely collect and report complete and accurate data as specified by the Commission. I further affirm that this application for a Certificate of Conformance to perform primary percutaneous coronary intervention has been duly authorized by the governing body of the applicant hospital, and that the hospital will comply with the terms and conditions of the Certificate of Conformance and with other applicable State requirements.

If the Commission issues a Certificate of Conformance to permit the hospital to perform primary PCI procedures, the hospital agrees that it will voluntarily relinquish its authority to provide primary PCI services upon receipt of notice from the Executive Director of the Commission if the hospital fails to meet the applicable standards for a Certificate of Conformance, Certificate of Ongoing Performance, or performance standards included in a plan of correction when the hospital has been given an opportunity to correct deficiencies through a plan of correction.

I have been designated by the Board of Directors of the applicant hospital to complete this affidavit on its behalf.

Please see Exhibit 6 for a copy of the Board Resolution which includes this designation.

Signature of Hospital-Designated Official

Doug Ryder
____

Printed Name of Hospital-Designated Official

Doug Ryder
____

Title: President

Date: October 15, 2015

Form B: REVENUES AND EXPENSES – Percutaneous Coronary Intervention Services

INSTRUCTIONS: Specify whether data are for calendar year or fiscal year. All projected revenue and expense figures should be presented in current dollars. Specify sources of non-operating income. This table must be accompanied by a statement of all assumptions used in projecting all revenues and expenses. Please assure that the revenue and expenses figures in this table are consistent with the historic and project utilization of PCI services at the applicant hospital and the information on staffing of this service provided elsewhere in this application.

Revenues and Expenses – PCI Services	**Projected Years (ending with third full year in which the applicant projects provision of primary PCI services**			
Calendar Year	Mar- Dec, 2016	2017	2018	2019
pPCI cases/year	52.5	71	72	73
1. Revenue				
a. Inpatient Services	$908,628	$1,228,811	$1,246,118	$1,263,426
b. Outpatient Services	$0	$0	$0	$0
c. Gross Patient Services	$0	$0	$0	$0
d. Revenues	$908,628	$1,228,811	$1,246,118	$1,263,426
2. Adjustments to Revenue				
d. Allowance for Bad Debt	$2,726	$3,686	$3,738	$3,790
e. Contractual Allowance	$59,061	$79,873	$80,998	$82,123
f. Charity Care	$15,447	$20,890	$21,184	$21,478
g. Net Patient Services Revenue	$77,233	$104,449	$105,920	$107,391
h. Other Operating Revenue	$0	$0	$0	$0
i. Net Operating Revenue	$831,395	$1,124,362	$1,140,198	$1,156,034
2. Expenses				
a. Salaries, Wages, and Professional Fees (including fringe benefits)	$332,558	$449,745	$456,079	$462,414
b. Contractual Services	$250,444	$334,003	$334,080	$334,158
c. Interest on Current Debt	$0	$0	$0	$0
d. Interest on Project Debt	$0	$0	$0	$0
e. Current Depreciation	$3,900	$5,200	$5,200	$5,200
f. Project Depreciation	$0	$0	$0	$0
g. Current Amortization	$0	$0	$0	$0
h. Project Amortization	$0	$0	$0	$0
i. Supplies	$37,800	$51,120	$51,840	$52,560
j. Other Expenses (Lab, Pharmacy, Radiology)	$242,550	$328,020	$332,640	$337,260
k. Total Operating Expenses	$867,252	$1,168,087	$1,179,839	$1,191,591

Revenues and Expenses – PCI Services	Projected Years (ending with third full year in which the applicant projects provision of primary PCI services			
Calendar Year	Mar- Dec, 2016	2017	2018	2019
pPCI cases/year	53	71	72	73
3. Income				
a. Income from Operation	($35,857)	($43,725)	($39,641)	($35,557)
b. Non-Operating Income	$0	$0	$0	$0
c. Subtotal	($35,857)	($43,725)	($39,641)	($35,557)
d. Income Taxes	$0	$0	$0	$0
e. Net Income (Loss)	($35,857)	($43,725)	($39,641)	($35,557)
4. Patient Mix:				
A. Percent of Total Revenue				
1) Medicare	36%	36%	36%	36%
2) Medicaid	30%	30%	30%	30%
3) Blue Cross	14%	14%	14%	14%
4) Commercial Insurance	16%	16%	16%	16%
5) Self-Pay	3%	3%	3%	3%
6) Other (Specify)	1%	1%	1%	1%
7) TOTAL	100%	100%	100%	100%

Assumptions:

1. Inpatient / Outpatient Split - 100% inpatient

2. Revenue

	Mar- Dec, 2016	CY 2017	CY 2018	CY 2019
a. IVC billed minutes at $87.22/minute, 60 min per case	$5,233	$5,233	$5,233	$5,233
b. ICU Room & Board charge = $1,715 x patient days at 1 day/case	$1,715	$1,715	$1,715	$1,715
c. Med/Surg Room & Board charge = $1,059 x # patient days at 1 day/case	$1,059	$1,059	$1,059	$1,059
d. Emergency Room charges estimated = $400/case x # cases	$400	$400	$400	$400
e. Lab charges estimated = $1,200/case x # cases	$1,200	$1,200	$1,200	$1,200

f. Pharmacy charges estimated = $2,000/case x # cases	$2,000	$2,000	$2,000	$2,000
g. Supplies revenue is estimated at $5,400/case x # cases	$5,400	$5,400	$5,400	$5,400
h. Radiology revenue is estimated at $300/case x # cases	$300	$300	$300	$300

3. Adjustments to Revenue

	Mar- Dec, 2016	CY 2017	CY 2018	CY 2019
a. Allowance for Bad Debt - Used .03% based on the HCGH Cath Lab P&L Oct14-May15	$2,726	$3,686	$3,738	$3,790
b. Contractual Allowance - Used 6.5% based on the HCGH Cath Lab P&L Oct14-May15	$59,061	$79,873	$80,998	$82,123
c. Charity Care - Used 1.7% based on the HCGH Cath Lab P&L Oct14-May15	$15,447	$20,890	$21,184	$21,478

4. Expenses Stated in CY2015 dollars

a. Salaries & Benefits estimated at 40% of net revenue				
b. Contractual Services call cost/yr:	**Mar- Dec, 2016**	**CY 2017**	**CY 2018**	**CY 2019**
Physician call / year @ $900/day, 365 days/yr	$246,375	$328,500	$328,500	$328,500
Tech call/hr based on $50/hr	$50	$50	$50	$50
Tech call expense assuming 2 techs on call at 2 hrs/case	$2,625	$3,550	$3,600	$3,650
RN call/hr based on $55/hr	$55	$55	$55	$55
RN all expense assuming 25% cases require 4 RN on call at 2 hrs/case	$1,444	$1,953	$1,980	$2,008
c. Supplies expense estimated at 60% of supplies revenue	$720	$720	$720	$720
d. Pharmacy expense estimated at 60% of pharmacy revenue	$1,200	$1,200	$1,200	$1,200
e. Lab test expense estimated at 60% of lab revenue	$3,240	$3,240	$3,240	$3,240
f. Radiology test expense estimated at 60% of radiology revenue	$180	$180	$180	$180
g. Capital depreciation for Acist System, CVI and cart ($26,000 depreciated over 5 years)	$5,200	$5,200	$5,200	$5,200

5. Projected Primary PCI Volumes

Projected pPCI Volumes

pPCI Volume in HCGH Zip Codes				
Zip Code	2013 Volume	2014 Volume	% Allocated HCGH	Projected HCGH pPCI Volume
HCGH PSA				
20874	20	18	100%	18
20876	8	5	100%	5
20877	13	9	0%	0
20878	14	16	50%	8
20879	9	14	50%	7
20882	2	7	100%	7
20886	6	6	100%	6
HCGH SSA				
20837	3	6	50%	3
20841	1	4	100%	4
20850	14	21	0%	0
20851	3	2	0%	0
20853	13	12	0%	0
20855	6	6	0%	0
20871	7	3	100%	3
20872	3	7	100%	7
TOTAL	**122**	**136**		**68**

Volume Source: MHCC CY2013_PPCI_PUBLIC_9082015 and MHCC CY2014_PPCI_PUBLIC

HCGH Projected pPCI Volumes					
	CY2015	CY2016	CY2017	CY2018	CY2019
pPCI Volume	69	70	71	72	73

Average Annual Growth Rate: 1.4%

Assumptions:

Projected volume based on 2014 pPCI volume in HCGH service area

Allocated percentage of cases, using zip code, based on location relative to HCGH

- -- All zip codes that border only HCGH zip code allocated 100% of cases
- -- Zip codes that border both HCGH and SGAH or border neither hospital zip code allocated at 50% of cases
- -- All zip codes that border only SGAH allocated at 0%

Estimated average annual pPCI growth rate by using average annual growth rate for Cardiac Service from Milliman for 2015-2019

6. CY2013 and CY2014 Elective and Primary PCI Data

Source: MHCC CY2013_PPCI_PUBLIC_9082015, MHCC CY2013_NPCI_PUBLIC_9082015, CY2014_PPCI_PUBLIC, MHCC CY2014_NPCI_PUBLIC

	YOY Change			2014			2013		
	pPCI	nPCI	TOTAL	pPCI	nPCI	TOTAL	pPCI	nPCI	TOTAL
Shady Grove	19.0%	-1.4%	7.7%	138	143	281	116	145	261
Washington Advent	-11.7%	-7.8%	-8.3%	91	583	674	103	632	735
HCGH TSA	11.5%	-12.9%	-7.2%	136	352	488	122	404	526
HCGH PSA	4.2%	-4.8%	-2.7%	75	218	293	72	229	301
Holy Cross	-100.0%	NA	-100.0%	0	0	0	1	0	1
Frederick	NA	300.0%	300.0%	0	4	4	0	1	1
Johns Hopkins	NA	-80.0%	-60.0%	1	1	2	0	5	5
Meritus	-100.0%	NA	-100.0%	0	0	0	1	0	1
Peninsula	-100.0%	NA	-100.0%	0	0	0	1	0	1
Shady Grove	10.0%	-11.7%	-2.2%	66	68	134	60	77	137
Suburban	-50.0%	6.5%	-2.7%	3	33	36	6	31	37
Southern MD	NA	NA	NA	1	0	1	0	0	0
Union Memorial	NA	NA	NA	0	2	2	0	0	0
University of MD	NA	200.0%	200.0%	0	3	3	0	1	1
Washington Adventist	NA	4.7%	3.0%	1	67	68	2	64	66
Washington (DC)	200.0%	-20.0%	-15.7%	3	40	43	1	50	51
HCGH SSA	22.0%	-23.4%	-13.3%	61	134	195	50	175	225
Holy Cross	14.3%	NA	14.3%	8	0	8	7	0	7
Franklin Sq	-100.0%	NA	-100.0%	0	0	0	1	0	1
Frederick	NA	25.0%	100.0%	3	5	8	0	4	4
Johns Hopkins	NA	50.0%	50.0%	0	3	3	0	2	2
Peninsula	-100.0%	NA	-100.0%	0	0	0	1	0	1
Prince Georges	NA	-100.0%	-100.0%	0	0	0	0	2	2
Shady Grove	28.6%	25.8%	27.1%	36	39	75	28	31	59
Suburban	40.0%	-37.3%	-30.4%	7	32	39	5	51	56
University of MD	NA	-100.0%	-100.0%	0	0	0	0	1	1
Washington Adventist	NA	-54.9%	-54.7%	1	23	24	2	51	53
Washington (DC)	0.0%	-3.0%	-2.6%	6	32	38	6	33	39

Note: Approx. 4% of total PCI cases track to an invalid or unknown zip code

Per question 29 in this application, once the applicant hospital obtains Commission approval to establish a primary PCI program, it will submit Form C to demonstrate compliance with this standard 90 days prior to first use that each physician who performs primary PCI services at a hospital that provides primary PCI without on-site cardiac surgery shall achieve an average annual case volume of 50 or more PCI cases over a two-year period.

Form C. Please use this form to identify for each physician and quarter the volume of primary and non-primary PCI cases performed by the physician.

Interventionalist____

Quarter Ending	**PCI Cases at Applicant Hospital**			**PCI Cases at Other Hospitals**			**Total PCI Cases- All Hospitals**
	pPCI	**npPCI**	**Total**	**pPCI**	**npPCI**	**Total**	

Source of Data:

Affidavit

I solemnly affirm under penalties of perjury that the information contained in the above table is true and correct to the best of my knowledge, information, and belief.

Date:________________ Signature of Physician:__________________________________

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Exhibits

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Exhibit 2, Letter of Commitment from President of Holy Cross Germantown Hospital – pages 180 - 183

Exhibit 3, Program Development and Implementation Plan – pages 184 - 185

Exhibit 4, Transfer Agreements – pages 186 - 202

Exhibit 5, Transport Agreement – pages 203 - 228

Exhibit 6, Expressions of Support – pages 229 - 234

Exhibit 1

Policies and Procedures

Question 6)

1) *Billing and Collection of Patient Payment Obligations –* ***pages 30- 45***
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12. ***Policy or Protocol for Inter-Hospital Transfers pages 144 - 176***
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Holy Cross Health: Billing and Collection of Patient Payment Obligations

Owner/Dept: JEFFREY KARNS, VP Revenue Cycle Operations/ Office of Chief Financial Officer	Date approved: 10/16/2015
Approved by: Anne Gillis (Chief Financial Officer, Holy Cross Health), Annice Cody (President Holy Cross Health Network), Doug Ryder (President, Holy Cross Germantown Hospital), Judith Rogers (President of Holy Cross Hospital)	Next Review Date: 10/16/2018
Affected Departments: Finance, Finance, Legal Services, Office of CFO, Patient Accounting, Patient Accounting	

Purpose

To outline the Holy Cross Health policy for ensuring that billing and collection practices for patient payment obligations are fair, consistent and compliant with state and federal regulations.

Applies to:

- Revenue Cycle Management
- Finance
- Legal Services
- Billing and Collection Business Associates

Policy Overview

In order for Holy Cross Health to fulfill its mission, patient payment obligations must be collected in a timely manner. Holy Cross Health will strive to achieve a billing process that is clear, concise, correct and patient friendly.

Whenever possible, Holy Cross Health will attempt to collect patient payment obligations prior to or at the time hospital services are provided. Patient balances not collected prior to or at the time of patient discharge will be billed to the patient as outlined within this policy. In general, self-pay patients will be sent a minimum of three statements for balances owed from the date the patient is discharged or for insured patients, the date a third party payer identifies the patient balance owed, before the patient's unpaid balance is submitted to a collection agency for collection. These statements will generally occur over a span of 90 – 120 days and will be generated based on Trinity Health established billing guidelines. The Hospital will list unpaid balances with the Credit Bureau no sooner than 90 days from placement with a collection agency, after all reasonable collection efforts have been made in compliance with hospital policies and procedures.

Prior to forwarding to a collection agency, self-pay balances will not be waived or adjusted by the hospital unless the patient or family meets the criteria of the Hospital's financial assistance policy or presumptive financial assistance as outlined in this policy.

Short-term payment plans will be accepted by the Hospital for those whose financial condition requires additional time to pay their balances. Long-term payment plans are generally the responsibility of the patient to arrange through a third party credit arrangement of their choosing, but may be offered by Holy Cross Health upon approval by the Director of Patient Accounting. In such cases the payment plan will be managed with the assistance of a collection agency.

Pre-Service/Point of Service Collections

Patients who are pre-registered for hospital service and are self-pay or have an insurance co-payment or deductible due will be asked to either pre-pay the estimated amount due, pay at the time of arrival for services or upon discharge. This does not include those people seeking emergency medical treatment or any other service covered by EMTALA regulations. Emergency Center patients will be asked to pay after the medical screening is complete or upon discharge. In all emergency cases, medical services will not be delayed or denied based upon ability to pay.

Information Regarding Charges

Information regarding charges for hospital services is made available to the public by posting a representative list of the most commonly used hospital services along with an estimated price range for each service listed. This list is prominently displayed in all hospital registration and cashier's areas, the emergency center and on the hospital's website. This list is updated quarterly and is based on the average patient charges billed for each service over the past six months.

All charge questions or patient requests for charge estimates for hospital services are forwarded to and processed by the financial counseling department in a prompt and courteous fashion. Written estimates for services are provided to the patient upon request and within 2 business days from the patient's request for a written estimate. All patients will be informed that information provided to them regarding hospital charges are estimates and their actual charges will vary depending upon the patient's condition and level of care or other services that are required and provided to the patient.

All registration, financial counseling, customer service, cashier and patient accounting staff are trained regarding the availability of charge information and the process for forwarding patient requests for charge estimates to the financial counseling department.

Financial Assistance

Information regarding the Hospital's financial assistance program will be prominently displayed to alert patients to the availability of financial assistance to settle their bills. This information is made available through signage and financial assistance information located in all hospital registration and cashier areas, the emergency center, notices on all hospital billing statements, through the hospital's website and through contacting financial counseling and customer service staff. Where it is possible for Medicaid, veteran's benefits, COBRA or other funding programs to cover the patient's medical expenses, that information will be shared with the patient. Financial counseling staff will be available to assist all patients requesting financial assistance.

Billing Process

Billing statements for patient payment obligations are generally submitted to patients after final medical record coding and according to the standard timeframes established by Trinity Health. Although this is generally from one to five days, this process can take up to 30 days post discharge or after third party payer adjudication. Patient payment obligations may be referred to an outside vendor for billing. The Director of Patient Accounting can override this referral to the outside billing vendor in order to retain the account at the hospital for follow up. This exception will generally be caused by a special circumstance of either the patient or the hospital and should be limited in scope and volume.

- Patients will receive an initial statement from the Hospital or outside billing vendor outlining what insurance, if any, is being billed, a summary of the services received, including the price, information about other bills the patient may receive from hospital-based physician groups and contact information for those groups. Other information on how to obtain the Hospital Patient Information Sheet which provides information on the Hospital's financial assistance program, the patient's rights and obligations regarding their bill and information on how to contact the hospital with questions or complaints regarding their bill will also be provided.

- Patients will be sent a minimum of three statements by the hospital and/or an outside billing vendor, including phone calls as appropriate, for balances owed over a period of 90 – 120 days from the patient's discharge date if self-pay or the date a third party payer identifies the patient balance owed before the patient's unpaid balance is submitted to a collection agency for collection. Payment plans and financial assistance will be discussed with the patient if they indicate that there is a need for accommodation. The outside billing vendor will return the account to Holy Cross Health at the end of 90 days from their receiving the account, provided there is no financial assistance application pending or an active payment plan in place. Any insurance information found by the outside billing vendor will be returned to Holy Cross Health. Holy Cross Health is responsible for submitting the bill to insurance and direct follow-up with the insurance to resolve the outstanding balance on the patient's account.

- Holy Cross Health will utilize customized billing processes for uninsured patients seen at the Holy Cross Health Centers and the OB Clinic. These processes may be designed to consider expected resources, financial assistance credits and other communication difficulties and may rely primarily on personal contact with those patients. No routine patient statements will be generated or collection activity pursued for these patients for services received at the Health Centers and within the OB Clinic. Hospital-based services provided to health center and clinic patients are to be handled according to the same billing procedures as other patient accounts at the hospital.

- Holy Cross Health will respond promptly and courteously to patients' questions or complaints about their bills and to requests for financial assistance.

Payment Plans

Payment plans, generally lasting twenty-four months or less, will be established for those patients who request it and are unable to pay the balance in full immediately. In cases where a payment plan in excess of twenty-four months is requested, the Director of Patient Accounting must approve the arrangement. Interest will not be charged on these extended payments.

Discounts

No "Professional courtesy" or employee discounts or other adjustments are permitted on balances not covered by insurance. Discounts to payers or self-pay patients will be approved based on regulations from the Health Services Cost Review Commission.

Refunds

Refunds will be provided on amounts exceeding $25 collected from a patient or guarantor of a patient who, within a 2-year period after the date of service, provides documentation to the Hospital that demonstrates the patient was eligible for free care at the time of service. If the patient or the guarantor of a patient does not cooperate with the Hospital by providing the required documentation in order to determine free care eligibility, the Hospital will document the lack of cooperation

and may reduce the 2-year period to no less than 30 days after the date the Hospital requests the required documentation from the patient or the guarantor of the patient.

If a patient is enrolled in a means-tested government health care plan that requires the patient to pay out-of-pocket for hospital service, the Hospital will comply with the terms of the patient's plan regarding refunds.

Presumptive Financial Assistance

Holy Cross Health recognizes that not all patients are able to complete the financial assistance application or provide requisite documentation. For patients unable to provide required documentation (for example, deceased patients with no known estate, homeless or unemployed patients, patients qualifying for public assistance programs who receive non-covered medically necessary services, patient bankruptcies, and members of religious organizations who have taken a vow of poverty and have no resources individually or through the religious organization), the Hospital may grant financial assistance.

For uninsured patients who are non-responsive to the application process, other sources of information may be used to make an individual assessment of financial need prior to referral to an outside collection agency. This information will enable the Hospital to make an informed decision on the financial need of non-responsive patients.

For the purpose of helping financially needy patients with no insurance coverage, a third-party may be utilized to conduct a review of patient information to assess financial need. This review utilizes a healthcare industry-recognized, predictive model that is based on public record databases. These public records enable the Hospital to assess whether the patient is characteristic of other patients who have historically qualified for financial assistance under the traditional application process. In cases where there is an absence of information provided directly by the patient, and after efforts to confirm coverage availability, the predictive model provides a systematic method to grant presumptive eligibility to financially needy patients.

In the event a patient does not qualify under the presumptive rule set, the patient may still provide requisite information and be considered under the traditional financial assistance application process.

Bad Debt Identification and Collection Process

Patient payment obligations that are not collected by the outside billing vendor within 90 days from receipt of an account will be returned to Holy Cross Health for evaluation and possible referral to an outside collection agency. After the screening of account for potential presumptive financial assistance is completed, all remaining, eligible accounts will be written off the Hospital's accounts receivable and transferred to a bad debt status within the Hospital's patient accounting system.

Accounts will be referred to a collection agency based on the following approval guidelines:

a. $0 - $5,000 – No approval needed, billing system will automatically refer account to the collection agency
b. $5,001 – 15,000 – Approval by Collections Manager or designee to ensure appropriate and timely collection activity has occurred
c. $15,000 - $50,000 – Approval by Director of Patient Accounting
d. Greater than $50,000 – Approval by Chief Financial Officer or senior management designee
e. Bad debt placement will be rescheduled on those cases where more time or further collection activity is needed. Accounts will not be closed without agency follow-up. The Director of Patient Accounting, or designee, must approve special circumstances in which an administrative decision is made to close an account with an agency.
f. Estate liens will be filed when needed to secure and resolve outstanding balances.
g. All bills sent to patients by the Hospital's collection agency, will contain information on how to file a complaint against the hospital or the outside collection agency regarding the handling of the patient's bill. Collection agency will notify the Hospital of all complaints received.
h. Interest will not be charged on accounts unless awarded to the Hospital after a judgment has been obtained against the debtor.
i. Holy Cross Health will not sell any patient medical debt to a third party.

Credit Bureau Reporting

Collection agencies may report outstanding debts to the Credit Bureau no sooner than 90 days from placement after all reasonable collection efforts have been made. Cases will be excluded and not reported if there is an active payment plan, known financial assistance eligibility on the date of service, possible insurance issue or known dispute regarding any part of the account balance. Collection agencies will be responsible for updating the Credit Bureau when payments are received within 60 days after the patient's payment obligation is fulfilled.

Legal Action

Collection agencies may pursue legal action for individuals who have the means to pay but are unwilling to pay. Legal action may be pursued for the portion of the unpaid amount after any financial support has been applied to the account. Approval by the CFO, their direct report, or the Director of Patient Accounting must be secured prior to proceeding with a legal action to collect a judgment (i.e. garnishment of wages). The Hospital will seek to vacate any judgment awarded or strike any adverse information reported to a consumer reporting agency on a patient who is later found to be eligible for free care on the date of service for which the judgment was awarded or the adverse information was reported.

Collection agencies shall not pursue action against the debtor's person, such as arrest warrants or "body attachments." Holy Cross Health recognizes that a court of law may impose an arrest warrant or other similar action against a defendant for failure to comply with a court order or for other violations of law related to a collection effort. While in extreme cases of willful avoidance for failure to pay a justly due amount when adequate resources are available to do so, in general, the hospital will first use its efforts to convince the public authorities not to take such an action, and if this is not successful, consider the appropriateness of ceasing the collection effort to avoid an action against the person of the debtor.

Liens may be placed for the portion of the unpaid amount after application of the Hospital's policies and procedures. Placement of liens requires approval by the CFO, their direct report, or the Director of Patient Accounting. The Hospital will not force the sale or foreclosure of a patient's primary residence to collect a debt owed on a hospital bill. Liens on primary residences can only be exercised upon the sale of the property and certain asset value in the property will be protected as documented in the Holy Cross Health Patient Financial Assistance policy.

Related Documents

Refer to the following related policies:
Holy Cross Health: Patient Financial Assistance

References

- Trinity Health. "Billing, Collection and Support for Patients with Payment Obligations," Trinity Health system policy 6-11-1, February 28, 2013.

Questions and more Information

Contact the Director, Patient Accounting at extension 8528 with questions and for more information.

Policy Modifications

The Holy Cross Health Board of Trustees must approve modifications to this policy. In addition, this policy will be presented to the Board for review and approval every two years.

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HC HOLY CROSS GERMANTOWN HOSPITAL

The table below provides the range of charges for the most commonly used inpatient and outpatient services at Holy Cross Germantown Hospital during its first three months of opening, and the average charge for the service. This table is updated quarterly and is based on patient charges actually incurred for these services during the past three months and may be used by patients to estimate the charge for services that they may incur The actual charges for services received may be higher or lower depending on the level of care provided, medical supplies used, pharmacy items administered, and other services provided to the patient. Please contact our Financial Counseling Office at (301) 557-6195 for assistance or for services not listed below.

The amounts below reflect hospital charges only. Holy Cross Germantown Hospital does not employ the physicians who practice at the hospital, and each physician group that provides service to you will charge you separately for their services. Please contact these physician groups directly for charge estimates (See Page 3).

Charges for Common Inpatient Surgical Procedures as of January 2015

	Price Range		
Obstetric Procedures	**Minimum**	**Maximum**	**Average**
Cesarean Section	$3,968	$7,179	$5,355
Vaginal Delivery – With Induction	$4,884	$7,863	$5,949
Vaginal Delivery – Without Induction	$3,947	$6,698	$5,004
General Surgery Procedures	**Minimum**	**Maximum**	**Average**
Abdominal Paracentesis	$5,618	$16,028	$10,823
Upper Endoscopy with Closed Biopsy	$9,005	$46,680	$21,818
Endoscopic Large Bowel Biopsy	$3,305	$4,464	$3,884
Laparoscopic Appendectomy	$4,458	$10,276	$7,488
Laparoscopic Cholecystectomy	$4,862	$9,558	$7,795
Orthopedic Procedures	**Minimum**	**Maximum**	**Average**
Partial Hip Replacement	$22,603	$28,417	$26,084
Total Knee Replacement	$24,642	$25,956	$25,327
Cardiovascular Procedures	**Minimum**	**Maximum**	**Average**
Thoracentesis	$9,529	$22,968	$15,768

Charges for Common Outpatient Surgical Procedures as of January 2015

	Price Range		
Orthopedic Procedures	**Minimum**	**Maximum**	**Average**
Cruciate Ligament Repair	$9,875	$13,271	$11,278
Excision of Knee Cartilage	$2,577	$5,656	$3,692
Excision of Soft Tissue	$5,326	$12,411	$8,869
Knee Synovectomy	$3,171	$4,379	$3,617
General Surgery Procedures	**Minimum**	**Maximum**	**Average**
Anal Fistulotomy	$3,578	$3,855	$3,716
Endoscopic Destruction of Gastric Lesion	$9,380	$11,773	$10,576
Gynecology Procedures	**Minimum**	**Maximum**	**Average**
Uterine Lesion Destruction	$3,705	$4,329	$4,017

Charges for Common Medical Imaging Services as of January 2015

	Price Range		
CAT Scans	**Minimum**	**Maximum**	**Average**
CAT Scan Abdomen & Pelvis w/ Contrast	$294	$324	$309
CAT Scan Abdomen & Pelvis w/o Contrast	$235	$259	$247
CAT Scan Cervical Spine w/ Contrast	$147	$162	$154
CAT Scan Cervical Spine w/o Contrast	$117	$129	$123
CAT Scan Chest w/ Contrast	$146	$192	$154
CAT Scan Chest w/o Contrast	$117	$130	$123
Diagnostic Radiology	**Minimum**	**Maximum**	**Average**
X-Ray Chest 1 View	$44	$48	$46
X-Ray Chest 2 Views	$66	$72	$69
X-Ray Lumbar Spine 2-3 Views	$66	$72	$69
MRA/MRI	**Minimum**	**Maximum**	**Average**
MRA Head w/o Contrast	$470	$520	$495
MRA Head w/ and w/o Contrast	$679	$750	$715
MRI Brain w/o Contrast	$261	$289	$275
MRI Brain w/ and w/o Contrast	$470	$520	$495
Nuclear Medicine	**Minimum**	**Maximum**	**Average**
Nuclear Medicine Myocardial Perfusion	$1,596	$1,764	$1,680
Nuclear Medicine Pulmonary Perfusion	$965	$1,067	$1,016
Ultrasound	**Minimum**	**Maximum**	**Average**
Ultrasound Abdominal Non-Pregnant	$261	$289	$275
Ultrasound Pelvis Non-Pregnant	$239	$265	$252
Ultrasound Pregnancy Transvaginal	$239	$265	$252
Ultrasound Transvaginal Non-Pregnant	$239	$265	$252
Other Procedures	**Minimum**	**Maximum**	**Average**
EKG 12 Lead Tracing Only	$63	$69	$66

Charges for Common Laboratory Services as of January 2015

	Price Range		
Laboratory Procedure	**Minimum**	**Maximum**	**Average**
Basic Metabolic Panel	$24	$26	$25
Blood Clotting Test (PT)	$17	$19	$18
Blood Type Test - ABO	$9	$10	$10
Blood Type Test - RH Factor	$9	$10	$10
CBC with Differential	$22	$24	$23
Complete Blood Count (CBC)	$17	$19	$18
Comprehensive Metabolic Panel	$32	$36	$34
Hepatic Function Panel	$24	$26	$25
Glycohemoglobin (HGB A1C)	$43	$48	$46
Lipase Test	$17	$19	$18
Lipid Panel	$41	$45	$43
Pregnancy Test (HCG)	$22	$24	$23
Strep Test	$54	$60	$57
Syphilis Test	$17	$19	$18
Thyroid Stimulating Hormone	$32	$36	$34
Urinalysis (UA)	$19	$22	$21
Venipuncture*	$17	$19	$18

*A venipuncture is charged each time blood is drawn for any blood-based lab test. This is charged once per day for inpatient stays, and once per visit for outpatients, in addition to the charges for the lab tests.

Fees for professional services you received at the Hospital from hospital-based physicians and other healthcare providers such as physician assistants, nurse practitioners, etc. will be billed separately to you and are not part of hospital charges. If you have questions regarding their bills, please contact the following:

Anesthesiologists, Holy Cross Anesthesia Associates Billing Group: Physicians Systems and Services, Inc. (800) 693-3257 **Cardiologists, Forest Glen Cardiology** (804) 262-1190 **Community Neonatal Associates** Billing Group: Assoc. Health Management Alliance (240) 364-2510 **ER Physicians, Silver Spring Emergency Physicians** Billing Group: Meridian Financial Management (443) 274-2900 or (888)-429-5380 **Inpatient Consultants of Maryland** (888) 447-3700	**Perinatalogists, Greater Washington Maternal Fetal Medicine** (301) 408-3667 **Radiologists, Diagnostic Medical Imaging Associates** Billing Group: McKesson (866) 953-5869 **Surgical Pathologists, Pathology Assoc. of Silver Spring** Billing Group: Assoc. Health Management Alliance (240) 364-2515 **Other Healthcare Providers, Professional Services of Holy Cross Hospital** Billing Group: Meridian Financial Management (443) 274-2900 or (888)-429-5380

Holy Cross Health: Patient Financial Assistance

Owner/Dept: JEFFREY KARNS, VP Revenue Cycle Operations/ Office of Chief Financial Offi	**Date approved: 08/19/2015**
Approved by: Anne Gillis (Chief Financial Officer, Holy Cross Health), Annice Cody (President Holy Cross Health Network), Doug Ryder (President, Holy Cross Germantown Hospital), Judith Rogers (President of Holy Cross Hospital)	**Next Review Date: 08/19/2018**
Affected Departments: Finance, Legal Services, Office of CFO, Patient Accounting, Financial Counseling	

Purpose

It is part of the Holy Cross Health mission to make medically necessary care available to those in our community who are in need regardless of their ability to pay. Since all care has associated cost, any "free" or "discounted" service provided through this program results in that cost being passed on to other patients and their payers. Holy Cross Health therefore has a dual responsibility to cover those in need while ensuring that the cost of care is not unfairly transferred to individuals, third party payers and the community in general.

It is the purpose of this policy to:

- Ensure a consistent, efficient and equitable process to provide free or reduced-cost medically necessary services to patients who reside in the state of Maryland or who present with an urgent, emergent or life-threatening condition and do not have the ability to pay.
- Ensure regulatory agencies and the community at large that the hospital documents the financial assistance provided to these patients so that their eligibility for the assistance is appropriately demonstrated.
- Protect a stated level of each patient's assets when determining their eligibility for financial assistance under this policy.
- Provide, without discrimination, care for emergency medical conditions to individuals regardless of their eligibility for financial assistance under this policy.

Applies to:

- Financial counseling and revenue cycle staff
- Hospital professional service providers
- Hospital contracted physicians

Policy Overview

The Holy Cross Health patient financial assistance policy applies in those cases where patients do not have sufficient income or assets to pay for their care and fulfill their obligation as patients to cooperate with and avail themselves of all programs for medical coverage (including Medicare, Medicaid, commercial insurances, workers compensation, and other state and local programs). The financial assistance policy is comprised of the following programs – each of which may have its own application and/or documentation requirements:

- **Scheduled Financial Assistance Program:** Holy Cross makes available financial assistance to eligible patients who have a current or anticipated need for inpatient or outpatient medical care. This assistance requires completion of an application and provision of supporting documentation. Once approved, such financial assistance remains in effect for a period of six months after the determination unless the patient's financial circumstances change or they become eligible for coverage through insurance or available public programs during this time.

- **Presumptive Financial Assistance Program:** Holy Cross makes available presumptive financial assistance to eligible patients as follows:

  - Patients, unless otherwise eligible for Medicaid or CHIP, who are beneficiaries of the means-tested social services programs listed below are eligible for free care, provided that the patient submits proof of enrollment within 30 days unless a 30 day extension is requested. Assistance will remain in effect as long as the patient is an active beneficiary of one of the programs below:
    - Households with children in the free or reduced lunch program;
    - Supplemental Nutritional Assistance Program (SNAP);
    - Low-income-household energy assistance program;
    - Women, Infants and Children (WIC)

  - Patients who are beneficiaries of the Montgomery county programs listed below are eligible for 60% financial assistance, provided that the patient submits proof of enrollment within 30 days unless a 30 day extension is requested. Assistance will remain in effect as long as the patient is an active beneficiary of one of the programs below:
    - Montgomery Cares;
    - Project Access;
    - Care for Kids

Note: Patients in these county programs may also be eligible and evaluated for 100% financial assistance based upon completion of a standard financial assistance application and provision of supporting documentation.

- Uninsured patients receiving services at Holy Cross Health Centers and/or the Obstetrics/Gynecology Clinics. In some cases both the eligibility and documentation requirements will reflect the processes and policies of county or other public programs for financial assistance. This assistance is based on the same financial assistance eligibility schedule, but normally requires a less extensive documentation process. In accordance with County policy, patients are expected to make the minimum required co-payments and/or contractual payments regardless of the level of charity care for which the patient would otherwise be eligible.

- Patients qualifying for public assistance programs who receive non-covered medically necessary services.

Holy Cross Health recognizes that not all patients are able to provide complete financial and/or social information and Holy Cross Health may elect to approve financial support based on available information prior to referring an outstanding balance to an external collection agency to ensure those patients who cannot afford to pay for care are appropriately identified regardless of documentation provided.

- **Medical Financial Hardship Program:** Holy Cross Health also makes available financial assistance to "medically indigent" patients who demonstrate a financial hardship as a result of medical debt. This program requires a more extensive documentation process. Reduced-cost financial assistance will remain in effect during the 12-month period after the date the reduced-cost medically necessary care was initially received and will apply to the patient or any immediate family member of the patient living in the same household when seeking subsequent care at a Holy Cross Health facility.

If a patient meets the eligibility requirements of more than one of the programs listed above, the reduction in charges that is most favorable to the patient. If reduced-cost care is approved for a patient, the maximum patient payment for care will not exceed the charge minus the hospital mark-up.

The documentation requirements and processes used for each financial assistance program are listed in the financial assistance and billing and collection procedures maintained by Revenue Cycle Management.

Within two business days of the receipt of a completed application for financial assistance, medical assistance or both, a determination of probable eligibility will be made.

Covered Services

The financial assistance policy applies only to charges for medically necessary patient services that are rendered at facilities operated solely by Holy Cross Health. These facilities include Holy Cross Hospital, Holy Cross Germantown Hospital, Holy Cross Health Centers, and Holy Cross Dialysis Center at Woodmore. It does not apply to services that are operated by a "joint venture" or "affiliate" of Holy Cross Health. Contracted physicians (Emergency Medicine, Anesthesia, Pathology, Radiology, Hospitalists, Intensivists and Neonatalogists) also honor scheduled financial assistance determinations made by Holy Cross Health. Financial assistance is only applicable when a patient takes advantage of the most appropriate cost effective setting to obtain their care.

Provision of services specifically for the uninsured: In the event that Holy Cross Health provides a more cost effective setting for needed services (such as the Obstetrics/Gynecology Clinic or the Health Centers), in cooperation with community groups or contracted physicians, specific financial assistance and payment terms apply that may differ from the general Holy Cross Health financial assistance program. In these heavily discounted programs, patients are expected to make the minimum co-payments that are required regardless of the level of charity care for which the patient would otherwise be eligible. Those minimum obligations are not then eligible to be further reduced via the scheduled financial assistance policy.

Services Not Covered

Services not covered by this financial assistance policy are:

- Private physician services or charges from facilities in which Holy Cross Health has less than full ownership.
- Cosmetic, convenience, and/or other medical services, which are not medically necessary. Medical necessity will be determined by the Holy Cross Health Chief Medical Officer after consultation with the patient's physician and must be determined prior to the provision of any non-emergent service.
- Services for patients who do not cooperate fully to obtain coverage for their services from County, State, Federal, or other assistance programs for which Holy Cross Health believes they are eligible.

Patient Eligibility Requirements

Holy Cross Health provides various levels of financial assistance to Maryland residents and patients who present with an urgent, emergent or life-threatening condition whose income is less than 400% of the federal poverty level and whose monetary assets (assets that are convertible to cash excluding up to $150,000 in equity in their primary residence, personal tools used in their trade or business, and deferred retirement plan assets) do not exceed $10,000 as an individual or $25,000

within a family. Holy Cross Health will also provide assistance to patients with family income up to 500% of the federal poverty level that demonstrate a financial hardship as a result of incurring hospital medical debt that exceeds 20% of family income over a 12-month period.

Any individual may make a request to reconsider the level of reduced-cost care approved or denial of free or reduced-cost care by Holy Cross Health for the individual. In such cases, requests are to be made to the financial counseling manager who will consider the total financial circumstances of the individual including outstanding balances owed to Holy Cross Health, debt and medical requirements as well as the individual's income and assets. The financial counseling manager will assemble the patient's request and documentation and present it to the financial assistance exception committee (comprised of the Chief Mission Officer, Chief Financial Officer, Chief Quality Officer and the Vice President, Revenue Cycle Operations) for consideration.

In any case where the patient's statements to obtain financial assistance are determined to be materially false, all financial assistance that was based on the false statements or documents will be rescinded, and any balances due will be processed through the normal collection processes.

The scheduled financial assistance program provides free medically necessary care to those most in need – patients who have income equal to or less than 200% of the federal poverty level. It also provides for a 60% reduction in charges for those whose income is between 201% and 300% of the poverty level, and 30% assistance from 301% to 400% of the federal poverty level. For those patients who demonstrate a medical financial hardship, a minimum of 30% assistance may be provided from 401% to 500% of the federal poverty level. Holy Cross Health's schedule of financial assistance will change according to the annual update of federal poverty levels published in the HHS Federal Register.

Continuing financial obligation of the patient: Patients who receive partial financial assistance have been determined to be capable of making some payment for their care. Unless a specific patient financial assistance exception request is made and approved, or hospital management formally adopts a procedure that exempts collection processes for particular services, patients are expected to pay the amount of the reduced balance. In cases other than the above, any patient who fails to pay their reduced share of the account in question will have that account processed through our normal collection procedures, including the use of outside agencies and credit reporting. However, Holy Cross Health will not pursue a judgment against anyone who has legitimately qualified for any scheduled level of Holy Cross Health financial assistance. Payment plans are also made available to uninsured patients with family income between 200% and 500% of the federal poverty level that request assistance.

Notice of Financial Assistance

The financial assistance program is publicized to patients of Holy Cross Health to whom it may apply. The information will be made available via the following methodologies:

1) A plain language summary of the Holy Cross Health's financial assistance policy, financial assistance applications, and the Hospital patient information sheet is prominently displayed in all registration and cashier areas, the facilities' main lobby, cafeteria and the emergency center, and the health center campuses in English, Spanish and in the predominant languages represented by our patient population as defined by applicable regulations. All documents can also be accessed, viewed, downloaded and printed from Holy Cross Health's external website.
2) Notice of financial assistance availability is indicated on all Holy Cross Health billing statements along with a reference to the external website and phone number where inquiries can be made.
3) All self-pay patients are advised of the existence of the financial assistance program during the pre-registration and registration process.
4) Information regarding eligibility and applications for financial assistance will be mailed to any patient who requests it at any time – including after referral to collection agencies.
5) A notice will be published each year in a newspaper of wide circulation in the primary service areas of Holy Cross Health.

Related Documents

- Billing and Collection of Patient Payment Obligations Policy

References

- Trinity Health. "Billing, Collection and Support for Patients with Payment Obligations", Trinity Health system policy 6-11-1, February 28, 2013.
- Federal Poverty Guidelines, HHS Federal Register

Questions and More Information

Contact the financial counseling department at 301-754-7195 or the financial counseling manager at extension 301-754-7193 with questions and for more information.

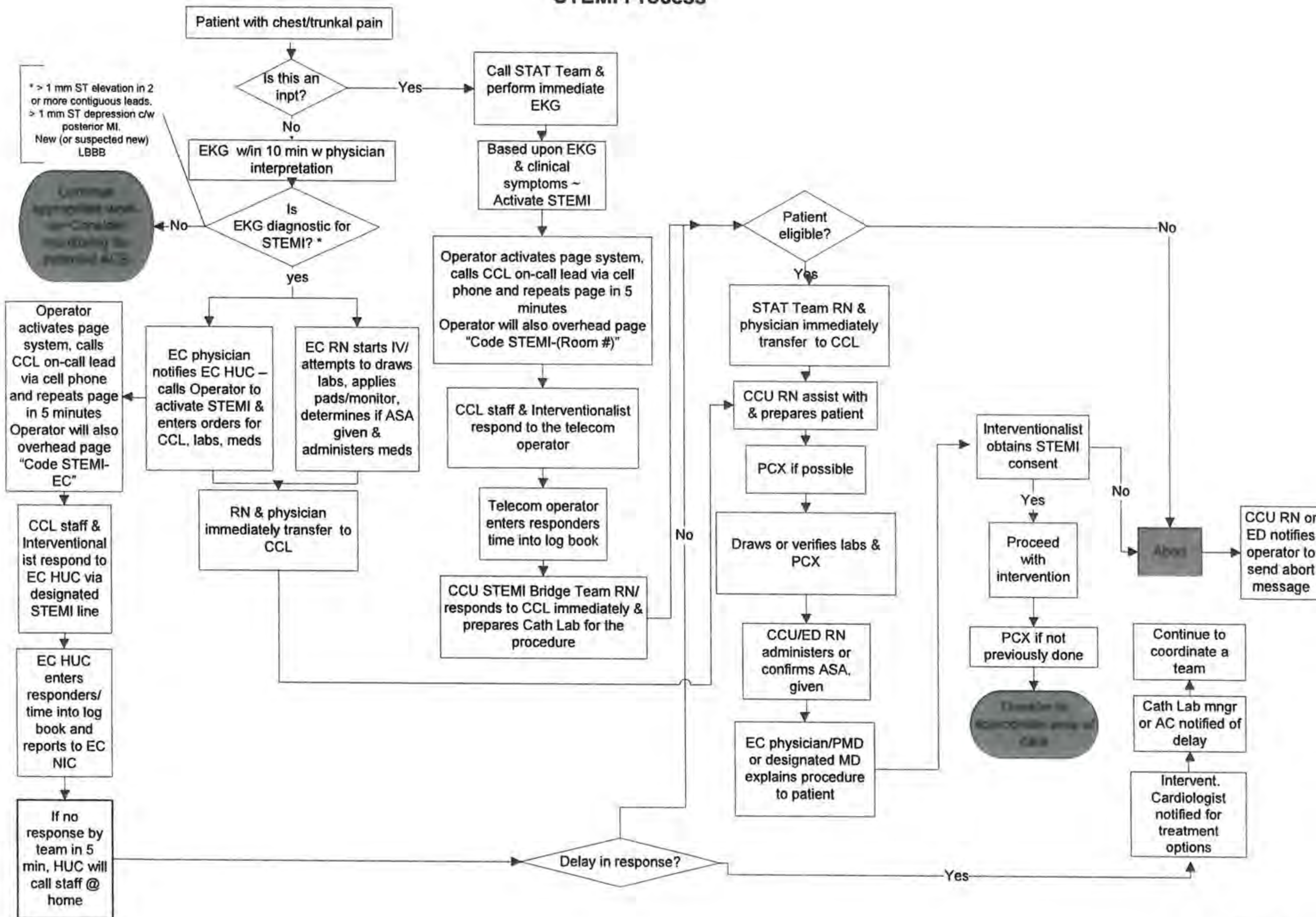
Policy Modifications

The Holy Cross Health Board of Directors must approve modifications to this policy. In addition, this policy will be presented to the Board for review and approval every two years.

Approval

This policy was reviewed and approved by the Holy Cross Health Executive Team and the Holy Cross Health Board of Directors on July 25, 2013

STEMI Process



Revised
1/19/2014
Performance Improvement

Emergency Center - Cardiac Monitoring Policy

Owner/Dept: LINDA RIVERA, Sr. Dir Emergency Svcs/ Patient Care Services	Date approved: 11/22/2013
Approved by: James DelVecchio (MD), KIMBERLY BAKER (Sr. Dir Emergency Svcs), LINDA RIVERA (Sr. Dir Emergency Svcs)	Next Review Date: 11/22/2016
Affected Departments: Emergency Department Services	

Purpose

To outline the policy for cardiac monitoring in the Holy Cross Hospital Emergency Center

Scope

- Applies to Nursing and Medical Staff who function in the Emergency Center

Policy overview

Patients that arrive in the emergency center and exhibit signs or symptoms of cardiac, respiratory or neurologic compromise or who during triage/nursing assessment are determined to need cardiac monitoring will have continuous cardiac monitor. A physician order will be documented for the initiation and discontinuation of cardiac monitoring.

Policy statements

An RN, LPN, or Emergency Department technician can apply the cardiac monitor leads.

It is the primary, or patient-assigned RN's responsibility to ensure the patient has been admitted to the cardiac monitor with a last name and that the monitor and the monitor alarms are adjusted according to the patient history and presentation.

The primary, or patient-assigned RN will assess the patient's initial cardiac rhythm and obtain, document, and analyze a 6 second strip without artifact. For patients with potential acute coronary syndrome two strips should be documented, in Lead II, VI, or V3 and in Lead III.

A physician order will be obtained for the initiation and discontinuation of the patient's cardiac monitoring.

The primary, or patient-assigned RN will immediately respond to all cardiac and respiratory alarms to check the patient prior to briefly silencing the alarm.

Significant changes in patient's rate or rhythm should be documented with a cardiac strip

print out. The assigned emergency center physician will be notified of significant changes in a patient's cardiac and respiratory status.

When the primary, or assigned RN is notified by the emergency center charge RN or the telemetry technician of a change in a patient's cardiac tracing or heart rate the RN will immediately assess the patient. If the telemetry technician notifies the RN of a lead disturbance the RN will correct the problem.

When/if a patient needs to be disconnected from the monitor for testing or other purposes the alarm will be paused and reset as quickly as possible after re-connection.

Patients that are provided continuous cardiac monitoring will have a strip documented every eight hours or more frequently as clinically indicated.

At the time of patient discharge or transfer to an inpatient unit the patient will be discharged from the cardiac monitor.

Related Policy: Patient Transportation: Intra-hospital (Excludes NICU)

STEMI IN THE EMERGENCY CENTER

Owner/Dept: LINDA RIVERA, Sr. Dir Emergency Svcs/ Patient Care Services	Date approved: 11/26/2013
Approved by: James DelVecchio (MD), KIMBERLY BAKER (Sr. Dir Emergency Svcs)	Next Review Date: 11/26/2016
Affected Departments: Cardiac Catheterization Lab, Coronary Care Unit, Emergency Department Services, Nursing Float, Radiology	

Purpose

To describe the procedural process to care for a patient who meets the STEMI criteria in the Emergency Center

Scope

Emergency Center Nursing and Medical Staff, CCU Nursing Staff, Radiology, Cardiac Cath Lab Staff., Laboratory Services

Process overview

- A code STEMI may be called from a pre-hospital EKG transmitted by EMS to the EC via LifeNet OR
- Reported verbally per EMS report OR
- Patients may present to the EC with complaints of chest pain, truncal pain or cardiac compromise.
- An EKG will be performed within 10 minutes of arrival (An EMS transmitted EKG may serve as the EKG of record)
- The pre hospital EKG or conducted EKG will be immediately presented to a physician for review. The EC physician initials the EKG indicating it has been reviewed by a physician.
- On review of the EKG, the EC physician activates the STEMI process if EKG meets criteria. The EC physician will notify the HUC, charge RN and primary RN of STEMI activation
- If a code STEMI is not activated from a pre-hospital EKG, and an EKG performed in the EC meets criteria for STEMI, the physician will alert the HUC and RN to activate code STEMI.
- The EC physician will place appropriate orders for patient management, including an order for a cardiac catheterization
- The HUC notifies the page operator to call a code STEMI
- The HUC will notify the Charge Nurse that STEMI activation has taken place
- The HUC receives return calls from the Cath Lab team and Cardiologist. The time the call is received, and the name of the team member will be recorded by the HUC on the STEMI call log.

Upon STEMI activation:

The Emergency Center RN will:

- Remove all patient clothing and personal effects.
- Establish a large bore IV and attempt to obtain necessary labs (obtaining labs should not delay patient transport to the CCL)
- Administer and document all medications as ordered by physician
- Prepare patient for transport to cath lab by placing patient on portable monitor and portable oxygen tank
- Place defibrillator pads on patient per ACLS protocol
- Transport the patient to the CCL with the EC physician
- Assist with patient care, as needed, until report is given and released by the CCL RN

The CCU nurse will:

- Report to the CCL once the code STEMI is called
- Prepare the CCL for patient arrival, including McKesson set up
- Verify proper defibrillator/ lead placement
- Administer ordered medication
- Assist with patient care as needed, including clipping groin, until released by the CCL RN

The Emergency Physician will:

- Interpret patient EKG and activate STEMI
- Enters orders for CCL, diagnostics and therapuetics
- Accompanies the patient and EC RN to the CCL and manages the patient care
- Explains the procedure to the patient and their family
- Hands off care to the interventional cardiologist

The lab technician will:

- Report to the EC when code STEMI is called
- Follows patient to the CCL and draws labs if still needed
- Delivers blood and labels to the EC Stat lab

The MI technician will:

- Report to the CCL when the code STEMI is called
- Performs PCXR prior to procedure
- If unable to perform prior to procedure, will return when procedure is concluded

Definitions

EKG – electrocardiogram
CCU – Coronary Care Unit
STEMI – ST segment elevation myocardial infarction
EC – Emergency Center
CCL- Cardiac Cath Lab
MI- Medical Imaging

Related standards

Simultaneous STEMI Patients Arriving for the Cardiac Catheterization Lab

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Appendix B: ESI Patient Flow Plan

A Patient Enters ---ESI Patient Flow Plan---May 13, 2010

<u>**GREETER TRIAGE NURSE**</u>
Sorts Patients at the door for

- A. **ESI #1**------------ **Immediate Bed Placement**\ Resuscitation, No VS, No Triage note, Registration at Bed Side
- B. **ESI#2**------------ **Immediate Evaluation with in 10 minutes**, VS optional for decision making, No or Brief triage note, Registration at Bed Side
- C. **Potential ESI#3**---after Greeter RN assessment
- D. **ESI #4 and 5-----Directly to Express Care** — No WR Registration or VS
  Registration in Express Care

<u>**ERQ REGISTRATION**</u>---------------ERQ registration and ID band only, All other registration is done at the Bed Side

<u>**V.S. TECHNICIAN STATION**</u>

- A. **Normal VS**- waits to see the Triage Sort RN-Waiting Room/ Line by number
- B. **Abnormal VS** -----Directly to Triage Sort RN

<u>**SORT TRIAGE RN**</u>----Adult or Pediatric--- <u>Determines if it is Safe to wait or may Elevate</u> ESI Priority to ESI#2

- A. Focused chief complaint exam
- B. VS assessment
- C. Medical Resource Assessment
  - >2 Medical Resources= ESI #3
  - 1 Medical Resource = ESI #4
  - 0 Medical Resources= ESI #5
- D. May order protocol testing

<u>**ESI# 3-WAITING ROOM**</u> **—Safe to Wait---Normal VS-**

- A. Monitored repeat VS Q2H
- B. Specimen Collection Area
  1. Protocol Testing Ordered by the Triage Sort RN, Triage Assessment RN or ERMD
- C. **To ED Bed if needed and when available**
- D. **Discharge from WR after Triage ERMD evaluation**

<u>**ASSESSMENT TRIAGE RN**</u>

- A. Time limited treatments-Stemi/CVA if no bed available
- B. Complex or difficult patient assessments
- C. Specimen Collection as needed
- D. Disposition ESI #3 patients in WR with ERMD after exam and test results

<u>**EXPRESS CARE**</u>—if no Express Care Exclusionary Criteria

HOLY CROSS HOSPITAL

Cardiac TPA Administration

Owner/Dept: DIANE MARVINNEY, Professional Development Spl/ Emergency Department Services	Date approved: 05/20/2014
Approved by: Pharmacy and Therapeutics (P&T), James DelVecchio, LINDA RIVERA, Pharmacy and Therapeutics (P&T), MD, Sr. Dir Emergency Svcs	Next Review Date: 05/20/2017
Affected Departments: Emergency Department Services	

Purpose

To outline the Holy Cross Hospital protocol for thrombolytic therapy administration to patients determined to benefit from cardiac thrombolysis

Scope

- Emergency Center Nursing and Medical Staff

Policy Overview

Cardiac Thrombolytic therapy may be the option of choice when the 90 minute door to balloon time cannot be achieved due to operational or weather related issues. When not contraindicated, thrombolytic therapy is advised for patients as a second-line intervention to decrease cardiac ischemia when interventional therapies cannot be performed. Door to needle time is 30 minutes or less from the time a STEMI is diagnosed.

Physician Evaluation

An order from the medical staff provider is required for thrombolytic therapy administration. Patient contraindications and benefits of therapy will be determined by the medical provider, discussed with the patient and/or appropriate significant other and consent will be obtained.

Pre-Procedure

1. Patient actual weight must be documented as well as head to toe physical assessment. Communicate abnormalities to physician.
2. Make Patient NPO
3. Confirm TPA checklist has been completed and verbal consent is performed.
4. Two nurses are assigned to the patient for the first 30 minutes of drug administration. After the first 30 minutes the patient remains a 1:1 nurse patient ratio until transfer to the critical care area. Patients should not be transported off the unit during TPA infusion. Anticipate reperfusion dysrhythmias during administration and after TPA infusion.
5. Establish intravenous access with a minimal of two (2) sites, with a 20 gauges or large size catheter.

6. Ensure patient is monitored with continuous cardiac and pulse oximetry. Document initial rhythm strip as well as every hour rhythm strip and changes with dysrhythmias.

7. Discuss with physician need for further diagnostic or tests, specific to blood, urine, x-ray, prior to administration of medication.

Administration of TPA

1. Mix t-PA according to manufacturer's instructions and determine dosing regimen.

2. Prior to administration of t-PA, two (2) RNs must perform a verification of the patient identification, verification of the order with the correct drug, dose and rate of infusion at the bedside and co-sign in the patient's medical record in the nurses note and/or MAR.

3. Withdraw t-PA bolus, 15 mg, and administer by IVP over 1-2 minutes.

4. Utilizing an infusion pump device, administer ***remaining weight-based dose*** as per order using calculations below.
   - 0.75 mg/kg (max 50 mg) over 30 minutes
   - 0.5 mg /kg (max 35 mg) over 60 minutes

5. Once the t-PA has started there are no IV, IM sticks during the infusion or 2 hours post infusion. No arterial sticks for 24 hours post infusion.

6. VS, pulse oximetry and neurologic checks are documented every 15 minutes during infusion, every 30 minutes for 2 hours post infusion, and then per unit policy or as patient condition warrants. Manual Blood Pressures, not automatic cuffs or blood pressures, should be used for the first 24 hours to negate the possibility of compartment syndrome.

7. Report dysrhythmias, VS or neurological changes, bleeding or new onset headache to the physician immediately.

8. Provide education to patient and significant others as needed during and post infusion.

9. Post-procedure: obtain 12 lead EKG one (1) hour after infusion completed. Continue to observe for reperfusion dysrhythmias. Two RNs will transfer patient to inpatient unit.

Education plan

Staff is educated in use of TPA for cardiac patients in orientation and/or in continuing education sessions.

Related standards

- Simultaneous STEMI in the Emergency Center, Holy Cross Hospital
- ACC/AHA "Guidelines for the Management of Patients with ST-Elevation Myocardial Infarction", Circulation (2004) pages 588-636 doi: 101161/01.Cir.0000134791.68010.FA
- Mission Lifeline: Stemi Systems of Care in Maryland
- MIEMSS: Region V STEMI Plan, 2013

Medical

Myocardial Infarction (STEMI) Acute Care Admit (TH)

Code Status

- EVIDENCE: Consider a clinical assessment to estimate the risk of mortality.
  oekm..9692
- Full Resuscitation

- Resuscitation Orders (TH)
- Resuscitation (FR)
- AICD Deactivation (AA)
- AICD Deactivation (HO/SA)

Admit/Discharge/Transfer

- STEMI Alogrithm
  //www.guidelines.gov/algorithm/4683/NGC-4683_3.html
- Admit to Inpatient Status

- QUALITY INDICATOR: Primary Percutaneous Coronary Intervention should be performed within 90 minutes of arrival, with a target of less than 60 minutes.

- Please refer to the Cardiac Catheterization Pre Procedure (TH) power plan for Cardiac Catheterization orders.

- Document a Problem

Consults

- Physician Consult - Reason: Cardiology

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- Case Management Consult - Reason: Acute Myocardial Infarction. Assess discharge planning needs.

X - Consult Cardiac Rehab - Reason: Myocardial infarct

X - Cardiac Rehab - Reason: Other- Myocardial Infarct

- Nutrition Consult

- Consult Social Work

- Consult Social Services/Case Management (DB)

- Consult Social Work (SC)

Patient Care

X - DVT/VTE Discern Advisor

X - AMI Quality Measures

X - Enoxaparin STEMI (TH)

Vitals Signs

X - Vital Signs - Per guideline

Activity

- Bedrest - With bedside commode for 24 hours.

- Activity as Tolerated - After 24 hours of bedrest, ambulate as tolerated.

- Activity - As indicated per Cardiac Rehabilitation guidelines.

Assessments

X - Intake and Output - Routine

X - Cardiac Monitoring - Indication: Evaluate for ACS, Continuous

X - Initiate Telemetry - Indication: Evaluate for ACS

- Remote Telemetry - Indication: Evaluate for ACS, Per Hospital Policy

- Pulse Oximeter/Nursing - On admission and as needed to assess shortness of breath.

X - Weight - Daily 6am

X - Weight (AA) - Daily 6am

Interventions

- Balloon Pump (TH)

Contingencies

X - Notify Physician of Abnormal Vital Signs/Output - T Above 38.3C/ 101F, HR/P Above 120 HR/P Below 60, SBP Above 180 SBP Below 90, DBP Above 100 DBP Below 40, UO Below 0.5mL/kg/hr, Or symptomatic hypotension or bradycardia

X - Notify Physician - For unrelieved chest pain.

X - ECG PRN Communication Order - Nurse order ECG STAT for: Chest Pain -unrelieved, Please consider using the significant event form to document and communicate a change in patient status. Use departmental order communication when entering the ECG order.

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- Covering Physician (AA)

Protocols

- Hypoglycemia - Non-Pregnant, Initiate Protocol

- Diabetes NPO After Midnight, Initiate Protocol

- Initiate Hypoglycemia Protocol When Needed (CH)

X - Protocol Urgent Measures Initiate When Needed - Use Urgent Measures Protocol PowerPlan/Orderset to initiate appropriate orders.

- Protocol Critical Care Initiate When Needed - For Critical Care: Dorsiflexion Boots | Local Anesthetic - IV Insertion | Urgent Measures

- Protocol Clinical Nutrition Initiate When Needed (AA) - For Clinical Nutrition: Food Service SJMHS-Nutrition | Laboratory SJMHS-Nutrition | Meta Meas Study SJMHS-Nutrition | Nutrition Referral SJMHS -Nutrition | Oral Supplements SJMHS-Nutrition | Pharmacy SJMHS Pharmacy-Nutrition | Tube Feeding SJMHS-Nutrition

- Initiate Clinical Nutrition Protocol When Needed

- Protocol Social Work Case Mgmt Initiate When Needed - For Social Work-Case Mgmt Chest X-Ray ECF Placement | Home Care and Hospice | OT Evaluation-Post Discharge Acute Care | PT Evaluation - ECF Placement

Diet

- Diet (AA)
  - -NPO
  - -Clear Liquid Diet, Caffeine Restricted
  - -Caffeine Restricted | Low Sat Fat/Low Cholesterol, Sodium 2 gm Restriction

Caffeine Restricted | Low Sat Fat/Low Cholesterol, 1800 CAL Consistent Carbohydrate, Sodium 2 gm Restriction

- Diet (BIA)
  - -NPO
  - -Clear Liquid Diet, Caffeine Free Diet
  - -Low Fat/Low Cholesterol, Caffeine Free Diet, Sodium 2 gm Restriction

Low Fat/Low Cholesterol, 1800 CAL Consistent Carbohydrate, Caffeine Free Diet, Sodium 2 gm Restriction

- Diet (CH)
  - -NPO
  - -Clear Liquid Diet, Caffeine Restricted
  - -Caffeine Restricted | Low Sat Fat/Low Cholesterol, Sodium 2 gm Restriction

Caffeine Restricted | Low Sat Fat/Low Cholesterol, 1800 CAL Consistent Carbohydrate, Sodium 2 gm Restriction

- Diet (CL)
  - -NPO
  - -Clear Liquid | Caffeine Free
  - -Caffeine Free | Low Fat/Low Cholesterol, Sodium 2 gm Restriction
  - -Caffeine Free | Low Fat/Low Cholesterol, Diabetic 1800 CAL, Sodium 2 gm Restriction
- Diet (DB)
  - -NPO

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-Clear Liquid

-Low Saturated Fat, Sodium 2 gm Restriction

-Low Saturated Fat, Diabetes Diabetic 1800 CAL, Sodium 2 gm Restriction

- Diet (FR)
  - -NPO
  - -Caffeine Free | Clear Liquid Diet
  - -Low Fat/Low Cholesterol | Caffeine Free Diet, Diabetic 1800 CAL, Sodium 2 gm Restriction

Low Sat Fat/Sodium 2gm (Heart Failure), Consistent Carbohydrate (no CAL level), Caffeine Free Diet, Sodium 2 gm Restriction

- Diet (GT)
  - -NPO
  - -Clear Liquid Diet, Caffeine Free Diet
  - -Caffeine Free Diet, Low Sat Fat/Low Cholesterol, Sodium 2 gm Restriction

Caffeine Free Diet, Low Sat Fat/Low Cholesterol, 1800 CAL Consistent Carbohydrate, Sodium 2 gm Restriction

- Diet (LI)
  - -NPO
  - -Caffeine Free | Clear Liquid
  - -Caffeine Free | Low Fat/Low Cholesterol, Sodium 2 gm Restriction
  - -Caffeine Free | Low Fat/Low Cholesterol, Diabetes Diabetic 1800 CAL, Sodium 2 gm Restriction

- Diet (PO)
  - -NPO
  - -Clear Liquid
  - -Low Fat/Low Cholesterol, Sodium 2 gm Restriction
  - -Low Fat/Low Cholesterol, Diabetes Diabetic 1800 CAL, Sodium 2 gm Restriction

- Diet (SC)

-NPO
-Clear Liquid | Caffeine Free
-Low Fat/Low Cholesterol | Caffeine Free, Sodium 2 gm Restriction
-Low Fat/Low Cholesterol | Caffeine Free, Diabetes Diabetic 1800 CAL, Sodium 2 gm Restriction

- Diet (SS)
  -NPO
  -Clear Liquid Diet, Caffeine Free Diet
  -Caffeine Free Diet, Low Fat/Low Cholesterol, Sodium 2 gm Restriction
  -Caffeine Free Diet, Low Fat/Low Cholesterol, Diabetic 1800 CAL, Sodium 2 gm Restriction

- Communication Order Dietary - No Caffeine for 24 hrs.

Infusions

Primary Infusions

- Sodium Chloride 0.9% - mL/hr, IV, 1,000 mL, Infusion

- Dextrose 5% in Water - mL/hr, IV, 1,000 mL, Infusion

- Dextrose 5% with 0.45% NaCl - mL/hr, IV, 1,000 mL, Infusion

- Insert Saline Lock

- Convert IV to Saline Lock

Drips

- DOBUTamine Infusion - Dobutrex (AA)
- Amiodarone New Start or IV - Cordarone (AA)
- DOPamine Infusion - Intropin (AA)
- Heparin Infusion Cardiology (AA)
- Lidocaine Infusion (AA)

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- Nitroglycerin Infusion (AA)
- Anticoagulation Infusions (TH)
- Antiarrhythmic Infusions (TH)
- Antihypertensive Vasodilator Drips (TH)
- Vasopressor Infusions (TH)
- Heparin Infusion Coronary Nomogram Includes Post Thrombolytic (BIA)
- Heparin Infusion (CL)
- Heparin Infusion Cardiology (Weight Based) (FR)
- Heparin Infusion for DVT/PE (FR)
- Heparin Nomogram (LI)
- Heparin Infusion for Atrial Fibrillation (PO)
- Anticoagulation Non-Stroke Heparin Anti-Xa (SC)
- Heparin Nomogram (SS)

- Heparin Infusion (SS)

Medications

Thrombolytics

- QUALITY INDICATOR: Thrombolysis should be instituted within 30 minutes of arrival.
- Myocardial Infarction Fibrinolysis Pre Procedure (TH)
- Myocardial Infarction Thrombolysis (TH)
- Myocardial Infarction Fibrinolytic Therapy - Tenecteplase (AA)

Platelet Inhibitors

- QUALITY INDICATOR: If not given in ED, give chewable Aspirin dose on admission
- aspirin
  - -162 mg, PO, Tab Chew, Once, ASAP
    If not given in ED
  - -324 mg, PO, Tab Chew, Once, ASAP
    If not given in ED

- aspirin - 300 mg, Rectal, Suppos, Once, ASAP
  If unable to tolerate oral dose, if not given in ED

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- ** Daily Dose **
- aspirin
  - -81 mg, PO, Tab EC, Daily
  - -162 mg, PO, Tab EC, Daily

- aspirin - 325 mg, PO, Tab EC, Daily

- ** For patients with feeding tubes select Buffered Aspirin below **

- Livingston. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Silver Spring. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Chelsea. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**
- Aspirin Buffered (Ascriptin)* - 1 Tab, Feed Tube, Daily

- Aspirin Buffered (Bufferin) - 325 mg, Feed Tube, Tab, Daily

- Baker City. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

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- Ontario. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Nampa. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Sioux City. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Livonia. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**
- ** If initially contraindicated, continue daily assessment to ascertain eligibility. **
- Plavix*
    - -300 mg, PO, Tab, Once, STAT
        Loading Dose if not given in ED.
    - -600 mg, PO, Tab, Once, STAT
        Loading Dose if not given in ED.

- Plavix* - 75 mg, PO, Tab, Daily

Cardiac: Beta Blockers

- ADVISORY: IV beta blockers should not be administered to STEMI patients who have any of the following: 1) signs of heart failure, 2) evidence of a low output state, 3) increased risk for cardiogenic shock, or 4) other relative contraindications to beta blockade

- ADVISORY: Intravenous beta blocker administration is reasonable in STEMI patients without contraindications especially if a tachyarrhythymia or hypertension is present. (ACC, 2007)

- ADVISORY: Patient must have cardiac monitoring in place to receive IV Metoprolol.
- Lopressor Inj* - 5 mg, IV Push, Inject, Q5min, x 3 Time(s)/Dose(s)

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Hold for HR less than 45 BPM, 2nd or 3rd degree heart block, PR interval greater than or equal to 0.24 seconds, SBP less than 100 mmHg, or moderate or severe heart failure.

- ** Metoprolol (Lopressor) order below to follow IV doses **
- Lopressor* - 50 mg, PO, Tab, Once, STAT
  Administer on admission if not given in ED following IV doses if ordered.

- Tenormin Oral* - 50 mg, PO, Tab, Once, STAT
  Administer on admission if not given in ED.

- Tenormin Oral*
  - -50 mg, PO, Tab, Daily
  - -50 mg, PO, Tab, BID

- Lopressor*
  - -50 mg, PO, Tab, Q12h
  - -50 mg, PO, Tab, QID

- Coreg* - 6.25 mg, PO, Tab, w/bkfst+din

- ** If initially contraindicated, continue daily assessment to ascertain eligibility.**

Angiotensin-Converting Enzyme Inhibitors

- Capoten* - 6.25 mg, PO, Tab, Once, x 1 Time(s)/Dose(s)
  Test dose, if not given in ED.

- Capoten* - 12.5 mg, PO, Tab, TID
  Starting on Day 2 if test dose tolerated.

- Lisinopril (Zestril/Prinivil)* - 5 mg, PO, Tab, Daily, x 2 Day(s)

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- Lisinopril (Zestril/Prinivil)* - 10 mg, PO, Tab, Daily
  Start on Day 3

Angiotensin Receptor Blockers

- Cozaar*
  - -12.5 mg, PO, Tab, Daily
  - -25 mg, PO, Tab, Daily
  - -25 mg, PO, Tab, Q12h
  - -50 mg, PO, Tab, Q12h

- Diovan*
  - -80 mg, PO, Tab, Daily
  - -160 mg, PO, Tab, Daily
  - -40 mg, PO, Tab, Q12h
  - -80 mg, PO, Tab, Q12h

- Atacand*
  - -4 mg, PO, Tab, Daily
  - -8 mg, PO, Tab, Daily
  - -4 mg, PO, Tab, BID

- Avapro*
  - -75 mg, PO, Tab, Daily
  - -150 mg, PO, Tab, Daily

- ** If initially contraindicated, continue daily assessment to ascertain eligibility.**

Calcium Channel Blockers

- EVIDENCE:For patients with a contraindication to or inadequate response to beta blockers, consider the use of a calcium channel blocker to control ischemia and heart rate.

- Cardizem Oral*
  - -30 mg, PO, Tab, Q6h

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-60 mg, PO, Tab, Q8h

- Cardizem CD* - 240 mg, PO, Cap CD, Daily

- Verapamil Oral (Calan/Isoptin)* - 80 mg, PO, Tab, Q8h

- Calan SR 240 mg Tab* - 1 Tab, PO, Daily

Cardiac: Nitrates

- Nitrostat* - 0.4 mg, Subl, Tab Subl, Q5min, PRN, See Comments
PRN Cheat Pain x 3 doses Per each episode of chest pain. If no relief after 3 doses contact physician

- Nitroglycerin Ointment 2%* - 1 Inch, Topical, Q6h

Cardiac: Lipid Regulating Agents

- WARNING: If patient on Amiodarone (Cordarone), there is an increased risk of myopathy with Simvastatin (Zocor) doses greater than 20 mg. Consider using a different formulary HMG-CoA reductase inhibitor (e.g., Pravastatin (Pravachol), low dose Atorvastatin (Lipitor), Rosuvastatin (Crestor)).

- National Cholesterol Education Program Guidelines
  URL:https://www.zynx.com/Reference/Content.aspx?Ite
- Zocor*
  -40 mg, PO, Tab, Bedtime
  -80 mg, PO, Tab, Bedtime

- Lipitor*
  -20 mg, PO, Tab, Bedtime
  -40 mg, PO, Tab, Bedtime
  -80 mg, PO, Tab, Bedtime

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- Atorvastatin - Lipitor (SS)
- Atorvastatin - Lipitor (AA)
- Statin Therapy - Contraindication

Aldosterone Antagonists

- Aldactone
  - -12.5 mg, PO, Tab, Daily
  - -25 mg, PO, Tab, Daily

Pain Management

- Tylenol* - 650 mg, PO, Tab, Q4h, PRN, Pain - Mild
  *** Maximum 4 Gm Acetaminophen/Day for Adults ***

- Morphine Inj* - 2 mg, IV Push, Inject, Q5min, PRN, Chest Pain, x 3 Time(s)/Dose(s)
  Chest pain unrelieved by nitroglycerin. Notify physician if pain persists

Smoking Cessation Agents

- Nicotine Addiction (TH)

Antiemetics

- Nausea and Vomiting Treatment (TH)

Antiulcer

- Stress Ulcer Prophylaxis (TH)
- Stress Ulcer Prophylaxis (AA)

Laxatives

- Colace*
  - -100 mg, PO, Cap, Bedtime
  - -100 mg, PO, Cap, BID

- Milk of Magnesia 8% - 30 mL, PO, Daily, PRN Constipation

- Milk of Magnesia Conc 24% - 10 mL, PO, Daily, PRN Constipation

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- Dulcolax* - 10 mg, Rectal, Suppos, Daily, PRN, Constipation

Sedatives

- Xanax*
  - -0.25 mg, PO, Tab, Q8h, PRN, Anxiety
  - -0.5 mg, PO, Tab, Q8h, PRN, Anxiety

- Ambien*
  - -5 mg, PO, Tab, Bedtime, PRN, Insomnia/Sleep
  - -10 mg, PO, Tab, Bedtime, PRN, Insomnia/Sleep

- Restoril* - 15 mg, PO, Cap, Bedtime, PRN, Insomnia/Sleep

Laboratory

- ADVISORY: Do not repeat studies performed in the ED unless indicated by patient condition.

Panels

- Basic Metabolic Panel - Blood, Routine, Next AM x 1 Day(s)

- Basic Metabolic Panel (TH) - Routine, Next AM x 1 Day(s)

- Comprehensive Metabolic Panel - Blood, Routine, Next AM x 1 Day(s)

- Comprehensive Metabolic Panel (TH) - Routine, Next AM x 1 Day(s)

- Electrolyte Panel - Blood, Routine, Next AM x 1 Day(s)

- QUALITY INDICATOR: A fasting lipid profile should be assessed in all patients within 24 hours of hospitalization for an acute cardiovascular or coronary event. (CMS, 2010)

- Lipid Panel - Blood, Routine, Next AM x 1 Day(s)

Chemistry

- BNP (B -Type Natriuretic Peptide) - Blood, Routine, Next AM x 1 Day(s)

- BNP N-Terminal pro (TH) - Routine, Next AM x 1 Day(s)

- **The CK order below will initiate first draw NOW and then Q6h x2**
- CK-MB - Blood, Timed, Q6h x 3 Time(s)/Dose(s)

  CONTENT:oekm..176722
- Creatine Kinase (CK) - Blood, Routine, Q6h Start at x 3 Time(s)/Dose(s)

  CONTENT:oekm..176722
- Glucose Level - Blood, Routine, Next AM x 1 Day(s)

- Magnesium Level - Blood, Routine, Next AM x 1 Day(s)

- ** The Troponin I order below will initiate first draw NOW and then in 6 hours**
- Troponin I - Blood, Timed, Q6h Start at x 2 Time(s)/Dose(s)

  CONTENT:oekm..176818

Coagulation

- Partial Thromboplastin Time (aPTT) - Routine, Blood, Next AM x 1 Day(s)

- Prothrombin Time - Routine, Blood, Next AM x 1 Day(s)

Hematology

- CBC with Differential - Blood, Routine, Next AM x 1 Day(s)

- CBC with Differential (s) - Blood, Routine, Next AM x 1 Day(s)

Radiology

General Diagnostics (X-ray)

- XR Chest 1 View - Chest Pain, Stat

Diagnostic Tests

Cardiology

- ECG 12 Lead - Reason: Acute MI, Next AM x 1 Day(s)
- ECG 12-Lead - Reason: Other- Acute MI, Next AM x 1 Day(s)
- ECG 15 Lead - Reason: Acute MI, Next AM x 1 Day(s)
- Echocardiograms (SDM)
- Echocardiograms (AA)
- Echocardiograms (BIA)
- Echocardiograms (CL)
- Echocardiograms (DB)
- Echocardiograms (SC)
- Echocardiograms (SS)
- Stress Tests (AA)
- .Stress Tests (BIA)
- .Stress Tests (BIE)
- Stress Tests (CH)
- .Stress Tests (FR)
- .Stress Tests (SAHS)
- Stress Tests (SS)
- Clinton** - Please go to order browse for your Stress Tests Order Set
- Dubuque** - Please go to order browse for your Stress Tests Order Set
- Livonia** - Please go to order browse for your Stress Tests Order Set

- Oakland** - Please go to order browse for your Echocardiograms Order Set and Stress Tests Order Set

- Sioux City** - Please go to order browse for your Stress Tests Order Set

Therapy

Respiratory

- Oxygen Therapy - Supplemental oxygen titration to maintain saturation greater than 90%

- Oxygen Therapy (DB) - Supplemental oxygen titration to maintain saturation greater than 90%

Medical

Myocardial Infarction Fibrinolysis Pre Procedure (TH)

Laboratory

- ORDERING INSTRUCTIONS:Order labs below if not already done.

Blood Bank

- Type and Screen - Stat
- Type and Screen (s) - Stat
- Type and Screen Automated (s) - Stat, x 1 Day(s)
- Type and Screen (CL) - Stat
- Type and Screen (DB) - Stat
- Type and Screen (ss) - Stat

Coagulation

- Fibrinogen Activity - Stat, Blood
- Partial Thromboplastin Time (aPTT) - Stat, Blood
- Prothrombin Time - Stat, Blood

Diagnostic Tests

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Cardiology

- ECG 12 Lead - Procedural - Prior to thrombolytic infusion

- ECG 15 Lead - Procedural - Prior to thrombolytic infusion

- ECG 12 Lead - Procedural. - Prior to thrombolytic infusion

Medical

Myocardial Infarction Thrombolysis (TH)

Admit/Discharge/Transfer

- Document a Problem

Patient Care

- THROMBOLYSIS GUIDELINES
- ADVISORY: Fibrinolysis is generally preferred if:
- Less than 3 hours has elapsed since symptom onset
- Delay to invasive strategy: medical contact to balloon or door to balloon time is greater than 90 minutes
- Delay to invasive strategy: (Door to balloon) - (Door to needle) greater than 1 hour
- Invasive strategy not an option: cath lab not available, vascular access difficulties
- .
- ADVISORY: Absolute contraindications to thrombolysis:
- Any prior intracranial hemorrhage
- Known structural cerebral vascular lesion
- Known primary or metastatic malignant intracranial neoplasm
- Ischemic stroke within 3 months EXCEPT acute ischemic stroke within 3 hours
- Suspected aortic dissection
- Active bleeding
- Significant closed head or facial trauma within 3 months
- .
- ADVISORY: Relative contraindications to thrombolysis:
- History of chronic, poorly controlled hypertension or severe uncontrolled hypertension on presentation (SBP greater than 180, DBP greater than 110)
- History of prior ischemic stroke greater than 3 months, dementia, or known intracranial pathology not listed in absolute contraindications
- Trauma or prolonged CPR (greater than 10 minutes), or major surgery within less than 3 weeks
- Recent internal bleeding (within 2 to 4 weeks)

- Pregnancy
- Active peptic ulcer
- Current use of anticoagulants (the higher the INR, the higher the risk of bleeding)

Vitals Signs

X - Vital Signs - Per guideline

Assessments

X - Neurological Checks - Per guideline

X - Cardiac Monitoring - Indication: Evaluate for ACS

X - Initiate Telemetry - Indication: Evaluate for ACS

- Remote Telemetry - Indication: Evaluate for ACS, Discontinue per Hospital Policy

Contingencies

X - Bleeding Precautions - Arterial and venous punctures, and intramuscular injections should be minimized. Observe all sites carefully for bleeding.

X - Communication Order Patient Care - Stop thrombolytic infusion immediately for any signs of bleeding or change in neurological status.

X - Communication Order Patient Care - If any signs of bleeding during thrombolytic infusion, obtain the following labs STAT: CBC, PT with INR, PTT and Fibrinogen.

X - Notify Physician - Notify physician for any signs of bleeding or change in neurological status.

X - ECG PRN Communication Order - Nurse order ECG STAT for: Chest Pain -unrelieved, Please consider using the significant event form to document and communicate a change in patient status. Use departmental order communication when entering the ECG order.

X - Notify Physician - If chest pain recurs or patient experiences new ECG changes.

Medications

- THROMBOLYTICS
- **Alteplase**
- **Accelerated Infusion: For patients weighing greater than 65 Kg**
- Activase Bolus* - 15 mg, IV Push, Inject, Once, STAT, Myocardial Infarction

- Activase Infusion* - 85 mg, IV, Inject, Once, Myocardial Infarction
After bolus dose, give 50 mg once over 30 minutes followed by 35 mg once over 60 minutes.
Accelerated Infusion: For patients weighing greater than 65 Kilograms

- **OR**
- **3 hour infusion: For patient weighing greater than 65 Kg**
- Activase Bolus* - 10 mg, IV Push, Inject, Once, STAT, Myocardial Infarction

- Activase Infusion* - 90 mg, IV, Inject, Once, Myocardial Infarction
After bolus dose, give 50 mg once over first hour followed by 20 mg for hours 2 and 3. **3 Hour Infusion: For patients weighing greater than 65 Kilograms**

- .
- **Accelerated infusion: For patients weighing less than 65 Kg**
- Activase Bolus* - 15 mg, IV Push, Inject, Once, STAT, Myocardial Infarction

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- Activase Infusion* - 0.75 mg/kg, IV, Inject, Once, Myocardial Infarction

After bolus dose, give 0.75 mg/Kg once over 30 minutes followed by 0.5 mg/Kg once over 60 minutes.
Accelerated Infusion: For patients weighing less than 65 Kilograms

- **OR**
- **3 hour infusion for patient weighing less than 65 Kg**
- Activase Bolus* - 0.125 mg/kg, IV Push, Inject, Once, STAT, Myocardial Infarction

- Activase Infusion* - 1.125 mg/kg, IV, Inject, Once, Myocardial Infarction

After bolus dose, give 1.125 mg/Kg once over 3 hours. **3 Hour Infusion: For patients weighing less than 65 Kilograms**

- .
- **Tenecteplase**
- **For patients weighing less than 60 Kg**
- TNKase* - 30 mg, IV Push, Inject, Once, STAT

  Once over 5 seconds

- **For patients weighing 60 to 69 Kg**
- TNKase* - 35 mg, IV Push, Inject, Once, STAT

  Once over 5 seconds

- **For patients weighing 70 to 79 Kg**
- TNKase* - 40 mg, IV Push, Inject, Once, STAT

  Once over 5 seconds.

- **For patients weighing 80 to 89 Kg**
- TNKase* - 45 mg, IV Push, Inject, Once, STAT

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Once over 5 seconds.

- **For patients weighing 90 Kg or greater**
- TNKase* - 50 mg, IV Push, Inject, Once, STAT
  Once over 5 seconds.

- Boise. - Tenecteplase (TNKase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

- Silver Spring. - Tenecteplase (TNKase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

- Fresno. - Tenecteplase (TNKase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

- Ontario. - Tenecteplase (TNKase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

- Baker City. - Tenecteplase (TNKase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

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- Nampa. - Tenecteplase (TNKase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

- Germantown. - Tenecteplase (TNKase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

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- **Reteplase**

- Retavase* - 10 Unit, IV Push, Inject, Q30min, STAT, x 2 Time(s)/Dose(s)
  Give 10 Units in 10 mL of sterile water. Give each dose IV Push over 2 minutes.

- Ann Arbor. - Reteplase (Retavase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

- Ontario. - Reteplase (Retavase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

- Baker City. - Reteplase (Retavase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives.**

- Nampa. - Reteplase (Retavase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

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- Livonia. - Reteplase (Retavase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Dubuque. - Reteplase (Retavase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Oakland. - Reteplase (Retavase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Sioux City. - Reteplase (Retavase) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

Diagnostic Tests

Cardiology

- ECG 12 Lead - Procedural - Reason: Other-, Perform immediately after thrombolytic infusion

- ECG 12 Lead - Procedural. - Reason: Other-, Perform immediately after thrombolytic infusion

- ECG 15 Lead - Procedural - Reason: Other-, Perform immediately after thrombolytic infusion

Simultaneous STEMI Patients Arriving to the CCL

Owner/Dept: VALARIE HARBAUGH, Director/ Cardiac Catheterization Lab	Date approved: 12/27/2013
Approved by: CANDACE HANRAHAN (Sr. Dir-CV & Crit Care), KIMBERLY BAKER (Sr. Dir Emergency Svcs)	Next Review Date: 12/27/2016
Affected Departments: All Colleagues, Cardiac Catheterization Lab, Cardiac Intermediate Care Unit, Coronary Care Unit, Emergency Department Services, Intermediate Care Unit, Medical Staff, Nursing Education, Post Procedure Recovery Area	

Purpose

To outline the Holy Cross Hospital (HCH) Policy regarding the care and treatment of simultaneous STEMI patients arriving to the CCL

Definitions

CCL Cardiac Cath Lab
HCH Holy Cross Hospital
STEMI ST-wave elevation Myocardial Infarction

Scope

This policy is to provide guidelines to ensure that quality patient care is delivered in the event of simultaneous activation of the CCL on call team for STEMI patients.

Policy overview

Patients who arrive at Holy Cross Hospital will receive appropriate treatment for their condition.

1) When two or more patients arrive simultaneously at Holy Cross Hospital, the interventional/STEMI cardiologist will prioritize the order the patients will present to the Cardiac Cath Lab in order to determine the best care for each patient.
2) If the interventional cardiologist is involved with another procedure a second STEMI patient arrives, the interventional cardiologist may request a second interventional cardiologist to be contacted by the emergency center. The emergency physician will stabilize the second patient until an interventional cardiologist is available

The emergency center physician will collaborate in the decision making process and weigh the following options:

- Interventional procedure
- Thrombolytics
- Transfer to another facility.

> *NOTE*: A medical decision may be made to treat the patient with thrombolytics if the door to needle time is less than 30 minutes and the expected door to reperfusion time is greater than 90 minutes

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Diversion of STEMI patients

Diversion of a STEMI patient is extremely unlikely. If this occurs the emergency center will, please refer to the following policy:

Diversion Management

References

Maryland Institute of Emergency Medical Systems Services, Maryland Chapter ofAmerican College of Cardiology and American Heart Association Mission: Lifeline Overview. Conference May 22, 2010, Anne Arundel Medical Center.

Patients Requiring a Percutaneous Cardiac Interventional Procedure (PCI)/Angioplasty/Stent

Owner/Dept: VALARIE HARBAUGH, Director/ Cardiac Catheterization Lab	**Date approved: 12/27/2013**
Approved VALARIE HARBAUGH, Director/ Cardiac Catheterization Lab	**Next Review Date: 12/27/2016**
Affected Departments: Cardiac Catheterization Lab, Emergency Department Services	

Purpose

To outline the Cardiac Catheterization Laboratory (CCL) procedure for performing a Percutaneous coronary intervention (PCI)/Angioplasty/Stent.
To define requirements for PCI at Holy Cross Hospital STEMI Receiving Center for patients transported via the 9-1-1- system with ST-elevation myocardial infarction (STEMI) or in-house patients who may benefit by rapid assessment and Percutaneous coronary intervention (PCI). This interventional procedure is supported by the cardiologist's diagnosis from left heart catheterization in conjunction with symptoms and non-invasive test/tests for ischemia.

Scope

- Cardiac/Vascular Catheterization Laboratory
- Interventional Cardiologists
- Registered Nurses (RN)
- Radiology Technologists RT(R)
- Registered Cardiovascular Invasive Specialist (RCIS)

Policy Overview

Percutaneous Coronary Intervention/Angioplasty is done on an emergency basis for the patient experiencing an acute Myocardial Infarction and presenting to the Emergency Center or for acute in-house cardiac patient experiencing an Acute Myocardial Infarction.

Definitions

Percutaneous Coronary Intervention (PCI) refers to the placement in persons 18 years of age or older, of an angioplasty guide wire, balloon, or other device (e.g. stent, atherectomy, or thrombectomy catheter) into a native coronary artery or coronary artery bypass graft for the purpose of mechanical coronary revascularization. Percutaneous Coronary Intervention can also mean Angioplasty or Coronary Intervention

Policy statement	The full diagnostic cardiac catheterization is done prior to the PCI to identify the vessels and define the clinical pathology for the PCI procedure; this should be reported in the catheterization report as part of the patient's record.
patient presentation	Patients with acute coronary syndrome with ST segment elevation on electrocardiogram may present as: □ Emergency Department admissions: □ "Walk ins" □ EMS transports from the field □ EMS transports from non-primary PCI hospital □ Inpatients or Observation status patients
STEMI Activation	**Emergency Department Procedure** If the decision to proceed with STEMI (ST segment elevation myocardial infarction) team evaluation is made from the EMS field EKG or while the patient is in the Emergency Center (EC), a designated EC staff member will proceed with STEMI activation. Notification occurs through STEMI page activation (notifies cardiac catheterization laboratory personnel, Bed Management, Administrative Coordinator,CCU). Bed Management, in conjunction with the Administrative Coordinator, will make arrangements to ensure bed availability. **_on-Emergency Department Procedure** A STEMI team evaluation for an in-house patient may be activated by a Cardiologist, STAT TEAM nurse responder Physician, or Intensivist.
Post – procedure requirements	• The patient will be accompanied by an RN and other support staff to CCU or other unit as determined by the cardiologist according to appropriateness of patient condition. Criteria for patient transfer will include a portable defib monitor, oxygen, hemostasis of procedure site, vital signs, cardiac rhythm, and level of consciousness. • CCL staff will transport to receiving unit where appropriate hand off will occur per HCH policy. • CCL Registered Nurse will give report to a Registered Nurse at the next level of care post procedure.

Cardiac Monitoring and Pulse Oximetry of OR and Endo/Minor Surgery Patients Receiving IV Moderate Sedation or Local

Owner/Dept: LIZA VIZCARRONDO, Sr Dir Perioperative Services/ President Holy Cross Hospital	**Date approved: 01/29/2014**
Approved by: Judith Rogers (President of Holy Cross Hospital)	**Next Review Date: 04/09/2016**
Affected Departments: Cardiac Catheterization Lab, Surgery	

Purpose

To establish standards of care for cardiac monitoring and pulse oximetry of patients.

Applies to:

Surgery staff

Policy overview

1. All patients receiving IV moderate sedation will be monitored according to HCH standards.
2. For patients that do not receive IV moderate sedation, any patient displaying significant medical history may be placed on a cardiac monitor and pulse oximeter.
3. A clear explanation of cardiac monitoring and pulse oximetry will be provided to the patients.
    a. An explanation will help to allay patient anxieties.
    b. Include in explanation that false alarms may be triggered by interference.
4. Verify allergies
    a. Patient may be allergic to adhesive electrodes
5. The physician will be responsible for rhythm interpretation
6. Cardiac monitoring and pulse oximetry systems vary in design.
    a. Place electrodes according to monitor being used.
7. Rhythm strips will be placed on patient's chart pre and post procedure and when any dysrhythmias are displayed.
    a. Rhythm strips placed on the patient's chart will indicate patient's name, date, time and lead.

Medical

Cardiac Cath Post PCI Procedure (TH)

Code Status

- Full Resuscitation

- Resuscitation Orders (TH)
- Resuscitation (FR)
- AICD Deactivation (AA)
- AICD Deactivation (HO/SA)

Admit/Discharge/Transfer

- Place in Outpatient Status

- Change Patient Location

- Document a Problem

Consults

X - Cardiac Rehab Consult

X - Cardiac Rehab

- Physician Consult

Patient Care

- DVT/VTE Discern Advisor

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- Enoxaparin Therapeutic Anticoagulation (TH)
- Post Radial Access Orders (TH)
- Femoral Sheath Removal (BIA)
- Interventional Line Removal (FR)
- Antiembolic Hose/Stocking Knee High

X - Intermittent Pneumatic Compression Knee High

Vitals Signs

X - Vital Signs - Per guideline

Activity

X - Activity - Advance as tolerated per guideline

Assessments

X - Neurovascular Checks - Per guideline

X - Puncture Site Assessment - Per guideline

- Intake and Output - Routine

- Cardiac Monitoring - Indication: Post PCI

- Initiate Telemetry - Indication: Post PCI

- Remote Telemetry - Indication: Post PCI, Per Hospital Policy

Interventions

- Encourage Oral Fluids

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- Pressure Dressing - Maintain sterile dressing at puncture site for ___hours. Apply manual pressure if bleeding persists until hemostasis achieved.

- Communication Order Patient Care - Hemostasis Device as needed

- Communication Order Patient Care - Nursing to advance diet as tolerated

Contingencies

X - Notify Physician - If any bleeding occurs from Cardiac Cath site. Maintain bedrest for an additional 2 to 4 hours.

X - Notify Physician - For chest pain, shortness of breath, significant arrhythmia, ST changes, hematoma, significant or suspected bleeding, decreased distal pulses, change in neurovascular exam, abdominal or back pain, or urinary urgency.

X - Notify Physician of Abnormal Vital Signs/Output - T Above 38.3C/ 101F, HR/P Above 120 HR/P Below 60, SBP Above 180 SBP Below 90, DBP Above 100 DBP Below 40, UO Below 0.5mL/kg/hr, Or symptomatic hypotension or bradycardia

X - ECG PRN Communication Order - Nurse order ECG STAT for: Chest Pain, Please consider using the significant event form to document and communicate a change in patient status. Use departmental order communication when entering the ECG order.

- Notify Physician - Cardiologist if platelets less than 100,000 or if 50% or more decrease from initial platelet count

- Communication Order Patient Care - Monitor ACT or PTT per guideline.

- Communication Order Patient Care - Draw STAT ACT 1 hour after heparin is discontinued.

- Communication Order Patient Care - Draw STAT aPTT 1 hour after heparin is discontinued. Repeat if aPTT is greater than 41 seconds.

- **If patient received Bivalrudin:**

- Communication Order Patient Care - Draw STAT ACT 2 hours after bivalrudin is discontinued.

- Communication Order Patient Care - Draw STAT aPTT 2 hours after bivalrudin is discontinued. Repeat if aPTT is greater than 41 seconds.

- Sheath Removal - When ACT is less than 140 seconds.

- Sheath Removal - When aPTT is less than 40 seconds.

- Covering Physician (AA)

Protocols

- Hypoglycemia - Non-Pregnant, Initiate Protocol

- ICU Tight Glucose Control, Initiate Protocol

- Protocol Critical Care Initiate When Needed

- Protocol Medical-Surgical Initiate When Needed

Diet

- Diet (SS)
    - -NPO
    - -Clear Liquid Diet
    - -Cardiac
    - -Diabetic 1800 CAL

- Diet (BIA)
    - -NPO
    - -Clear Liquid Diet
    - -Cardiac
    - -1800 CAL Consistent Carbohydrate

- Diet (CL)
    - -NPO
    - -Clear Liquid
    - -Cardiac
    - -Diabetic 1800 CAL

- Diet (DB)
    - -NPO
    - -Clear Liquid
    - -Cardiac
    - -Diabetes Diabetic 1800 CAL

- Diet (FR)

-NPO
-Clear Liquid Diet
-Cardiac
-Consistent Carbohydrate (no CAL level)

- Diet (LI)
  -NPO
  -Clear Liquid
  -Cardiac
  -Diabetes Diabetic 1800 CAL

- Diet (PO)
  -NPO
  -Clear Liquid
  -Cardiac
  -Diabetes Diabetic 1800 CAL

- Diet (SC)
  -NPO
  -Clear Liquid
  -Low Fat/Low Cholesterol, No Added Salt
  -Diabetes Diabetic 1800 CAL

Infusions

Primary Infusions

- Sodium Chloride 0.9% - mL/hr, IV, 1,000 mL, Infusion

- Dextrose 5% with 0.45% NaCl - mL/hr, IV, 1,000 mL, Infusion

- Sodium Chloride 0.9% Bolus - 250 mL, IV, Once, See Comments
  Bolus, Infuse over 30 mins - for SBP less than 90

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- IV Convert to Saline Lock

Drips

- Amiodarone New Start or IV - Cordarone (AA)
- DOBUTamine Infusion - Dobutrex (AA)
- DOPamine Infusion - Intropin (AA)
- Eptifibatide Infusion - Integrilin (AA)
- Heparin Infusion Cardiology (AA)
- Lidocaine Infusion (AA)
- Nitroglycerin Infusion (AA)
- Antiarrhythmic Infusions (TH)
- Anticoagulation Infusions (TH)
- Heparin Infusion (CL)
- Heparin Nomogram (DB)
- Heparin Nomogram (LI)
- Heparin Infusion for Atrial Fibrillation (PO)
- Anticoagulation Non-Stroke Heparin Anti-Xa (SC)
- Heparin Infusion (SS)
- Heparin Nomogram (SS)

- Heparin Infusion Coronary Nomogram Includes Post Thrombolytic (BIA)
- Antihypertensive Vasodilator Drips (TH)
- Vasopressor Infusions (TH)
- Heparin Infusion Cardiology (Weight Based) (FR)
- Heparin Infusion for DVT/PE (FR)
- Insulin IV Infusions A (TH)
- Insulin IV Infusions (TH)

Medications

- Pharmacy Communication Order* - 1 Each, Misc, Misc, Communication
  Discontinue Previous Heparin Orders

Contrast Nephropathy Prophylaxis

- Contrast Nephropathy Prophylaxis (TH)

Cardiac: Beta Blockers

- Tenormin Oral*
    - -25 mg, PO, Tab, Daily
      Hold for SBP less than 100 mmHg, heart rate less than 60
    - -50 mg, PO, Tab, Daily
      Hold for SBP less than 100 mmHg, heart rate less than 60
    - -100 mg, PO, Tab, Daily
      Hold for SBP less than 100 mmHg, heart rate less than 60

- Lopressor*
    - -25 mg, PO, Tab, Q12h
      Hold for SBP less than 100 mmHg, heart rate less than 60
    - -50 mg, PO, Tab, Q12h
      Hold for SBP less than 100 mmHg, heart rate less than 60
    - -100 mg, PO, Tab, Q12h
      Hold for SBP less than 100 mmHg, heart rate less than 60

- Toprol XL* - 25 mg, PO, Tab ER, Daily
  Hold for SBP less than 100 mmHg, heart rate less than 60

- Coreg*
    - -3.125 mg, PO, Tab, w/bkfst+din
      Hold for SBP less than 100 mmHg, heart rate less than 60
    - -6.25 mg, PO, Tab, w/bkfst+din
      Hold for SBP less than 100 mmHg, heart rate less than 60
    - -12.5 mg, PO, Tab, w/bkfst+din
      Hold for SBP less than 100 mmHg, heart rate less than 60
    - -25 mg, PO, Tab, w/bkfst+din

Hold for SBP less than 100 mmHg, heart rate less than 60

- **If initially contraindicated, continue daily assessment to ascertain eligibility.**

ACE Inhibitors

- Capoten*
  - -6.25 mg, PO, Tab, Q8h
    Hold for SBP less than 90
  - -12.5 mg, PO, Tab, Q8h
    Hold for SBP less than 90
  - -25 mg, PO, Tab, Q8h
    Hold for SBP less than 90

- Lisinopril (Zestril/Prinivil)*
  - -5 mg, PO, Tab, Daily
    Hold for SBP less than 90
  - -10 mg, PO, Tab, Daily
    Hold for SBP less than 90

Angiotensin Receptor Blockers

- Cozaar*
  - -12.5 mg, PO, Tab, Daily
    Hold for SBP less than 90
  - -25 mg, PO, Tab, Daily
    Hold for SBP less than 90

- Diovan*
  - -80 mg, PO, Tab, Daily
    Hold for SBP less than 90
  - -160 mg, PO, Tab, Daily
    Hold for SBP less than 90
  - -40 mg, PO, Tab, Q12h

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Hold for SBP less than 90
-80 mg, PO, Tab, Q12h
Hold for SBP less than 90
-160 mg, PO, Tab, Q12h
Hold for SBP less than 90

- Atacand*
  -4 mg, PO, Tab, Daily
  Hold for SBP less than 90
  -8 mg, PO, Tab, Daily
  Hold for SBP less than 90
  -16 mg, PO, Tab, Daily
  Hold for SBP less than 90
  -32 mg, PO, Tab, Daily
  Hold for SBP less than 90

- Avapro*
  -75 mg, PO, Tab, Daily
  Hold for SBP less than 90
  -150 mg, PO, Tab, Daily
  Hold for SBP less than 90
  -300 mg, PO, Tab, Daily
  Hold for SBP less than 90

- **If initially contraindicated, continue daily assessment to ascertain eligibility.**

Cardiac: Nitrates

- Nitrostat* - 0.4 mg, Subl, Tab Subl, Q5min, PRN, See Comments

PRN for chest pain. May repeat Q5 min x 3 doses per episode of chest pain. Notify Physician immediately of unrelieved chest pain.

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- Nitroglycerin Ointment 2%* - 1 Inch, Topical, Q8h

Cardiac: Lipid Regulating Agents

- Zocor*
  - -20 mg, PO, Tab, Bedtime
  - -40 mg, PO, Tab, Bedtime

- Lipitor*
  - -10 mg, PO, Tab, Bedtime
  - -20 mg, PO, Tab, Bedtime
  - -40 mg, PO, Tab, Bedtime

- Atorvastatin - Lipitor (SS)
- Statin Therapy - Contraindication

Diuretics: Aldosterone Antagonists

- Aldactone
  - -12.5 mg, PO, Tab, Daily
  - -25 mg, PO, Tab, Daily

Pain Management

- Morphine Inj* - 3 mg, IV Push, Inject, Once, PRN, See Comments
  For Sheath Removal.

- **If patient allergic to Morphine, use Diazepam (Valium) for sheath removal**
- Valium Inj* - mg, IV Push, Inject, Once, PRN, See Comments
  For Sheath Removal

- Tylenol* - 650 mg, PO, Tab, Q4h, PRN, Pain/Discomfort
  *** Maximum 4 Gm Acetaminophen/Day for Adults ***

- Norco 5 mg/325 mg*
  - -1 Tab, PO, Q4h, PRN Pain - Moderate
    - *** Maximum 4 Gm Acetaminophen/Day for Adults ***
  - -2 Tab, PO, Q6h, PRN Pain - Moderate
    - *** Maximum 4 Gm Acetaminophen/Day for Adults ***

Platelet Inhibitors

- ** If initally contraindicated, continue daily assessment to ascertain eligibility**
- aspirin - 325 mg, PO, Tab EC, Daily

- aspirin
  - -162 mg, PO, Tab EC, Daily
  - -81 mg, PO, Tab EC, Daily

- Aspirin Buffered (Ascriptin)* - 1 Tab, PO, Daily

- Aspirin Buffered (Bufferin) - 325 mg, PO, Tab, Daily

- Livonia. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Silver Spring. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Sioux City. - Buffered Aspirin is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Plavix*
    - -300 mg, PO, Once
    - -600 mg, PO, Once

- Plavix* - 75 mg, PO, Tab, Daily

Smoking Cessation Agents

- Nicotine Addiction (TH)

Antiemetics

- Nausea and Vomiting Treatment (TH)

Antiulcer

- Stress Ulcer Prophylaxis (TH)
- Stress Ulcer Prophylaxis (AA)

Laxatives

- Colace*
    - -100 mg, PO, Cap, Bedtime
    - -100 mg, PO, Cap, BID

- Milk of Magnesia 8% - 30 mL, PO, Bedtime, PRN Constipation

- Milk of Magnesia Conc 24% - 10 mL, PO, Bedtime, PRN Constipation

- Dulcolax* - 10 mg, Rectal, Suppos, Daily, PRN, Constipation

Sedatives

- Xanax*
    - -0.25 mg, PO, Tab, Q8h, PRN, Anxiety
    - -0.5 mg, PO, Tab, Q8h, PRN, Anxiety

- Ambien*

-5 mg, PO, Tab, Bedtime, PRN, Insomnia/Sleep

-10 mg, PO, Tab, Bedtime, PRN, Insomnia/Sleep

- Restoril* - 15 mg, PO, Cap, Bedtime, PRN, Insomnia/Sleep

Miscellaneous

- ADVISORY: For patients with NORMAL renal function or MILD renal insufficiency (CrCl GREATER than 60 mL/min)

- Mylanta/Maalox Plus* - 30 mL, PO, QID, PRN Indigestion/Heartburn

- Antacids for Renally Impaired (TH)

Laboratory

Panels

- Basic Metabolic Panel - Blood, Routine, Next AM x 1 Day(s)

- Basic Metabolic Panel (TH) - Routine, Next AM x 1 Day(s)

- Electrolyte Panel - Blood, Routine, Next AM x 1 Day(s)

Chemistry

- BUN - Blood, Routine, Next AM x 1 Day(s)

- Calcium Total - Blood, Routine, Next AM x 1 Day(s)

- **For patients on metformin prior to Cardiac Cath, obtain creatinine 48 hours post cath.**
- Creatinine - Blood, Timed, x 48 hr, Post cardiac cath

- Creatinine - Blood, Routine, Next AM x 1 Day(s)

- CK Total (TH) - Blood, Stat

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- CPK - Stat

- CK-MB - Blood, Stat

- Creatine Kinase (CK), MB-CK and % Index - Blood, Stat

- Creatine Kinase (CK) and CK-MB - Blood, Stat

- CK MB - Blood, Stat

- ORDERING INSTRUCTIONS: Select CK order below to order a STAT and a Timed in 8 hours draw.
- CK Total (TH) - Blood, Timed, Q8h, Start at X 2 Time(s)/Dose(s)

- CPK - Timed, Q8h Start at x 2 Time(s)/Dose(s)

X - CK-MB - Blood, Timed, Q8h Start at x 2 Time(s)/Dose(s)

X - Creatine Kinase (CK) and CK-MB - Blood, Timed, Q8h Start at x 2 Time(s)/Dose(s)

X - CK MB - Blood, Timed, Q8h Start at x 2 Time(s)/Dose(s)

- Glucose Level - Blood, Routine, Next AM x 1 Day(s)

- Troponin I - Blood, Routine, x 1 Day(s)

- BNP (B -Type Natriuretic Peptide) - Routine, Blood, Once

- BNP N-Terminal pro (TH) - Routine, Once

Coagulation

- Partial Thromboplastin Time (aPTT) - ASAP, Blood, x 1 Time(s)/Dose(s)

- Prothrombin Time - ASAP, Blood, x 1 Time(s)/Dose(s)

- Prothrombin Time - Routine, Blood, Next AM x 1 Day(s)

Hematology

- ** The CBC order below will initiate first draw NOW and then Q4 x 2**
- CBC - Blood, Timed, Q4h Start at x 2 Time(s)/Dose(s)

- CBC - Blood, Routine, Next AM x 1 Day(s)

Diagnostic Tests

Cardiology

- ECG 12 Lead - Procedural - Reason: Other- Post PCI, Next AM x 1 Time(s)/Dose(s)

- ECG 12 Lead - Procedural - Reason: Other- Post PCI, On arrival to unit. Nonbillable

- ECG 12 Lead - Procedural. - Reason: Other- Post PCI, Next AM x 1 Time(s)/Dose(s), Nonbillable

- ECG 12 Lead - Procedural. - Reason: Other- Post PCI, On arrival to unit. Nonbillable

- Echocardiograms (SS)
- Echocardiograms (BIA)
- Echocardiograms (CL)
- Echocardiograms (SDM)
- Echocardiograms (DB)
- Echocardiograms (SC)

- Oakland** - Please go to order browse for your Echocardiograms Order Set and Stress Tests Order Set

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Therapy

Respiratory

X - Oxygen Therapy - Supplemental oxygen titration to maintain saturation greater than 90%

X - Oxygen Therapy (DB) - Supplemental oxygen titration to maintain saturation greater than 90%

Medical

Cardiac Cath Post Diagnostic Procedure - Inpatient (TH)

Admit/Discharge/Transfer

- Admit to Inpatient Status
- Change Patient Location
- Document a Problem

Patient Care

- DVT/VTE Discern Advisor
- Post Radial Access Orders (TH)

Vitals Signs

X - Vital Signs - Per guideline

Activity

X - Communication Order Patient Care - If any bleeding occurs, maintain bedrest for an additional 2-4 hours .

X - Activity - Advance as tolerated per guideline.

Assessments

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X - Puncture Site Assessment - Per guideline

X - Neurovascular Checks - Per guideline

- Intake and Output

- Cardiac Monitoring

- Initiate Telemetry

- Remote Telemetry - Per Hospital Policy

Contingencies

X - Notify Physician - If bleeding from puncture site occurs, apply manual pressure per guideline. Notify Cath Lab/Physician if bleeding persists.

X - Notify Physician - For chest pain or shortness of breath, hematoma, significant or suspected bleeding, decreased distal pulses, change in neurovascular exam, abdominal or back pain, urinary urgency.

X - Notify Physician of Abnormal Vital Signs/Output - T Above 38.3C/ 101F, HR/P Above 120 HR/P Below 60, SBP Above 180 SBP Below 90, DBP Above 100 DBP Below 40, UO Below 0.5mL/kg/hr, or symptomatic hypotension or bradycardia.

X - ECG PRN Communication Order - Nurse order ECG STAT for: Chest Pain, Notify provider. Please consider using the significant event form to document and communicate a change in patient status. Use departmental order communication when entering the ECG order.

X - Communication Order Patient Care - Hemostasis device as needed.

Interventions

- Interventional Line Removal (FR)

Diet

X - Diet (BIA) - Clear Liquid Diet

X - Diet (CL) - Clear Liquid

- Diet (DB) - Clear Liquid

X - Diet (FR) - Clear Liquid Diet

- Diet (GT) - Clear Liquid Diet

- Diet (LI) - Clear Liquid

- Diet (PH) - Clear Liquid

- Diet (PO) - Clear Liquid

- Diet (SC) - Clear Liquid

X - Diet (SS) - Clear Liquid Diet

- Nursing Advance Diet per Protocol
  - -Nursing advance diet to Regular
  - -Nursing advance diet to Cardiac
  - -Nursing advance diet to Consistent Carb
  - -Nursing advance diet to Renal

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- Nursing Advance Diet per Protocol (DB)

- Nursing Advance Diet per Protocol (PH)

- Communication Order Patient Care - Clear Liquid diet, nursing to advance diet as tolerated.

Infusions

- Sodium Chloride 0.9% - IV, 250 mL, Infusion
  Over 30 minutes for SBP less than 90

- Sodium Chloride 0.9% - IV, 1,000 mL

Medications

- Pharmacy Communication Order* -
  Discontinue Previous Heparin Orders

Cardiac: Nitrates

X - Nitrostat* - 0.4 mg, Subl, Tab Subl, Q5min, PRN, See Comments
PRN Chest Pain - Administer Q5 min x 3 doses as needed per episode of chest pain. If no relief after 3 doses contact Physician

Pain Management

- Tylenol* - 650 mg, PO, Tab, Q4h, PRN, Pain - Mild
  *** Maximum 4 Gm Acetaminophen/Day for Adults ***

- Norco 5 mg/325 mg*
  -1 Tab, PO, Q6h, PRN Pain - Moderate
  *** Maximum 4 Gm Acetaminophen/Day for Adults ***
  -2 Tab, PO, Q6h, PRN Pain - Moderate

*** Maximum 4 Gm Acetaminophen/Day for Adults ***

Platelet Inhibitors

- **If initially contraindicated, continue daily assessment to ascertain eligibility.**
- aspirin
  - -81 mg, PO, Tab EC, Daily
  - -162 mg, PO, Tab EC, Daily
- aspirin - 325 mg, PO, Tab EC, Daily
- Aspirin Buffered (Bufferin) - 325 mg, PO, Tab, Daily
- Aspirin Buffered (Ascriptin)* - 1 Tab, PO, Daily

- Livonia. - Bufferin (Aspirin Buffered) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Port Huron. - Bufferin (Aspirin Buffered) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Sioux City. - Bufferin (Aspirin Buffered) is a medication that is NOT currently on your hospital's formulary. **Please contact Pharmacy for assistance in identifying formulary alternatives**

- Plavix* - 75 mg, PO, Tab, Daily

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Report: B_TIS_POWERPLAN_A

HC HOLY CROSS HOSPITAL

Intra-Aortic Balloon Pump Policy

Owner/Dept: VALARIE HARBAUGH, Director/ Cardiac Catheterization Lab	**Date approved: 11/13/2013**
Approved by: Aaron Kenigsberg (MD), CANDACE HANRAHAN (Sr. Dir-CV & Crit Care)	**Next Review Date:** 11/13/2016
Affected Departments: Cardiac Catheterization Lab, Coronary Care Unit	

Purpose

To provide general guidelines concerning the insertion, removal and maintenance of the intra aortic balloon pump.

Scope

- Cardiac/Vascular Cath lab
- Coronary Care Unit (CCU)

Policy Overview

An intra-aortic balloon pump (IABP) provides lifesaving cardiac support to patients with various cardiac problems, including those awaiting cardiac transplant, those recovering from a myocardial infarction, and those in cardiogenic shock.

Objectives of IABP therapy

1. To reduce cardiac workload by decreasing the resistance of ventricular ejection.
2. To increase cardiac output by decreasing the resistance to ventricular emptying.
3. To improve myocardial oxygenation by decreasing O2 demand and increasing O2 supply.
4. To improve coronary perfusion by increasing (augmenting) diastolic pressure.
5. To maintain systemic perfusion.

Indications (as guidelines)	1. Refractory unstable angina 2. Impending infarction 3. Acute MI 4. Refractory ventricular failure 5. Complications of acute MI e.g.; Acute MR or VSD, or papillary muscle rupture 6. Cardiogenic shock 7. Support for diagnostic, percutaneous revascularization and interventional procedures 8. Ischemia related intractable ventricular arrhythmias 9. Septic shock 10. Intraoperative pulsatile flow generation 11. Weaning from bypass 12. Cardiac support for non-cardiac surgery 13. Prophylactic support in preparation for cardiac surgery 14. Post surgical myocardial dysfunction / low cardiac output syndrome 15. Myocardial contusion 16. Mechanical bridge to other assist devices 17. Cardiac support following correction of anatomical defects
Preparation for Insetrtion	1. In the presence of patient, family, the physician will give a full explanation of the purpose and procedure. 2. Written consent must be obtained, except in an emergency. 3. Appropriate personnel must be notified of the insertion. (i.e. cath lab RN, Cath lab Staff,, CV Techs, etc.) 4. Once consent has been obtained and proper personnel notified, the patient must be transferred to the appropriate unit where balloon insertion will occur (may be at the bedside, in the CCU, Cath Lab, etc.)

Guidelines for Monitoring Duties in the Cardiac Catheterization Lab (CCL)

Owner/Dept: LIZA VIZCARRONDO, Sr Dir Perioperative Services/ President Holy Cross Hospital	Date approved: 11/13/2013
Approved by: CANDACE HANRAHAN (Sr. Dir-CV & Crit Care)	Next Review Date: 11/13/2016
Affected Departments: Cardiac Catheterization Lab	

Purpose

To outline the Holy Cross Hospital (HCH) CCL procedure for monitoring personnel during an invasive CCL diagnostic/and or interventional procedure. The monitoring duties during CCL diagnostic/ and or interventional procedure are supported by the attending cardiologist during diagnostic left and /or right heart catheterization and throughout any interventional procedure conducted in the CCL.

Scope

- Interventional Cardiologists
- Registered nurses (RN)
- Radiologic technologists RT(R)
- Registered Cardiovascular Invasive Specialist (RCIS)

Policy Overview

Monitoring guidelines are indicated to establish the expected duties for the technologist or nursing staff that monitor in the CCL during the procedure.

CCL stands for Cardiac Catheterization Laboratory.

Monitoring personnel responsibilities:

- Record patient information in appropriate screens prior to case
- Set up and calibrates transducers as necessary
- Document procedure in CCL log book
- Ensures all hard copies from procedure have patient label
- Assist with patient and CCL room set up as needed
- Provide continuous assessment of EKG, blood pressure, and o2 sat,

Monitoring personnel responsibilities:

a. Perform, and analyze measurements and calculations using acquired data.
    1. Single pressures
    2. Dual pressures
    3. Valves
    4. Oximetry
    5. Gradients
    6. Cardiac Output
    7. Accurately and appropriately document procedural information
    8. Communicates ECG and hemodynamic changes, rapidly and communicates those changes to the physician.
    9. Documentation of vitals, ECG and hemodynamic data every 5 minutes.
    10. Record CCL procedure notes (expectation is to keep accurate intra-procedural log)
    11. Recognize normal and abnormal valve pressures. Especially aortic/mitral.
    12. Be responsible to review chart for consent, lab work, H&P, and appropriate supporting reports (Operative, Previous Cath, and Echo).
    13. Accurately print and assemble the procedure report.
    14. Demonstrate knowledge of responsibilities in a CODE situation.
    15. Appropriately turn on and off the equipment.
    16. Print still pictures of selective coronary/vascular angiogram as requested by the physician
    17. Record all supplies utilized
    18. Record all medications utilized

- Create CD of case for CCL and verify all images are sent to Mckesson.
- Assist with room turnover and patient care when applicable
- Enters patient charges immediately after the case.
- Place completed report in the patient's chart for medical record to scan.

HC HOLY CROSS HOSPITAL

Guidelines for Circulating Duties in the Cardiac Catheterization Lab (CCL)

Owner/Dept: VALARIE HARBAUGH, Director/ Cardiac Catheterization Lab	**Date approved: 11/13/2013**
Approved by: Aaron Kenigsberg (MD), CANDACE HANRAHAN (Sr. Dir-CV & Crit Care), CAROLINE MALFARA (Director)	**Next Review Date: 11/13/2016**
Affected Departments: Cardiac Catheterization Lab	

Purpose

To outline the Holy Cross Hospital (HCH) CCL procedure for circulating personnel during an invasive CCL diagnostic and/or interventional procedure(s). The circulating duties are supported by the attending cardiologist during diagnosis for left and /or right heart catheterization and throughout any interventional procedure conducted in the CCL.

Scope

- Interventional Cardiologists
- CCL Registered Nurses (RN)
- CCL Radiologic technologists (RT)
- Registered Cardiovascular Invasive Specialist (RCIS)

Policy Overview

A circulating person gives medications to the patient and collects the necessary supplies and passes them off in a sterile fashion. These supplies include catheters, sheaths, balloons and stents. Only RNs can administer medication.

Pre-Procedure Responsibilities

- Assist with transfer of patient to the X-ray table
- Establish EKG monitoring on the screen
- Place defibrillator pads properly on patient
- Establish EKG monitoring on the defibrillator
- Place nasal cannula on the patient, adjust o2 rate per physician order.
- Establish O2 Sat monitoring
- Maintain IV patency and ordered flow rates
- Assist scrub personnel in gowning
- Assist with prep of access site
- Assist physician in gowning
- Continuous attendance to patient's pre-procedure needs.

Intra-Procedure Responsibilities

- Provide continuous assessment of patient needs
- Any observed changes in patient status to be reported to physician and appropriate intervention initiated.
- Support Physician and scrub person by providing sterile products and items requested
- Administration of conscious sedation and medications as ordered by physicians (RN's only)
- Operate other ancillary equipment as needed per HCH policy
- Initiate charge for supplies utilized
- Initiate charge for medications used

Post Procedure Responsibilities

- Remove monitoring equipment from patient
- Assist with patient care during recovery phase
- Assist with transfer of patient
- Collect reusable cables and instruments and prepare for sterilization
- Clean-up procedure room once patient has vacated premises
- Prepare room for next patient
- Dispose medications, syringes needles, IV fluids in respective areas as per HCH policy

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Guidelines for Scrub Duties in the Cardiac/Vascular Catheterization Lab (CCL)

Owner/Dept: VALARIE HARBAUGH, Director/ Cardiac Catheterization Lab	Date approved: 09/27/2013
Approved by: Aaron Kenigsberg (MD), CAROLINE MALFARA (Director)	Next Review Date: 09/27/2016
Affected Departments: Cardiac Catheterization Lab	

Purpose

- To outline the Holy Cross Hospital (HCH) CCL procedure for scrub personnel during an invasive CCL diagnostic/and or interventional procedure. The scrub duties are supported by the attending cardiologist's during diagnosis from left and /or right heart catheterization and throughout any interventional procedure conducted in the CCL.
- To provide safety rules for Cardiac Vascular Catheterization Lab registered nurses and technologist in the performance of sponge, sharp, instrument and miscellaneous item counts.

Scope

- Interventional Cardiologists
- Radiologic Technologists (R.T.)
- Registered Cardiovascular Invasive Specialist (RCIS)
- Registered Nurses (RN)

Policy Overview

Personnel in the Cardiac Vascular Catheterization lab departments are required to wear scrubs provided HCH. Hospital issued scrubs shall be marked "Property of HCH" and shall be laundered, maintained, distributed and issued by the Laundry Service Department at HCH.
Scrub duties are the tasks done by the Cardiac Cath Lab, RCIS/CVT, RN, and RT in the CCL during the procedure following sterile technique. The Scrub person always observes sterile technique to avoid contamination thus assuring patient safety and always utilizes universal precautions.

Scrub duties

- Assist with patient placement on X-ray table.
- Note and mark lower extremity /access site pulse points
- Clip and prep access site according to procedure guidelines.
- Prepare sterile worktable and X-ray table sterile field.
- Assemble all supplies.
- Using aseptic technique, open supplies onto instrument table.
- Using sterile technique, arrange instrument table in proper fashion
- Performs The Sponge IN Counts:

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- The **Sponge IN** Counts are:
- Initial baseline count conducted before the case begins for all sponges, sharps and small miscellaneous items.
- Count conducted whenever new items are added to the field
- The **IN** counts are performed to establish the baseline number of items, detect packaging errors and provide knowledge on how many items are being used during the case. A two person verification is required
- All free sponges (sponges passed along the field without the use of an instrument) should be used in **multiples of ten** (10)
- Only sponges which contain an x-ray detectable element will be used on the sterile field.

<u>During Procedure</u>

The Cardiac Cath Lab scrub nurse/technician will:

- Assist the physician(s) as needed.
- Acquire additional supplies as needed.
- After gowning and gloving, drape the patient and set up instruments in the sterile field.
- Flush all catheters and guide wires with saline heparin flush solution.
- Set up and prep ACIST device per procedural protocol; or set up three way manifold if ACIST device unavailable.
- Ensure that all lines and contrast syringes are free of air bubbles.
- Assist with panning (R.T. scrub only) as requested by physician.
- Technologist will account for all sharps during case. After removal of catheters technologist will account for all sharps and dispose as per HCH policy.
- Injects contrast media to achieve optimal opacification without air embolism.
- Demonstrates how to proficiently and safely operate all devices used during a procedure per manufacturers instructions for use.
- CLOSING count- count performed beforeincision/ wound closure begins
- RELIEF count- count performed at the time of permanent relief of either the surgical technologist or circulating nurse.
- ANYTIME count- count performed at the discretion of any member of the Cath lab team.
- FINAL count- count performed after skin closure, when surgical items are no longer in use and ALL are passed off the field. The final sponge count can only be performed when all of the sponges are in the sponge holders.

The final count can only be recorded as CORRECT or INCORRECT

The OUT count sequence each time is:

- Surgical site
- Sterile field
- Mayo stand
- Back table
- Kick bucket or container which hold discarded items
- Holders or counter boxes
- Safe repository where dropped or contaminated items have been placed.

- Sponge, needles and small miscellaneous item counts will be documented on a **white dry erase board** mounted on the OR wall using a standardized format for recording the information.
- Use of **sponge holders** on all cases where free surgical sponges are used.
- Technologist will assist with access site at end of case as per physician order and HCH policy while maintaining sterile technique
- Once hemostasis is achieved will transfer the patient to stretcher using easy mover and/or sufficient CCL members.
- Will assist in transfer of patient to appropriate unit. RN will accompany.

Assist with room turnover and patient care when applicable
(refer to **Prevention of Retained Surgical Items policy)**

Medications and Fluids on the sterile field

Medications and Fluids on the sterile field:

- Medications should be dispensed to the sterile field in the order of use and as close to the time of administration as possible and removed as soon as practical.
- Deliver the medications to the sterile field using aseptic technique.
- If two or more people are preparing medications then a two person verification is required
- All medications, solutions and fluids, including irrigations, delivered to a sterile field are to be confirmed by the person setting up the sterile field (i.e. the "scrub nurse") and another qualified healthcare provider (i.e. the "circulating nurse" or the licensed professional performing the procedure). Together, they must visually and verbally confirm the medication's label, including;
    a. The drug's name,
    b. The concentration or dosage,
    c. Expiration date (as applicable)
    d. Intended route.

Medications (or solutions or fluids) on a Sterile Field/Procedure Areas – Labeling:
1. All medications and solutions, which are placed on the sterile field, must be labeled. Blank and pre-printed sterile labels are available for this purpose, as well as "steri-strips" and sterile surgical markers.
2. If there is any doubt as to the contents of a syringe, cup, basin, etc. it should be discarded and a new medication and/or solution be prepared. Medications and solutions found unlabeled should be discarded.
3. Before the patient receives the medication, the medication is to be confirmed with the licensed health care provider performing the procedure.
4. All medications and solutions on the sterile field that are used/administered are to be documented in the appropriate areas on the patient care record.
5. All original medication, solution containers and delivery devices should remain available for reference until the conclusion of the procedure. All labeled containers on the procedure field are discarded at the conclusion of the procedure.
6. If a medication, fluid, or solution is drawn up and administered/used immediately (does not leave the hand of the person who is administering), then a label on the syringe is not required.
7. If a medication is drawn up in a syringe, or placed in a secondary container such as a cup, basin, or flush or oral syringe ***and is not given immediately*** (if it leaves the clinician's hand and is put down for even a moment), the following is required on a label:
a. drug name

b. dose/concentration
c. expiration date/time (as applicable for areas using medications with short expiration dates-less than 24 hours)
9. It is recommended that the label is attached to the syringe, cup, basin, flush or oral syringe or other secondary container immediately **after** the medication or solution / fluid is put into it. ***Prelabeled empty cups and syringes may not be used.***

HC HOLY CROSS HOSPITAL

On Call: Staff and Interventional Cardiologists in the Cardiac Catheterization Laboratory

Owner/Dept: LIZA VIZCARRONDO, Sr Dir Perioperative Services/ President Holy Cross Hospital	Date approved: 11/14/2011
Approved by: Aaron Kenigsberg (MD), CAROLINE MALFARA (Director), Gary Ward (VP Surg Svcs & Matrls Mgt)	Next Review Date: 11/14/2014
Affected Departments: President Holy Cross Hospital	

Purpose

- To outline the Holy Cross Hospital (HCH) cardiac catheterization services policy regarding staff scheduling for on-call procedures and procedure for simultaneous on-call coverage by the interventional cardiologists
- To provide immediate definitive care to the patient having an ST Elevation myocardial infarction (STEMI

Scope

Cath Lab Team: The Cardiac Cath lab on call team consists of the following:

- On-call Interventional Cardiologist
- Cath Lab Registered Nurse
- Radiologic Technologist (RT)
- Registered Cardiovascular Invasive Specialist (RCIS)

Policy Overview

This policy has been established to define guidelines for the rapid activation of the Cardiac Cath Lab On- Call Team for acute ST-Segment Elevation Myocardial Infarction (STEMI), and provide staffing coverage for; the efficient turnaround time of all emergency procedures, service after hours, periods of reduced staffing/absenteeism, and to establish time frames for reporting of on-call personnel.

Definitions

CCL: Cardiac Catheterization Laboratory
STEMI: ST Elevation Myocardial Infarction
HCH: Holy Cross Hospital
ED-HUC: Emergency Department Health Unit Coordinator

Normal Coverage for CCL

Normal Business hours of the Cath Lab are: Monday – Friday 07:00 – 1730
On-call coverage is provided 24/7/365 or Monday through Friday from 17:30 to 07:00 Saturday and Sunday 24 hours.

Activation and Response

Activation:

Emergency Department Physicians will activate the Cardiac Cath Lab Call Team without consulting a cardiologist for patients with an identified acute ST-Segment Elevation Myocardial Infarction (STEMI) by EKG. Call back of on-call staff for emergent procedures shall be initiated via the hospital paging system.

Response:

The On-Call Interventional Cardiologist will call the referring physician back and accept the patient.

Role of Interventional Cardiologist

Holy Cross Hospital's primary objective related to STEMI call is to ensure that coverage by a participating interventional cardiologist is always available to meet the needs of the patients. The expectations of the on-call interventional cardiologist(s) includes, but is not limited to:

- (S)he is not simultaneously on call for PCI at more than one hospital
- In the event that there is an unexpected conflict that prevents the on-call Cardiologist from his/her ability to meet the responsibility of being the on-call physician, he/she will identify a participating interventional cardiologist to provide back-up coverage in order to ensure that the patient has coverage at all times
    - The on-call Cardiologist is responsible for notifying the Medical Affairs Office in the event that a change in the schedule is necessary
    - An updated schedule is generated by the Medical Affairs Office reflecting the changes

Note: it is the responsibility of the on-call interventional cardiologist to contact the Medical Affairs Office with the name of the back-up interventional cardiologist providing the additional coverage.

- The cardiologist on call responds to STEMI Alert page within 5 minutes of receiving the page by calling the STEMI Hot line (301-592-4123)
- The cardiologist on call will arrive within 30 minutes of the initiation of the page
- The cardiologist may accompany the patient from the ED to the cath lab or may wait for the patient in the cath lab
- The cardiologist may, at his/her discretion, cancel the cardiac cath at any time
- Steps:
    - The Page operator will initiate a page to the On- Call Interventional Cardiologist
    - If there is no response within 5 minutes to the page; the EC-HUC will initiate a second page and call the mobile telephone number and/or the home number of the On-Call Interventional Cardiologist

Role of the Cardiac Catheterization Laboratory (Cath Lab) Staff on call

- The Cath Lab on-call staff will respond and will call the STEMI Hot line @ (301-592-4123) For Emergency center activation and the Page Operator for In-house activation within five (5) minutes, to advise the EC-HUC/Operator they have received the page and are proceeding to the Cath Lab.
  - The ED-HUC/Page Operator will log all pages/calls to activate the Team
  - The Cardiac Cath Lab On-Call Team is expected to arrive in the Cardiac Cath Lab within thirty 30 minutes of the initial page notification.
    - If the on-call staff member does not live within a 30 minute arrival time, an on call room will be available to the on call staff member to stay in the hospital
  - If there is no response from the non-physician members of the Team within five(5) minutes, the Cath Lab on-call team leader will re-initiate the page and call the mobile/home phone number of the non physician team member.
- The Cath Lab Team will proceed to the Cath Lab upon the initial page to the team, if they are not already in the department.
- The attending Physician and the patient care unit staff will initiate treatments to manage the patient until the patient is taken to the Cath Lab.

***Note: When assigned as a member of the on-call team, the CCL staff member will/must be available via pager or cell phone, when not at home, or at designated telephone number.**

Alternate team activation process

If the on-call CCL staff member cannot be reached or does not respond by the second page (within ten minutes):

- Other cath lab personnel will be called
- The person initiating the call (to the on-call CCL staff member) will contact the Administrative Coordinator on duty and give him/her an assessment of the situation.
- The Cardiac Cath Lab Director shall be called.

Note: If the on-call CCL staff member cannot to be reached, or fails to report in a timely fashion, their on-call pay will be withheld and the employee may be subject to corrective action up to, and including possible termination

HC HOLY CROSS HOSPITAL

On Call: Staff and Interventional Cardiologists in the Cardiac Catheterization Laboratory

Owner/Dept: LIZA VIZCARRONDO, Sr Dir Perioperative Services/ President Holy Cross Hospital	Date approved: Not Approved Yet
Approved by: Judith Rogers (President of Holy Cross Hospital), LOUIS DAMIANO (VP Medical Affairs)	Next Review Date: No Review Date
Affected Departments: President Holy Cross Hospital	

Purpose

- To outline the Holy Cross Hospital (HCH) cardiac catheterization services policy regarding staff scheduling for on-call procedures and procedure for simultaneous on-call coverage by the interventional cardiologists
- To provide immediate definitive care to the patient having an ST Elevation myocardial infarction (STEMI

Scope

Cath Lab Team: The Cardiac Cath lab on call team consists of the following:

- On-call Interventional Cardiologist
- Cath Lab Registered Nurse
- Radiologic Technologist (RT)
- Registered Cardiovascular Invasive Specialist (RCIS)

Policy Overview

This policy has been established to define guidelines for the rapid activation of the Cardiac Cath Lab On- Call Team for acute ST-Segment Elevation Myocardial Infarction (STEMI), and provide staffing coverage for; the efficient turnaround time of all emergency procedures, service after hours, periods of reduced staffing/absenteeism, and to establish time frames for reporting of on-call personnel.

Definitions

CCL: Cardiac Catheterization Laboratory
STEMI: ST Elevation Myocardial Infarction
HCH: Holy Cross Hospital
ED-HUC: Emergency Department Health Unit Coordinator

Normal Coverage for CCL

Normal Business hours of the Cath Lab are: Monday – Friday 07:00 – 1730
On-call coverage is provided 24/7/365 or Monday through Friday from 17:30 to 07:00 Saturday and Sunday 24 hours.

Activation and Response

Activation:
Emergency Department Physicians will activate the Cardiac Cath Lab Call Team without consulting a cardiologist for patients with an identified acute ST-Segment Elevation Myocardial Infarction (STEMI) by EKG. Call back of on-call staff for emergent procedures shall be initiated via the hospital paging system.

Response:
The On-Call Interventional Cardiologist will call the referring physician back and accept the patient.

Role of Interventional Cardiologist

Holy Cross Hospital's primary objective related to STEMI call is to ensure that coverage by a participating interventional cardiologist is always available to meet the needs of the patients. The expectations of the on-call interventional cardiologist(s) includes, but is not limited to:

- (S)he is not simultaneously on call for PCI at more than one hospital
- In the event that there is an unexpected conflict that prevents the on-call Cardiologist from his/her ability to meet the responsibility of being the on-call physician, he/she will identify a participating interventional cardiologist to provide back-up coverage in order to ensure that the patient has coverage at all times
    - ❑ The on-call Cardiologist is responsible for notifying the Medical Affairs Office in the event that a change in the schedule is necessary
    - ❑ An updated schedule is generated by the Medical Affairs Office reflecting the changes

Note: it is the responsibility of the on-call interventional cardiologist to contact the Medical Affairs Office with the name of the back-up interventional cardiologist providing the additional coverage.

- ❑ The cardiologist on call responds to STEMI Alert page within 5 minutes of receiving the page by calling the STEMI Hot line (301-592-4123)
- ❑ The cardiologist on call will arrive within 30 minutes of the initiation of the page
- ❑ The cardiologist may accompany the patient from the ED to the cath lab or may wait for the patient in the cath lab
- ❑ The cardiologist may, at his/her discretion, cancel the cardiac cath at any time
- ❑ Steps:
    - The Page operator will initiate a page to the On- Call Interventional Cardiologist
    - If there is no response within 5 minutes to the page; the EC-HUC will initiate a second page and call the mobile telephone number and/or the home number of the On-Call Interventional Cardiologist

Role of the Cardiac Catheterization Laboratory (Cath Lab) Staff on call

- The Cath Lab on-call staff will respond and will call the STEMI Hot line @ (301-592-4123) For Emergency center activation and the Page Operator for In-house activation within five (5) minutes, to advise the EC-HUC/Operator they have received the page and are proceeding to the Cath Lab.
    - The ED-HUC/Page Operator will log all pages/calls to activate the Team
    - The Cardiac Cath Lab On-Call Team is expected to arrive in the Cardiac Cath Lab within thirty 30 minutes of the initial page notification.
        - If the on-call staff member does not live within a 30 minute arrival time, an on call room will be available to the on call staff member to stay in the hospital
    - If there is no response from the non-physician members of the Team within five(5) minutes, the Cath Lab on-call team leader will re-initiate the page and call the mobile/home phone number of the non physician team member.
- The Cath Lab Team will proceed to the Cath Lab upon the initial page to the team, if they are not already in the department.
- The attending Physician and the patient care unit staff will initiate treatments to manage the patient until the patient is taken to the Cath Lab.

***Note: When assigned as a member of the on-call team, the CCL staff member will/must be available via pager or cell phone, when not at home, or at designated telephone number.**

Alternate team activation process

If the on-call CCL staff member cannot be reached or does not respond by the second page (within ten minutes):

- Other cath lab personnel will be called
- The person initiating the call (to the on-call CCL staff member) will contact the Administrative Coordinator on duty and give him/her an assessment of the situation.
- The Cardiac Cath Lab Director shall be called.

Note: If the on-call CCL staff member cannot to be reached, or fails to report in a timely fashion, their on-call pay will be withheld and the employee may be subject to corrective action up to, and including possible termination

HC HOLY CROSS HOSPITAL

Arterial/Venous Sheath Removal

Owner/Dept: CAROLINE MALFARA, Director/ Cardiac Catheterization Lab	Date approved: 12/13/2010
Approved by: CAROLINE MALFARA (Director), Gary Ward (VP Surg Svcs & Matrls Mgt)	Next Review Date: 12/13/2013
Affected Departments: Cardiac Catheterization Lab, Coronary Care Unit, Short Stay Observation Unit	

Purpose

CCL Staff, RCIS, R.T. or a Registered Nurse competent in the technique of sheath removal may remove an artery or venous sheath post angiography or percutaneous interventions.

Scope

Cardiac Catheterization Lab, Coronary Care Unit, Short Stay Observation Unit Staff

Competency

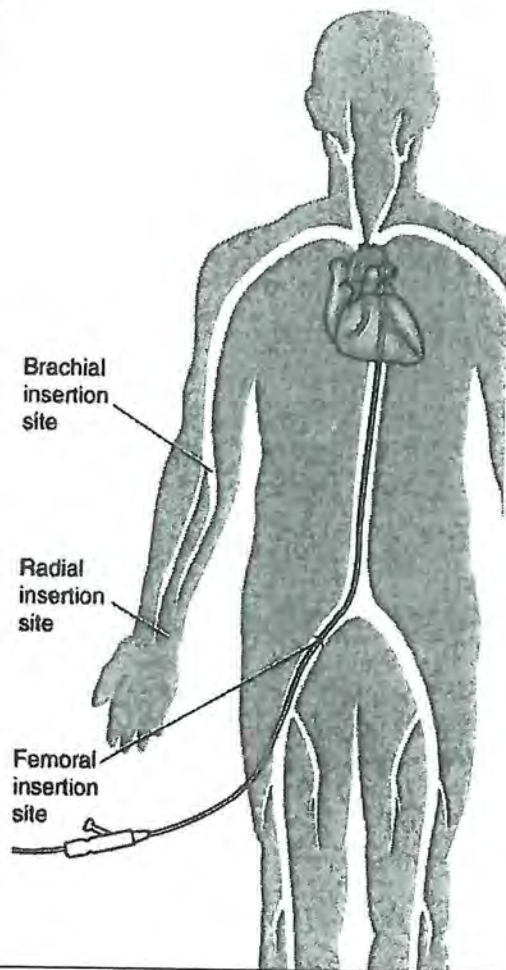
- An RN must be present at sheath removal and until hemostasis is achieved
- *Note:* Staff must be competencied in sheath removal prior to performing this action
  - To gain competency the CCL professional will complete the following:
    - Life Threatening Arrhythmia recognition assessment or Critical Care qualification
    - Attend arterial / venous sheath removal workshop
    - Demonstrate satisfactory manual pressure technique
    - Complete a minimum of 5 successful supervised sheath removals
    - Discuss emergency management of a vasovagal episode associated with femoral artery sheath removal

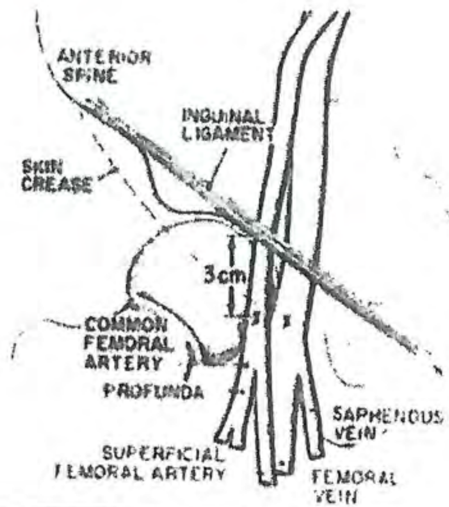
Process for sheath removal

See attachment A: ***Sheath Removal Process***

Procedure: Sheath Removal Process

Common insertion sites





Prior to sheath removal	**The following information is assessed:** • Procedure performed. • Medications given during / post procedure. • Check intravenous (IV) infusions and rates are as ordered. • Observe insertion site for signs of bleeding, swelling or hematoma. • Review last vital signs, presence or absence & location of distal pulses. • Determine if the patient has chest discomfort, pain or shortness of breath. • Orders for time of arterial sheath removal • Assess bladder status • Time and dose of last anticoagulant • ACT • Size and Length of sheath
Equipment	• Sterile gloves and protective eyewear • Gauze • Waste container for contaminated sheath and soiled equipment. • Emergency drugs to be available for potential complications. • IV Atropine • Extra IV Normal Saline 500 mls • Lidocaine 1% if local anesthetics required • Doppler • Warm blanket
Post Sheath Removal	• Check vital signs with procedure site checks per physician order • Patient should be instructed to notify nurse immediately for any "popping sensation" burning, pain or wetness at the insertion site • Patient should be instructed to place their hand and apply pressure over their procedure site for coughing, sneezing or straining • The patient should lie flat for 30 mins or per physician order post hemostasis following this if hemodynamically stable, they may be elevated to 30° and have a light snack and fluids, but remain on bed rest for 2-3 hrs or per physician order • To prevent dislodgement of clot, bleeding and possible hematoma formation, the patient should be instructed to keep the affected leg straight and not flex the hip for at least 6 hours • A clear occlusive dressing may be applied over insertion site

Arterial/Venous Sheath Removal

Owner/Dept: LIZA VIZCARRONDO, Sr Dir Perioperative Services/ President Holy Cross Hospital	Date approved: Not Approved Yet
Approved by: Caroline Malfara, Director Cardiac /Vascular catheterization Lab	**Next Review Date:** No Review **Date**
Affected Departments: Cardiac Catheterization Lab, Coronary Care Unit, Cardiac Vascular Care Unit, Surgical Intensive Care Unit, PACU	

Purpose

Cardiac Cath Lab Staff, Registered Cardiovascular Interventional Specialist (RCIS), Radiological Technologist (RT(R). or a Registered Nurse (RN) competent in the technique of sheath removal may remove an arterial or venous sheath post angiography or percutaneous interventions.
Outcome Goals:
A. Patients having diagnostic and/or interventional cardiac/vascular procedures will:
1. Be free of significant hematoma
2. Have adequate tissue perfusion
3. Have absence of bleeding
4. Have absence of vasovagal response
5. Be free of chest pain/ procedure site pain
6. Have catheter site discomfort kept to a minimum

Scope

Cardiac Catheterization Lab, Coronary Care Unit, Cardiac Vascular Care Unit, Surgical Intensive Care Unit, PACU

Definitions

Free of significant hematoma	Significant hematoma is defined as a swelling or mass of blood (10 cm or greater) confined to an area of tissue or space, as determined by site observation and palpation.
Adequate tissue perfusion	Adequate perfusion is defined as the presence of distal pulses as detected by palpation or Doppler examination and the presence of adequate need to define adequate color, motion, temperature, and sensation in the involved extremity.
Absence of bleeding	Bleeding is defined as inadequate hemostasis after the application **of pressure for at least twenty minutes.**
Arterial/Venous Sheath	Percutaneous catheterization of the femoral artery or femoral vein is accomplished technique specifics probably not necessary otherwise you are going to have to define /explain the technique. The medical device known as a sheath is a single-use intravenous catheter (placed in an artery or vein) not necessary. Common size ranges between 4 to 6 French Give exact length in cm.
Angioseal	The AngioSeal vascular closure device quickly seals femoral artery punctures following catheterization procedures, allowing for early ambulation and hospital discharge. The device creates a mechanical seal by sandwiching the arteriotomy between a bioabsorbable anchor and collagen sponge.
Perclose	This device provides suture for vascular closure of 5-8F femoral artery access sites. According to the manufacturer, the device maintains vascular access throughout deployment and has flexibility to pre-close and close over the wire.
Radial band	The TR Band hemostasis device works by providing controlled compression of the radial artery without completely occluding vessel flow or significantly compressing other structures. The transparent cuff allows precise visual control, and the air injection port and inflator syringe ensures accurate pressure adjustment.

Competency

- An RN must be present during sheath removal and until hemostasis is achieved
- *Note:* Staff must be competent in sheath removal prior to performing this action
  To gain competency the CCL professional will complete the following:
  - Life Threatening Arrhythmia recognition assessment or Critical Care qualification.
  - Attend arterial / venous sheath removal workshop.
  - Demonstrate satisfactory manual pressure technique.
  - Complete a minimum of 5 successful supervised sheath removals.
  - Discuss emergency management of a vasovagal episode associated with femoral artery sheath removal

Common insertion sites

Multiple sites can be used bilaterally to gain access
Multiple sites can be used for Arterial or Venous Access

- Bilateral Brachial
- Bilateral Radial
- Bilateral Femoral

Sheath removal	Site should be visually monitored and palpated every 15 minutes x 4; every 30 minutes x 2; then, hourly for remainder of patient's "bed rest. Distal pulses should be palpated, as above. Site status and distal pulses should be documented at same intervals listed for assessment.
Treatment Post closure device Angio-Seal or Perclose Deployment	1. Observe site for bleeding or oozing every 15 minutes x 4; every 30 minutes x 2. 2. Patients may ambulate after two hours of bed rest"" post diagnostic procedure; four hours "" after interventional procedure. Site should be observed for 30 minutes post ambulation before discharging patient. 3. Report any bleeding/oozing to physician for assessment.
Treatment Post Radial Band Placement	1. No blood pressure readings, lab draws or I.V. access in the valuate access site for bleeding every 15 minutes x 4; every 30 minutes x 2 and every hour until the hemostasis device is removed, and document …what. If bleeding occurs, apply firm manual pressure for hemostasis and reapply the radial band for one hour. 2. Assess the hand for ulnar pulse, color, blood return, numbness and pain. 3. Limit movement in the arm for 2 to 5 hours. If necessary, place the wrist on an arm board or put the arm in a sling to restrict movement. 4. Place pulse oximeter on thumb of hand used for procedure and notify physician immediately if evidence of decreased pulse, color change or pain in hand. 5. Leave the hemostasis band intact for sixty minutes after sheath is removed. Then release the device by 2 notches every 15 minutes until device is able to be easily removed. 6. Post interventional band should be left in place for two hours, then release two notches every 30 minutes. If bleeding occurs, apply firm manual pressure for hemostasis and reapply the radial band for one hour. Contact physician with any concerns. 7. When hemostasis band has been removed, apply (Bandaid) to site. Monitor for signs of bleeding for 30 minutes. 8. Patient should be instructed not to lift with the arm for 24 hours. The dressing can be removed the next day. 9. If a hematoma occurs after sheath removal, apply firm pressure with fingers 2 mm above the insertion site for additional twenty minutes or until hemostasis is obtained. Appropriate physician should be notified re hematoma.

Holy Cross Health: EMTALA: Examination, Treatment, and Transfer of Patients with Potential Emergency Medical Conditions

Owner/Dept: PETER TALLERICO, Director/ Risk Management & Patient Safe	Date approved: 12/17/2013
Approved by: HCGH Policy Review Group	Next Review Date: 12/17/2016
Affected Departments: Risk Management and Patient Safety	

Purpose

To outline the Holy Cross Health policy for examination, treatment, and, if necessary, transfer of individuals who come to the hospital and request medical assistance under the Emergency Medical Treatment and Active Labor Act (*EMTALA*).

Applies to

- Holy Cross Hospital Silver Spring
- Holy Cross Germantown Hospital
- Members of the medical and dental staff
- Employees

*Note: Unless otherwise noted, the procedures contained herein are applicable to both Holy Cross Hospital and to Holy Cross Germantown Hospital.

Definitions

The hospital(s) refers to both Holy Cross Hospital Silver Spring and Holy Cross Germantown Hospital

For additional definitions See Appendix A.

Note: Key words that are important to understanding and applying federal EMTALA regulations are defined in Appendix A. To assist with recognition, these words are *italicized*, and *underlined* the first time they are used in this policy.

Policy overview

All persons who come to the hospitals for examination and treatment of a potential *emergency medical condition* receive a *medical screening examination*, *stabilizing* treatment, and if necessary, appropriate *transfer* to another hospital that has the needed specialized *capability*, without regard to the person's ability to pay or method of payment.

The hospitals transfer patients to other facilities in the interest of quality

patient care or at the request of the patient or the patient's legal representative.

The hospitals are obligated to accept appropriate transfers of individuals with emergency medical conditions if the transferring hospital does not have a specialized capability that the hospital has (for example, obstetrics or neonatal intensive care unit), and if the hospital has the *capacity* to care for the patient. The hospital also complies with reporting obligations under EMTALA.

Content

This policy is divided into five sections and covers the following topics:

- Section 1: Examination and Treatment
- Section 2: Transfers
- Section 3: Emergencies in Non-Clinical Areas of the Hospital
- Section 4: Emergencies Outside of Hospital Property
- Section 5: Reporting EMTALA Violations
- Appendix A: Definitions

This policy does not include routine hospital admissions, transfers and discharges, bed placement, intra-hospital transfers or the transfer of patients to equal or lower levels of care.

Policy Links ~ Admission and Bed Placement
~ Admission Transfer and Discharge Criteria
~ Transfer of Patient to an External Non Acute Facility
~ Patient Transportation: Intra-hospital (Excludes NICU)

References

- 42 U.S.C. §139dd
- 42 C.F.R. § 489.24
- 64 Fed. Reg. 61,353 (1999)
- 68 Fed. Reg. 53,222 (2003)
- Moy, Mark. The EMTALA Answer Book. Aspen Publishers, Wolters Kluwer, 2009 Edition.
- Lewis, Jessica, "EMTALA Update: CMS Issues Guidance Clarifying Recent Changes," National Law Review, Poyner Spruill LLP, 2009.

End of Overview

Section 1: Examination and Treatment

Section Contents: Medical screening exam / Delays and payment / Contacting physicians / On-call physicians / Emergency medical conditions / No emergency medical conditions

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Medical screening examination

Qualified Medical Personnel

Qualified medical personnel provide medical screening examinations to individuals who come to the *Emergency Center (EC)* or *Labor and Delivery unit (L&D)* to determine if an emergency medical condition exists.

The scope of the medical screening examination is within the capability of the hospital's EC and L&D unit, including ancillary services that are routinely available to such areas.

Signs

Signs are posted in a conspicuous location in the emergency center and the labor and delivery unit (and other places as appropriate) stating the right of the individual to examination and treatment for an emergency medical condition and that the hospitals participate in the Medicare program.

Note: Hospital personnel are not obligated to provide screening services beyond those necessary to determine whether an emergency medical condition exists.

Delays due to individual's ability to pay or method of payment

When a patient *comes to the emergency center, the labor and delivery unit*, or to another area on *hospital property* seeking treatment for a possible emergency medical condition, the medical screening examination is **not** delayed by asking about the individual's ability to pay or method of payment.

Patient Questions

Staff knowledgeable about billing and EMTALA regulations should answer patient questions about financial responsibility for emergency services. Patients should be told of the hospital's willingness to provide a medical screening examination and stabilizing treatment if needed.

Hospital staff is not allowed to seek, or instruct the individual to seek, authorization from the individual's insurance company for screening or stabilization services until **after** the medical screening examination has been performed and any medical examination and treatment needed to stabilize the emergency medical condition has been initiated.

Hospital personnel may follow standard registration procedures, including inquiries about the individual's insurance (that is, whether the individual is insured and, if so, what the insurance is), as long as the inquiry does not delay screening or treatment and the individual is not discouraged from remaining for further treatment.

Contacting patient physicians

An emergency physician or non-physician practitioner may contact the individual's physician at any time to seek advice about the individual's medical history as long as the consultation does not delay the services required under this policy.

On-call physicians

Qualified medical personnel performing the medical screening examination are responsible for determining, after consulting with the on-call physician, whether it is necessary for an on-call physician to come to the hospital to provide further examination and treatment.

Availability

The hospitals maintain an on-call list of physicians who are on its' medical and dental staff. It also has procedures that address when a physician with a particular specialty is unavailable or the on-call physician cannot respond due to circumstances beyond his or her control.

> **Note:** On-call physicians scheduling elective surgery or with other call duties must arrange for backup coverage. A compliant transfer to an appropriate facility may also be considered to avoid delay.

Responsibilities

On-call physicians are responsible for:

- Appearing within a reasonable time after notification according to the rules and regulations of the medical and dental staff

Note: If the on-call physician does not appear within a reasonable time (in most cases, 30 minutes), the qualified medical personnel is responsible for assessing alternate treatment options for the patient and seeking other appropriate care, including the use of a back-up physician roster for some specialties. If the patient must be transferred to another facility capable of meeting the patient's clinical needs, qualified medical personnel must document the name and address of the on-call physician (Part IV of the *Acute Care Transfer Record*) who failed to appear on transfer documents.

Form FoD: Acute Transfer Record

- Assuming responsibility for patient management until the case has been referred to another physician who has accepted responsibility for the management of the patient

When emergency medical condition(s) exist

After determining that an emergency medical condition exists, further examination and treatment are provided within the capabilities of the staff and facilities available at the hospital until the individual's condition is stabilized or an appropriate transfer is made.

See Section 2 "Appropriate Transfer"

When no emergency condition exists

If, after performing the medical screening examination and using ancillary services routinely available to the emergency center and labor and delivery unit, it is determined that the individual does not have an emergency medical condition, the basis for this determination is documented in the medical record.

The individual may then be:

- Given further non-emergency treatment
- Referred to a private physician or an outpatient facility
- Discharged

Financial Arrangements
When it has been determined that no emergency medical condition exists, personnel may then interview the individual about financial arrangements to pay for the medical care given.

Note: The EMTALA requirements and procedures **no longer apply** once it is determined the individual does not have, or no longer has, an emergency medical condition. EMTALA also does not apply to:

- Inpatients
- Patients who have begun to receive scheduled or unscheduled outpatient services

End of Examination and Treatment

Section 2: Transfers

Section Contents: Stable patients / Unstable patients / Appropriate transfers / HCH obligations / Consent for transfer / Patient refusal

Stable patient

A patient in *stable* condition may be transferred from the hospital when the physician has completed the *Acute Care Transfer Record* before the transfer.

The nursing staff is responsible for assessing the patient and discussing changes in the patient's condition with the physician according to instructions on the *Acute Care Transfer Record* within one hour of transfer time for inpatients and within 15 minutes of transfer time for emergency transfers.

Form FoD: Acute Transfer Record

Unstable patient

A patient in unstable condition may be transferred from the hospital when the:

- Physician certifies on the *Acute Care Transfer Record* that the medical benefits expected from treatment at another facility outweigh the risks of transfer.

or

- The patient, or legally responsible person, requests transfer after being informed of the risks of transfer and the hospital's obligation to provide a medical screening examination and stabilizing treatment.

Note: The nursing staff is responsible for verifying on the *Acute Care Transfer Record* that the certification is within one hour of the time of transfer for inpatients and within 15 minutes of transfer time for emergency transfers.

Note: The patient or legally responsible person must document the request for transfer on the *Acute Care Transfer Record*, stating the reasons for the request and that he or she is aware of the risks and benefits of transfer. The transfer request should also be documented in the patient's medical record.

Note: In the event that there is a disagreement regarding the transfer, see Consent to transfer and Patient refusal to accept transfer sections below.

Appropriate transfers

For all patients, a transfer is only appropriate when the:

- Transferring hospital provides medical treatment within its capacity which minimizes the risk to the individual's health and, in the case of a woman in labor, her health and the health of her unborn child.
- Receiving facility has both the capability and capacity (available space, operational equipment, and qualified personnel) for the treatment of the individual and has agreed to accept transfer of the individual and to provide medical care.
- Physician has explained the reasons, alternatives, risks, and benefits of transfer to the patient or legal representative.
- Transferring hospital sends the receiving hospital all medical records (or copies of the record) related to the emergency medical condition for which the individual has presented that are available at the time of transfer including:

  a. Records related to the individual's emergency medical condition
  b. Observations of signs or symptoms
  c. Preliminary diagnosis
  d. Treatment provided
  e. Test results
  f. Informed written consent or certification by the patient or the patient's legal representative
  g. Name and address of any on-call physician at the referring facility who failed to appear within a reasonable time to provide necessary stabilizing treatment

Note: Other records that are not readily available at the time of transfer must be sent as soon as practicable after the transfer.

- Physician documents acceptance of transfer by the receiving facility and the nurse documents the name and title of the person to whom report was given at the receiving facility on the *Acute Care Transfer Record*
- Transfer is done through qualified personnel and proper transport equipment

See "Inappropriate transfers" in Section 5.

Consent for transfer

When possible, the physician obtains consent for the transfer from the patient or the patient's legal representative on the *Acute Care Transfer Record.*

Consent refusal. If the patient or legal representative refuses to consent to transfer, the physician is responsible for documenting on the *Acute Care Transfer Record* the reasons(s) for refusal and the risks and benefits of transfer were explained to the patient or legal representative.

Note: Patients who are committed under an involuntary certification do not sign the consent for transfer section of the *Acute Care Transfer Record.*

Nursing staff is responsible for making reasonable attempts to obtain the signature of the patient or the patient's legal representative and documenting the refusal in the medical record.

Patient refusal to accept transfer against medical advice

If an individual refuses transfer against medical advice, the physician is responsible for explaining the risks and benefits of the transfer and request that the individual sign the "Acute Care Transfer Record." If the individual refuses to sign the form, the physician is responsible for documenting the risks and benefits of transfer that were explained to the individual, the reason(s) for the refusal and the individual's refusal to sign the form.

Hospital obligation to accept certain transfers

The hospital must accept appropriate transfers of individuals with emergency medical conditions if:

- The transferring hospital does not have a specialized capability that the hospital has (for example, a neonatal intensive care unit)
- The hospital has the capacity to treat the individual's emergency medical condition
- The hospital specialty attending physician, such as the OB/GYN attending, neurologist, neurosurgeon, cardiologist, or the neonatologist, who has been contacted by another facility requesting to transfer their patient to the Hospital, has the authority and responsibility to accept or refuse a request for transfer to the

respective specialty unit at the Hospital. Prior to accepting the patient the hospital specialty attending physician will consult with the Bed Management department regarding capacity status. Transfers may be refused if the Hospital lacks capacity. The Hospital is not obligated to accept transfers from hospitals located outside of the boundaries of the United States.

- The Bed Management Department will consult with the specialty unit charge nurse and the specialty unit Director (or Administrative Coordinator on the off-shifts) to assure that the Hospital has the capacity to treat this patient. The physician may opt to speak directly with the charge nurse and/or Administrative Coordinator.

- The Bed Management Department will maintain a log of all transfer requests to the Hospital. If a transfer to a higher level of care is refused, the log will reflect the names of the involved hospital physician, charge RN and Director/Administrative Coordinator, and reason for the refusal (such as lack of space, resources, down equipment, unavailable qualified personnel, etc.)

- Prior to transport of the patient to the hospital:
    a. the receiving hospital attending physician has to have agreed to accept the patient
    b. The receiving hospital attending physician has to have received a complete report on the patient from the sending physician at the transferring facility.
    c. The receiving hospital RN has to have received a complete report on the patient from the sending RN at the transferring facility.
    d. The patient or surrogate has to have agreed to the transfer.
    e. The transferring hospital agrees to send the receiving hospital all medical records (or copies of the record) related to the emergency medical condition for which the individual has presented that are available at the time of transfer including:
        - Records related to the individual's emergency medical condition
        - Observations of signs or symptoms
        - Preliminary diagnosis
        - Treatment provided
        - Test results
        - Informed written consent or certification by the patient or the patient's legal representative
        - Name and address of any on-call physician at the referring facility who failed to appear within a reasonable time to provide necessary stabilizing treatment

Note: Other records that are not readily available at the time of transfer must be sent to the receiving hospital as soon as practicable after the transfer.

End of Transfers

Section 3: Emergencies in Non-Clinical Areas of the Hospital

Section Contents: Assistance outside clinical areas / Security responsibilities / Emergency Center responsibilities

Assistance needed outside a clinical care area

Hospital staff members are responsible for immediately calling security when they become aware of anyone seeking assistance for a potential emergency medical condition (or for whom assistance is sought) on hospital property that is outside a clinical care area.

- If the patient is awake and his condition is of concern, the STAT Team should be immediately activated.
- If the patient is unresponsive or has gasping breaths, the Code Blue Team should be activated.
- If the patient is behaving in an aggressive manner, the Code Green Response Team should be activated.

Note: Security is part of the STAT, Code Blue and Code Green Teams. Therefore, a separate call to security is necessary only if for any reason one of these teams is not activated or if security does not respond to the initial call.

Policy Links ~ STAT Team Policy
~ Code Blue: Cardiopulmonary Emergency/Arrest and AED
~ Code Green Response Team Aggressive Behavior Incidents

Security responsibilities

Security is responsible for immediately:

- Dispatching at least one security staff member to the individual's location
- Contacting the Emergency Center (EC) for instructions

Emergency Center responsibilities

Based on the information provided by security, EC personnel are responsible, as necessary, for:

- Instructing the security staff
- Activating the STAT, Code Blue or Code Green Response Teams as appropriate, or sending clinical staff to attend to the individual.
- The staff may activate the emergency medical system (EMS/911), as determined by the nature of the situation and/or mechanism of injury.
- Arranging for medically appropriate transport of the individual to an appropriate emergency center.

End of Emergencies in Non-Clinical Areas

Section 4: Emergencies Outside of Hospital Property

Section Contents: Persons outside of hospital property

Persons outside of hospital property

Hospital staff members are responsible for immediately calling EMS/911 when they become aware of anyone seeking assistance for a potential emergency medical condition (or for whom assistance is sought) outside of hospital property.

If an individual is outside of hospital property, and the EC becomes aware of the situation, depending on the proximity to the Hospital, the EC may opt to send designated clinical staff to attend to the patient until EMS arrives.

End of Emergencies Outside of Hospital Areas

Section 5: Reporting EMTALA Violations

Section Contents: Inappropriate transfers / Staff with concerns / Physicians with concerns / RM/PS department responsibilities / Chief Medical Officer responsibilities / Protection against retaliation

Inappropriate transfers

Examples of inappropriate transfers include, but are not limited to, transfers from or to the hospital that involve:

- Patients the hospital did not agree to accept before transfer
- Patients not accompanied by appropriate medical records
- Patients whose transfer did not use appropriate medical transport personnel or equipment

See "Appropriate Transfers" in Section 2.

Staff who have concerns about inappropriate transfers

Hospital employees and contracted staff are responsible for notifying their supervisor (or the Administrative Coordinator during off-shifts) immediately if they have reason to believe that an individual with a non-stabilized emergency medical condition has been transferred to the hospital or from another hospital in violation of EMTALA requirements.

A hospital safety (VOICE) report should also be completed.

The supervisor (or the administrative Coordinator during off-shifts) will notify the Chief Medical Officer.

Physicians who have concerns about inappropriate transfers

Physicians who have concerns about inappropriate transfers are responsible for immediately and directly contacting the Chief Medical Officer.

The Chief Medical Officer is responsible for immediately notifying the Risk Management/Patient Safety department.

Risk management/ patient safety department responsibilities

The Risk Management/Patient Safety department is responsible for reviewing the circumstances of the patient's transfer and providing a report of its investigation to the Chief Medical Officer within **24 hours** of receiving the information about an inappropriate transfer.

Chief Medical Officer responsibilities

If the Chief Medical Officer concludes that there is a reasonable basis to believe that there was an inappropriate transfer of an unstable patient from another facility and that the reporting requirements of federal regulations are met, he or she is responsible for making a report to the designated state or federal agency within **72 hours**.

If the…	Then…
transferring facility is in Maryland,	the report is made to the Office of Health Quality of the Maryland Department of Health and Mental Hygiene.
transferring facility is outside of Maryland,	the report is made to the federal Centers for Medicare and Medicaid Services (CMS).

No report is needed. If the Chief Medical Officer concludes that no report under federal law or regulations is needed, but that the transferring facility involved needs to be contacted about its transfer arrangements, he or she is responsible for contacting the appropriate person(s) at that facility.

Protection against retaliation

A physician or other staff member will not be penalized or have adverse action taken against him or her for:

- Refusing to authorize the transfer of an individual with an emergency medical condition that has not been stabilized
- Reporting an EMTALA violation

Education plan

This policy will be available to staff in the electronic policy management system (Policy Tech). Managers will be informed of updates to this policy at Patient Safety Committee, Safety Committee, and Clinical Leadership meeting. Managers are responsible for disseminating information to their respective teams.

End of Reporting EMTALA Violations

End of Policy

Appendix A: Definitions

Agents / Capability / Capacity / Comes to the EC and L&D / Court-appointed guardians / Emergency Center / Emergency medical condition / EMTALA / Hospital property / Labor and Delivery unit / Legal representatives / Medical screening exam / Pregnant woman / Qualified medical personnel / Stabilized / Stable for transfer / Stable for discharge / Surrogates / Transfer

Capability	*Capability* of the hospital refers to the existing physical space, equipment, supplies and services that the hospital provides to support the specialty service, such as Labor and Delivery, or Psychiatry. It also refers to the level of care that hospital staff can provide within the training and scope of their professional licenses. This includes coverage available through the Hospital's on call roster.
Capacity	*Capacity* means the ability of the hospital to accommodate the requested examination or treatment of the transferred individual. Capacity encompasses such things as numbers and availability of qualified staff, open beds, and available working equipment. It includes the hospital's past practices of accommodating additional patients in excess of its occupancy limits.
Comes to the emergency center or labor and delivery unit	*Comes to the emergency center or labor and delivery unit* means: • any person who comes to the hospital Emergency Center (EC) or Labor and Delivery (L&D) unit and requests examination or treatment of a medical condition (or has a request made on his or her behalf). • any person who comes onto hospital property other than the EC or L&D and requests examination or treatment for a potential emergency medical condition (or has a request made on his or her behalf). *Note*: In the absence of a verbal request by the individual or his or her legal representative, a request exists if a prudent layperson would believe that the individual requires examination or treatment based on his or her appearance or behavior.
EMTALA	*EMTALA* is an acronym for the federal Emergency Medical Treatment and Active Labor Act of 1986. It is also known as the "anti-dumping" law and prohibits inappropriate transfers of patients with emergency medical conditions and women in active labor.
Emergency medical condition	An *emergency medical condition* is a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain), psychiatric disturbances, or symptoms of substance abuse such that the absence of immediate medical attention could reasonably be expected to result in placing the health of an individual (or in the case of a pregnant women, the health of the woman or her unborn child) in serious jeopardy. *Pregnant woman*. A pregnant woman having contractions is considered to

have an emergency medical condition if there is inadequate time to effect a safe transfer to another medical facility before delivery, or that transfer may pose a threat to the health or safety of the woman or her unborn child. A woman having contractions is considered to be in true labor unless a physician certifies that she is in false labor.

Hospital property

Hospital property refers to the entire hospital campus, including parking lots, sidewalks, and driveways that are contiguous to the hospital campus, but not including physicians' offices, the cafeteria, gift shop, or other non-medical facilities.

***Note*:** The Holy Cross Resource Institute on Dameron Drive and the Physician's Office Building, (except for the Emergency Department on the ground floor and the first floor elevator corridor, waiting area, SICU and EKG department), are not owned by Holy Cross Hospital. They are not hospital property and EMTALA does not apply to them.

When a Hospital vehicle is enroute to or from the Hospital, its passengers are not considered to be on hospital property and EMTALA does not apply to them.

Legal representative

A *legal representative* is someone who is authorized to speak and make decisions for an individual. This includes:

Agents are	appointed to make healthcare decisions for a patient under an advance directive made according to the Maryland Health Care Decision Act.
Court-appointed guardians are	adults who have not been appointed under an advance directive, but who under certain circumstances, are authorized by Maryland State law to provide consent for someone who is unable to make informed decisions.
Surrogates are	adults who have not been appointed under an advance directive, but are authorized by Maryland State law to provide consent, under certain circumstances, for an individual who is incapable of making informed decisions. Consent may be obtained from a surrogate in the following priority

	order: • Spouse or domestic partner • Adult child • Parent • Adult sibling • Friend or relative who has signed an "Affidavit of Relationship to Patient" form. **Note: This form must be completed and put in the patient's medical record.** Form Link ~ FoD: Affidavit of Relationship to Patient

Medical screening examination

A *medical screening examination* is an examination within the capabilities of the hospital emergency center and labor and delivery unit, including ancillary services routinely available to such areas.

Qualified medical personnel perform this examination to determine whether the person has an emergency medical condition.

Qualified medical personnel

Qualified medical personnel are individuals considered qualified by the hospital board of trustees to conduct medical screening examinations and stabilizing treatment as documented in the rules and regulations of the medical and dental staff.

Emergency Center. The medical screening examination must be performed in the Emergency Center (EC) by one of the following:

- The emergency medicine physician on duty
- A physician assistant or nurse practitioner under the supervision of the emergency medicine physician on duty according to hospital policy
- The individual's private physician

Note: The medical screening examination must be performed by any of the above qualified medical personnel for patients who arrive at the hospital's EC seeking direct admission to the hospital by arrangement with his or her private physician if the patient's admission to the hospital is delayed by 30 minutes or more or the patient requests screening or treatment for an emergency condition.

Labor and Delivery unit. The medical screening examination in the labor and delivery unit (L&D) may be performed by one of the following:

- A clinical nurse acting in collaboration with the patient's private physician and according to hospital policy
- A resident physician under the supervision of the attending physician
- The patient's private physician

Stabilized

Stabilized means that no significant deterioration of the emergency medical condition is likely, within reasonable medical probability, to result from or occur during the transfer of the individual, or in the case of a pregnant woman having contractions, the baby and placenta are delivered.

Stable for transfer. Stable for transfer means that the appropriate physician has determined, within reasonable clinical confidence, that:

- The patient is expected to leave the hospital and be received at the second facility with no material deterioration in his or her medical condition
- The receiving facility has the capability to manage the patient's medical condition and any reasonable foreseeable complications

Stable for discharge. Stable for discharge means that the appropriate physician has determined, within reasonable clinical confidence, that the patient has reached the point where his or her continued care, including diagnostic work-up or treatment, could reasonably be performed as an outpatient or later as an inpatient. It also means that the patient is given a plan for appropriate follow-up care and discharge instructions.

Transfer

Transfer refers to the movement (including the discharge) of an individual outside the hospital's facilities at the direction of an appropriate physician or responsible hospital representative, but does not include such a movement of an individual who:

- Has been declared dead
- Leaves the hospital without the permission of a physician or responsible hospital representative

End of Definitions

Admission, Transfer, and Discharge Criteria

Owner/Dept: ANDREA KHANDAGLE, Dir-Pat Plcmt /Staffing/PHS/ President Holy Cross Hospital	Date approved: 05/29/2014
Approved by: CELIA GUARINO (Chief Nursing Officer), Judith Rogers (President of Holy Cross Hospital)	Next Review Date: 05/29/2017
Affected Departments: All Clinical Staff	

Purpose

To outline the Holy Cross Hospital (HCH) policy regarding admission, transfer, and discharge criteria of the nursing units.

Applies to HCH

- Medical and dental staff
- Hospital staff

Definitions

Term	Definition
Level of Care Criteria	InterQual Acute Level of Care Criteria provide support for determining the medical appropriateness of hospital admission, continued stay, and discharge.
Acuity Adaptable	Inpatient beds that can flex based on patient acuity and level of staff care, (i.e. Critical Care to Intermediate Status or Intermediate Status to Medical-Surgical level status).
Accommodation Code	A value (and charge) assigned to each inpatient bed charge that is reflective of the acuity of the patient and nursing staff needed to care for patients.
Critical Care	A level of medical and nursing care provided to hemodynamically unstable patients (or those with the potential to become unstable) who require treatment, assessment, or intervention every 1-2 hours.
Intermediate Care	A level of medical and nursing care provided to patients who require treatment, assessment, or intervention every 2-4 hours. (Also referred to as definitive observation in Maryland).
Acute Care	A level of medical and nursing care provided to patients who require treatment, assessment, or intervention every 4-8 hours. Patients may or may not be on telemetry monitors.
Observation	A level of medical and nursing care provided to patients who require 6-24 hours of treatment or assessment pending a decision to admit to the hospital for additional care….
Patient Type	Refers to the identification of the type of service provided and status of the patient visit. Patient types include Inpatient (IP), Observation (OS), Emergency (EM), Ambulatory Surgery (AS), Newborn (NB), Hospice Inpatient (HI), Rehab Med-PT/OT/ST (1A).

Policy overview Holy Cross Hospital maintains guidelines for admission, patient placement, transfer and

discharge.

General admission

Per physician order, patients admitted to HCH will be placed on the nursing unit most appropriate to the patient's diagnosis and condition. Patients should meet the level of care and patient placement criteria specific to the nursing unit they are assigned to (Appendices A and B).

There are four levels of care in the general medical-surgical areas (excluding maternity, Neonatal Intensive Care Unit (NICU), High Risk Perinatal Center (HRPC), and Pediatrics): critical, intermediate, acute and observation. All units within these levels of care are capable of telemetry monitoring except Women's Surgery, Oncology, and Joint & Spine.

The general medical-surgical areas are further differentiated by medical or surgical specialty, and may have associated restrictions to admission. Patients are preferentially placed by specialty but could be cared for on any unit capable of that level of care. Patients generally not eligible for admission to these areas are patients under 18 years of age, unless medically and psychosocially appropriate.

Bed placement will be done by the Administrative Coordinator (AC) and bed management in collaboration with the charge nurse of the unit. If a nursing unit is at capacity and unable to accommodate a patient, the patient may be assigned to another nursing unit capable of providing the same level of care.

General transfer and discharge

Patients will remain on the assigned nursing unit until:

- Their condition requires another level of care, technology (e.g. telemetry monitoring), or specialty
- Inpatient nursing care is no longer required and the patient has been medically cleared and discharge planning needs have been met

Note: Patients assigned to a nursing unit outside of the focus of their diagnosis or condition may be transferred to the appropriate unit when a bed becomes available. The charge nurse of the transferring unit initiates a transfer request to bed management.

Patient Acuity

Accommodation codes are assigned on inpatient admission, reviewed daily, and changed appropriate to the patient's acuity and intensity of nursing service as part of census reconciliation performed prior to midnight. (Appendix C)

Acuity Adaptability
The critical care areas can flex to an intermediate level of care; and the intermediate care unit can flex to an acute level of care. The following acute care units can flex to an acute level of care with and without telemetry monitoring: CIC (Cardiac Intermediate care), IMC (Intermediate care), PCU (Progressive care unit), Medicine, and General Surgery.

Unit specific criteria table of contents

The unit-specific admission, transfer, and discharge criteria can be found in this document as follows:

Unit	See Page
Critical Care Units (Cardiac Care Unit, Intensive Care Unit, Surgical Intensive Care Unit/Neuro Critical Care Unit)	3
Intermediate Care	7
Acute Care	8
Acute Care - Oncology	8
Observation	8
Pediatrics	9
Labor & Delivery and Maternity Suites	10
High Risk Perinatal Center	11
Neonatal Care Unit	12

Note: Only criteria that differ from general criteria will be outlined in the unit-specific sections.

Critical Care (CC) Unit admission criteria

All patients admitted to a critical care unit will be classified according to the priority system described below. In addition, all admissions will be reviewed for appropriateness by the director or designee or the charge nurse. Priority 1 patients have highest priority for treatment. Priority 3 patients the lowest. Classification will be made by the director or designee and the charge nurse, and will be reevaluated daily; classification may change in accordance with changes in condition or prognosis.

All admitted patients must have written admission orders from the attending physician or designee upon arrival in the unit or be accompanied by a physician. All patients must be seen by the attending physician or designee and have an admission note in the patient record within 4 hours of admission to unit.

Classification	Description
Priority 1	Critically ill, unstable patients in need of intensive treatment such as ventilator support, continuous vasoactive drug infusion, etc. and for whom there is a reasonable chance of benefit. Priority 1 patients have no limits placed on therapy. Examples of such admissions include but are not limited to: • shock • acute respiratory failure • life-threatening GI bleeding • unstable post-operative patients requiring advanced life support Additional examples for **CCU** include patients with: • acute myocardial infarction • pulmonary edema

Priority 2	Patients who are not critically ill but whose condition requires the technologic monitoring services of a CC Unit or intensive nursing care.. These high-risk monitoring patients may benefit from intensive monitoring (systemic or pulmonary arterial lines) and are at risk for needing immediate intensive treatment. Priority 2 patients have no limits placed on therapy. Examples include, but are not limited to, patients with: • underlying heart, lung, or renal disease who have a severe medical illness or have undergone major surgery Additional example for **CCU** include: • acute myocardial infarction in patients not requiring active hemodynamic support
Priority 3	Critically ill, unstable patients whose previous state of health, underlying disease, or acute illness, either alone or in combination, severely reduces the likelihood of recovery and benefit from critical care treatment. Priority 3 patients may have limits placed on therapy. Examples include, but are not limited to, patients with: • metastatic malignancy complicated by infection, pericardial tamponade, or airway obstruction • patients with end-stage heart or lung disease complicated by severe acute illness • patients with severe dementia or encephalopathy who are non- functional at baseline • patients with sequelae of end-stage acquired immunodeficiency syndrome

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Neuro Critical Care Unit (NCCU)

Admission criteria are determined by a combination of neurological diagnosis systemic stability and therapeutic interventions. Level of care in NCCU is based on the intensity of monitoring and therapeutic interventions.

- ICU" status (typically 1:1 or 2:1 patient: nurse ratio)
  - Monitoring greater than every 2 hours
  - Intervention includes acute mechanical ventilation, ventriculostomy, etc.
- "Step-Down" status (typically 3:1 or 4:1 patient: nurse ratio)
  - Monitoring less than every 2 hours
  - Intervention includes stable mechanical ventilation, contained burr-hole drainage of chronic identify what this is- SDH, etc.

Diagnosis' appropriate for admission to NCCU

- Neurological Diagnosis
  - Intracranial masses
  - Cerebrovascular disease (e.g. CVA, TIA, hemorrhage)
- "Brain trauma (e.g. hematoma, closed head injury, skull fracture)
  - Seizures
    - Status epilepticus
    - Recurrent or refractory seizures
    - Elective Epilepsy monitoring
  - Acute, treatable or diagnostically uncertain unstable neuromuscular disease
  - Infectious
  - Spinal cord dysfunction

- Coma
- Miscellaneous
  - Hypercalcemia
  - Acute Hyponatremia
  - DKA or hyperosmolar state
  - Addisonian crisis
  - Cerebral Salt Wasting Syndrome
  - Diabetes Insipidus

CC Unit transfer and discharge criteria

Transfers out of and discharge from critical care will occur as follows:

Classification	Criteria
Priority 1 patients will be transferred/ discharged when…	active critical care treatment and invasive monitoring is no longer required.
Priority 2 patients will be transferred/ discharged when…	the patient's condition has stabilized such that intensive monitoring is not required. Generally, if no active treatment has been given for 24 hours, the patient will be a candidate for transfer.
Priority 3 patients will be transferred/ discharged when…	the need for intensive care is no longer present or when further critical care treatment has little likelihood of benefit or is deemed futile.

Arrangements for appropriate care must be made prior to transfer of any patient. Priority 3 patients may stay in critical care if appropriate care cannot be given in another setting.

Patients may be discharged to home directly from critical care if they are stable and arrangements for appropriate care have been made.

Patients following a clinical pathway will be candidates for transfer from critical care when the specific unit discharge criteria of that pathway are met.

Patients meeting criteria for discharge from critical care will be reclassified as Priority 1T, 2T, or 3T (T= transfer).

CC Unit triage procedure

All patients in critical care will be reviewed by the director/designee or charge nurse and classified according to the priority system. If a patient meets discharge criteria, the charge nurse will contact the attending physician to request transfer. If there is disagreement between nursing and the attending physician, the director or designee will speak with the attending physician. If the director or designee agrees with the attending

physician that the patient's condition requires further critical care, the patient's classification will be changed accordingly; otherwise, transfer orders should be written promptly by the attending physician or their designee prior to transfer from the unit. Transfer orders may be taken by telephone. Transfer orders are not required if the patient is being moved to a unit with the same level of care.

If beds are needed after transferring all patients who meet discharge criteria, Priority 3 patients will be transferred to make room for Priority 1or 2 patients after arrangements for appropriate care outside of the critical care unit are made. The attending physician will be notified by either the charge nurse or director/designee that the bed is needed for another patient of higher priority with greater acuity. The attending is expected to comply with this request unless a convincing argument can be made for changing the patient's classification. Transfer orders must be given ASAP if a bed is needed urgently.

If all critical care beds are full and arrangements for appropriate care of Priority 3 patients cannot be made, new patients meeting admission criteria will be cared for on another clinical unit capable of providing the same level of care as critical care (e.g. emergency center, PACU) until a bed in critical care becomes available.

All cases in which there is substantial disagreement between the director and the patient's attending physician will be reviewed by Risk Management. Physicians found to have a pattern of inappropriate admissions, delayed transfers or who are found to be in violation of unit policy will be reported to their Chief of Service.

Triage decisions fall to the director or designee. The foremost consideration in triage decisions is the expected outcome of the patient in terms of survival and function. While uncertainty of prognosis is a crucial problem in critical care, the results of predictive instruments (e.g. Apache scores) will be considered as a component in the determination of prognosis even while understanding the strengths and limitations of these instruments. Priority for treatment (either admission or continued treatment) in critical care will correlate with the likelihood that care offered in these units will benefit the patient substantially more than care in a non-critical care unit. Factors considered in determining benefit include:

- Likelihood of a successful outcome
- Patient's life expectancy due to underlying disease
- Anticipated quality of life of the patient
- Wishes of the patient and/or surrogate
- Burdens for those affected, including psychological costs and missed

opportunities to treat other patients

Ethnic origin, race, sex, creed, social worth, sexual preference, and ability to pay will not be factors considered in triage decisions. Triage decisions may be made without patient or surrogate consent.

CC Unit general principles

The CC Units are open units. All qualified attending physicians may admit and treat their patients in the unit along with appropriate consultation as dictated by the patient's condition and unit policy. The attending physician must obtain immediate consultation with the physician of their choice in accordance with this policy if requested to do so by the director or designee. Required consultations in the critical care units include the following:

- All patients requiring mechanical ventilation must be followed by a physician with ventilator privileges with-the following exception: patients immediately post-op who are on the surgical teaching service and are otherwise stable do not need to be seen by a physician with ventilator privileges if they are extubated by the earlier of 2 PM the day following surgery or within 24 hours after the initiation of mechanical ventilation
- A cardiology consultation may be required for any patient admitted to the CCU for acute MI or unstable angina
- All patients admitted by all surgery sub specialties except thoracic surgery and vascular surgery must be followed by either a general surgeon or a sub specialist in pulmonary or critical care medicine
- Consultation by a sub-specialist in the primary system failure leading to admission or a sub specialist in pulmonary or critical care medicine may be required for all patients requiring critical care for more than 24 hours
- Consultation may at any time be required at the discretion of the director or designee
- In complicated cases with multiple consultations and differing therapeutic approaches, the director may require the attending physician to designate on the order sheet a specific physician to take charge and coordinate patient care

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End of Critical Care Criteria

Intermediate Care

All patients admitted to intermediate care must:

- Have a set of written admission orders from the attending physician/designee upon arrival or be accompanied by a physician.
- Be seen by the attending physician/designee and have a physician admission note on the patient record within 8 hours of admission
- Be seen on a daily basis by the attending physician/designee and have written daily progress notes on the patient care record

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End of Intermediate Care Criteria

Acute Care

All patients admitted to acute care must:

- Be seen by the attending physician/designee and have a physician admission note on the patient record within 24 hours of admission. Note: General Surgery requires written admission orders within 2 hours of admission to the unit, and patients must be seen by the attending physician/designee and have an admission note within 8 hours of admission.
- Be seen on a daily basis by the attending physician/designee and have written daily progress notes on the patient care record

Acute Care - Oncology admission criteria

The order of priority for admission to the oncology unit is as follows:

- Patient requiring the administration of chemotherapy or biotherapies
- Patients undergoing treatment with 1-131 for thyroid cancer
- Cancer patients
  - who require symptom management to include pain, nausea/vomiting, and dehydration
  - undergoing radiation treatment for active treatment or palliation
  - undergoing extensive work-up for metastatic disease
  - requiring extensive case management or psychosocial support
  - Inpatient Hospice patients
- Surgical oncologic patients to include but not limited to: colostomy, ostomy, hysterectomy, and craniotomy
- Sickle cell patients requiring intensive symptom management to include hydration, transfusion, and pain management
- Patients with hematological compromise requiring management by a hematologist
- Overflow medical patients may be admitted to the floor if a bed is available after all other priority patients are accommodated

The following patients are generally excluded from admission to the oncology unit. If a physician deems that the patient would be best treated on the oncology unit he/she will collaborate with the Director, Clinical Nurse Specialist, or designee to review on a case-by-case basis.

- Symptomatic Grade IV anemia
- Tumor Lysis Syndrome with cardiac arrhythmias (K+> 6.5)
- New onset of seizures or status epilepticus
- Septic shock with unstable blood pressure or heart rate
- Active DIC with bleeding and clotting
- Anaphylaxis
- Symptomatic cardiac tamponade

End of Acute Care Criteria

Observation Status

Patients admitted to observation status will preferentially be placed in the Observation Unit if they meet eligibility requirements (Observation Policy – Patient Status and Locations). Patients not meeting eligibility requirements will be cohorted on the medical units or the unit most appropriate to the patient's care needs.

End of Observation Criteria

Pediatrics admission criteria

Patients admitted to pediatrics are generally between the age of birth through 18 years of age. Other patients, including adult patients, will be admitted on a case-by-case basis. The pediatric unit is able to provide nursing care for patients with many diagnoses, for example, but not limited to:

- Asthma
- Pneumonia
- Brochiolitis
- Cellulitis
- Hyperbilirubinemia
- Kawasaki disease
- Ingestions
- Croup
- Sickle cell disease
- Seizure disorders
- Surgical procedures
- Orthopedic therapies

Cardiorespiratory and pulse oximetry monitoring are available in a centrally monitored environment.

Pediatrics admission guidelines

At the time of admission, the anticipated outcome for pediatric patients should be one of improvement in status and continued progression to wellness in a reasonable amount of time. Patients whose condition does not improve steadily and predictably, may need to be stabilized and readied for transfer to a facility that can perform higher level of care and monitoring.

- **For admissions to the pediatric teaching service:**
  - The admission procedure is initiated by a call from the admitting physician to the charge nurse detailing the patient's diagnosis and plan of care to ensure that the most appropriate room placement, and appropriate preparation and resources are available
  - All admissions to the pediatric medical service will be discussed with the pediatric resident (prior to the patient's arrival on the unit) to facilitate plans for admission and care management
  - The admitting physician/physicians office will also notify patient reception to verify/confirm all pre-admission requirements.
  - Physicians who admit to the pediatric service are to have seen or see their patients within 12 hours of admission.
  - All orders for patients on the pediatric teaching service are written by the pediatric resident in collaboration with the pediatric attending
- For admissions to other than the pediatric teaching service:
  - Pediatric admissions to other than pediatric teaching service occur in several ways; through the emergency department, through surgical posting and direct admissions from physician offices or other health care facilities
  - It is expected that the admitting physician will speak with the charge nurse regarding the plan of care

- All patients, regardless of service, are to be seen daily by an attending physician and all patients must have a history and physical done within 24 hours of admission
- All admissions of minors must be done with the consent and presence of a parent or legal guardian

Note: Legal guardians must show evidence of having legal custody, and a copy of the documentation must be placed in the front of the chart.

Pediatric transfer and discharge criteria

Every effort is made to accommodate all pediatric patients on the eighth floor. In times of demand for beds beyond capacity, re-evaluation of the patient population will occur, with consultation with various resources (nurse director, Women & Children's Manager on call, administrative coordinator, pediatric attending, infection control, etc.).

Scenarios may include:

- Facilitating discharge of some patients or moving some patients to other units
- Adult patients on the unit would be the first priority to be transferred with notification to their physician (patients moved within the unit do not require physician order/notification)

End of Pediatric Unit Criteria

Labor and delivery and maternity suites admission criteria

Labor and delivery

Patients will be admitted/transferred to the labor and delivery unit using the following criteria:

- Patients with an admitting obstetric diagnosis
- Patients identified as needing care that nurses on the labor and delivery unit could give best

Maternity suites

Postpartum women and newborns will be admitted to the Mother Baby Unit using the following criteria:

Infants

Stable infants will be assessed by the Nursery Resource Nurse and cleared or transferred to Maternity Suites Unit.

- If the infant is medically unstable, the infant must be banded prior to mother/infant separation and transfer to the NICU
- Babies born outside of HCH who are medically stable must be kept in Labor and delivery with the mother for infant identification procedures including quadruple banding. These infants should be seen by Neonatology for assessment and determination of appropriate unit placement (NICU/Labor and Delivery)
- Infants must be seen and evaluated by the admitting physician or designee within 24 hours of the infant's admission.
- If the infant is medically unstable, the infant must be banded prior to mother/infant separation and transfer to the NICU

Stable infants will be assessed by the Nursery Resource Nurse and cleared

or transferred to Maternity Suites Unit.
Infants must be seen and evaluated by the admitting physician or designee within 24 hours of the infant's admission.

Labor and delivery and maternity suites admission criteria

Mothers

- All stable postpartum patients
- Mothers who deliver outside of HCH and are not seen or treated at another healthcare institution and who are medically stable must be kept in the emergency room with the infant for infant identification procedures including quadruple banding
  - These mothers will be admitted directly to labor & delivery for assessment and recovery.
  - If the mother is medically unstable, the mother/infant couplet must be banded in the emergency room prior to mother/infant separation
- If the mother was delivered or seen at another healthcare institution, the mother may be directly admitted to labor and delivery after infant identification procedures and banding occurs
  - Mothers must be seen and evaluated by the admitting physician or designee within 24 hours of admission
- Patients who have received MgS04 post delivery may be transferred to maternity suites 2 hours after discontinuation of the MgS04 providing that their condition is otherwise stable
- Patients will remain on the Labor and Delivery/Maternity Suites units until discharge unless their condition warrants transfer to another area

Note: Labor and delivery and maternity suites utilize general transfer and discharge criteria listed on page one of this policy.

End of Labor and Delivery and Maternity Suites Criteria

High risk perinatal center admission criteria

Patients admitted to the high-risk perinatal center include female patients between the ages of approximately 12-45 years old requiring inpatient hospital care for an obstetrical complication.

Patients not eligible for admission include:

- Patients who require a continuous pulse oximeter bed
- Patients who are medically unstable or critical, requiring monitoring capabilities of Labor and Delivery or of a critical care unit such as ICU, CCU, SICU, IMC or CIC

NICU admission criteria

- Neonates, 0-30 days of age, that require specialized care and management, including, but not limited to, resuscitative and stabilization measures, ongoing medical intensive care, hemo-dynamic monitoring and cardio-pulmonary monitoring, intravenous fluid, nutrition, and/or medication administration, and convalescent care after any of the above.

- Neonates are admitted as "Intensive" capacity and remain in that capacity for a minimum of 24 hours. Infants will be re-evaluated every 24 hours and may be re-assigned to the "Baby" capacity when their nursing care requirements justify such.
- Neonates that do not meet criteria for routine Maternity Suites newborn care, will be admitted to the NICU as a Short Stay admission. Admission in this status is limited to 6 hours. At this time, the neonate must be able to be transferred to routine newborn care on Maternity Suites, or will be converted to a full NICU admission.
- Neonates are admitted to the NICU under the care of the NICU Neonatal Medicine Service attending physician.
- The Neonatal physician, in collaboration with the Charge Nurse, the Asst. Nurse Mgr, and/or the Nurse Director, will determine eligibility for admission to the NICU.
- In the case of the neonate born at HCH, the mother's signed consent for treatment, done at the time of her admission to Labor and Delivery, constitutes consent for the infant's treatment in the NICU. All direct admissions from the Emergency Department, transfers from Pediatrics, or from referral hospitals (including back-transfers), must have signed consent for treatment from the parent/guardian upon admission.
- Neonates transferred for tertiary care may be back-transferred to HCH when they no longer require the higher level of care. A HCH neonatal physician must accept the neonate and in collaboration with Utilization Review, the NICU charge nurse/ nursing leadership will, coordinate to receive the neonate.

NICU classifications

Classification	Example
1 Infants requiring multi-system support	Labile or unstable infant requiring conventional n at high settings or High Frequency Jet ventilation. Infants needing hourly blood testing, having indwelling invasive lines (arterial or venous), requiring medication drips and/or sedation with close monitoring, prolonged resuscitation, exchange transfusion, or any sudden clinical deterioration requiring resuscitation or significant change in plan of care. Also, infants undergoing laser eye surgery, any surgical procedure, or surgically placed central line procedure (for the duration of the procedure).

2 Infants requiring intensive care	Stable infant on ventilator assistance or CPAP, with low, moderate, or high settings, with stable blood gases, invasive lines (arterial or venous) for treatment and/or monitoring. Chronically ill infants requiring frequent interventions. Infants on insulin drips, requiring less than every 2 hourly blood testing. Infants with multiple apneic or bradycardic events, lengthy transport for procedures, or during peripheral central line placement.
3 Infants requiring intermediate care	Stable infant with peripheral or central lines for treatment, transfusion, IV fluids, parenteral nutrition, or medications. Stable infant requiring oxygen via Vapo-therm, CPAP, or nasal cannula. Occasional mild-moderate apneic or bradycardic events. Difficult nipple feedings, bolus gavage feeding every 2-4 hours, or continuous feedings. Infants requiring blood product transfusion, septic work-up, drug withdrawal, contact or respiratory isolation, or complex discharges.
4 Infants requiring continuing care	Stable infants on full feedings via gavage/p.o. every 3-4 hours. May have Hep- Lock for antibiotics, but without complicated medical needs.

NICU transfer and discharge criteria

- Infants may be transferred to Maternity Suites or Pediatrics, if they no longer require the level of care and services available in the NICU, as long as they meet the admission criteria of the unit to which they are being transferred.
- The mother must still be admitted as a patient if the baby is to be transferred to Maternity Suites.
- If the mother has been discharged, and in collaboration with the family and the Pediatric Unit physician and nursing staff, the infant may be transferred to Pediatrics.
- A pediatrician, credentialed to care for newborns by HCH, must accept the neonate on his/her service, prior to the infant's transfer.
- A transfer summary of NICU care, will be placed on the neonates medical record
- Neonates requiring specialized services or care that is not available at HCH, will be transferred to a tertiary care center that provides that care. The HCH neonatal physician will initiate the transfer and a neonatal physician from the receiving hospital must accept the neonate. Transport of the neonate to the receiving hospital is not done by HCH staff, but may be arranged for or facilitated in some cases. The neonate remains under the care of the HCH neonatal medicine attending until the transport team arrives, obtains consent to treat, and assumes care for the neonate.
- Discharge is recommended when the infant meets the following criteria:
  - Resolution or stabilization of acute problems
  - Enteral intake, appropriate with respect to route and amount, to support growth
  - Ability to maintain body temperature in an open crib

- Completion of the following tests:
  - Initial and subsequent Maryland Metabolic Screenings as required by HCH policy and Maryland State Law.
  - Newborn Hearing Screening
  - Eye exam-if applicable
  - Infant Car Seat test-if applicable
- Parents/guardians demonstrate the knowledge and ability to provide care for the infant at home
- Discharge order written by physician/NNP within 24 hours of discharge date and time
- Notification of follow-up Pediatrician/facility and of appointments made
- Verification that of follow-up appointments/referrals have been discussed with family/guardian
- Completion of Discharge teaching and checklist –signed by parent/guardian and discharging nurse
- Satisfactory completion and documentation in the neonates medical record, of home monitor training and infant CPR training, if infant is being discharged on a home heart rate/apnea monitor
- Physician/NNP Physical Exam and Discharge Summary completed on day of discharge

End NICU criteria

Appendix A
Levels of Care By Unit

	ICU	CCU	SICU	IMC	CIC	PCU	Medicine	Oncology	General Surgery	Women's Surgery	Joint & Spine
Critical	P	P	P								
Intermediate	S	S	S	P/T							
Acute	S	S	S	S/T	P/T	P/T	P/T	P	P/T	P	P
Observation	S	S	S	S	S	S	S	S	S	S	S

P = primary S = secondary T = telemetry capable

Level of Care Patient Placement Guidelines

Acute Care no Telemetry	Acute Care with Telemetry	IMC
Patients that require: • Treatment, assessment, intervention Q 4-8H • VS monitoring Q Shift • No requirement for IV antidysrhythmic or vasoactive agents	Patients that require: • Treatment, assessment, intervention Q 4-8H • VS, neuro, vascular monitoring Q 4 hours; Q 2 hours x 4 when specifically ordered • Monitored unit IV drugs (CIC only maintenance dose Dopamine & Dobutamine;	Patients that require • Treatment, assessment, intervention Q 2-4H • Long term mechanical ventilation • Insulin drip • Plasmapheresis • Monitored unit IV drugs plus Dopamine, Dobutamine, Nitroglycerine

<table>
<tr><td></td><td>approval required
Nitroglycerine)</td><td></td></tr>
<tr><td>Diagnosis
• Primary diagnosis of medical, surgical, or orthopedic problems without need for additional monitoring
• Chronic heart failure
• PACs/PVCs without evidence of ischemia, hypotension, or syncope
• History of cardiac dysrhythmia not requiring immediate drug intervention in the last 24 hours
• Differential diagnosis of AMI has been ruled out
• Stable respiratory issues O2 less than 50% on FM</td><td>Diagnosis
• Primary or secondary cardiac diagnosis that requires ECG and/or pulse oximetry monitoring
• Drug overdose/ETOH withdrawal
• Hemodynamically stable post MI
• Dysrhythmia, external pacemaker or malfunctioning pacemaker
• Hypertensive urgency with no evidence of end organ damage
• Significant cardiac co-morbidity
• Medical patients recovering from unstable coronary syndromes, CHF, syncope, chest pain not due to AMI
• Moderate heart failure (requires no more than 50% oxygen).
• Respiratory failure requiring 50% oxygen or less due to pneumonia, COPD, or CHF
• General medical or surgical patients with other significant cardiac co-morbidity
• Delineation into one of the following categories
➢ CIC: Primary cardiac diagnosis requiring specialized services of CIC and all CHF patients
➢ PCU: Primary neuro diagnosis requiring specialized services. All epilepsy monitoring and stroke patients
➢ General Surgery: all hemo- dynamically stable surgery patients requiring cardiac or pulse oximetry</td><td>Diagnosis
• Medical-surgical diagnosis that requires ECG continuous pulse oximetry monitoring, greater than 50% oxygen
• Initiation of inotropic medications for CHF
• Mechanical ventilation requiring chronic care or slow weaning*
• Acute need for BIPAP/CPAP or aggressive chest physiotherapy
• Stable neuromuscular or neurovascular disorders requiring ongoing neuro checks, q 2 hour positioning or suctioning
• Endocrine diagnoses requiring insulin drips, accuchecks, or injections q 2 hours
• Thyroid states requiring frequent monitoring
• Stable postoperative patients with significant co-morbidities

*Requires pulmonologist or intensivist consultation.</td></tr>
</table>

<table>
<tr>
<td></td>
<td>monitoring
➢ Medicine: General medical or surgical patients with other cardiac comorbidities</td>
<td></td>
</tr>
<tr>
<td>Inappropriate Patient Types:
• Primary cardiac diagnosis, uncontrolled arrhythmias or ongoing acute ischemia, unstable heart failure or syncope
• Hemodynamically unstable</td>
<td>Inappropriate Patient Types:
• Comfort care only unless they require a specialized service other than continuous ECG or SPO2 monitoring
• Hemodynamically unstable</td>
<td>Inappropriate Patient Types:
• Comfort care only unless on chronic mechanical ventilation or require a specialized service other than continuous ECG or SPO2 monitoring
• Imminent risk of requiring intubation
• Hemodynamically unstable</td>
</tr>
<tr>
<td colspan="3">Monitored unit IV drugs: Adenosine*, Aminocaproic acid, Amiodarone*, Atropine, Calcium gluconate infusion, Diazempam**, Digoxin (loading/maintenance), Diltiazem*, Diphenhydramine, Enalapril, Epoprostenol, Fosphenytoin**, Haloperidol (except palliative/hospice), Hydralizine, Ibutilide*, Labetalol, Lidocaine, Lorazepam**, Metoprolol, Milrinone, Octrotide, Pentamidine, Phenobarbital, Phenytoin**, Verapamil.
CIC – in addition to above, may continue maintenance infusion of low dose Dopamine** & Dobutamine**; and may infuse Nitroglycerine** with critical care leadership approval.
IMC – in addition to above, may initiate Dopamine, Dobutamine, Nitroglycerine

*Requires MD at bedside
** Dosage restrictions – see Red Book</td>
</tr>
</table>

Appendix B
Patient Placement Guidelines – General Medical Surgical Areas

LOC	Specialty Area	Primary Patient Population	Secondary (in order of preference)	Exceptions/Exclusions
OBS	Observation Unit (19 beds, 2 short term bays)	Medical observation	Acute with telemetry	Intensive bathroom needs
ACUTE	Oncology	Oncology, hospice	Acute medical	See page 8
	Medicine – 5NE and SE	Medical with or without telemetry	Surgical Observation	
	General Surgical	Surgical with or without telemetry Orthopedic (fractures) Bariatric surgery	Adult GYN overflow J&S overflow Medical	Negative pressure rooms
	Joint/Spine	Joint/Spine surgical	Ortho/Spine patients Surgical patients Medical patients	Negative pressure rooms; draining wounds; [UTI is OK]
	Women's Surgical	GYN surgical (female) Breast surgery	General surgical Female medical	Negative pressure rooms
	CIC	Cardiac with or without telemetry	Acute medical with telemetry Observation	
	PCU	Neuro with or without telemetry Seizure monitoring	Acute medical with telemetry Observation	
INTE R MEDI ATE	IMC	Intermediate medical and surgical Note: 6 designated ventilator capable beds	Acute medical or surgical with telemetry	
CRITICAL CARE	SICU/NCCU	SICU – Post surgical ICU NCCU – Neuro medical (acute)/surgical	Medical ICU Maternal ICU	
	ICU	Medical ICU, Maternal ICU	Post surgical ICU, Cardiac ICU Intermediate - Chronic ventilator	
	CCU	Cardiac ICU IABP/STEMI/Cath/EP (must)	Medical ICU, Medical neuro ICU	

Overflow:

LOC	Specialty Area	Primary Patient Population	Secondary (in order of preference)	Exceptions/Exclusions
Pediatrics	Pediatrics (25 beds; ADC 12, allow for 50% surge)	Pediatrics (age < 18, unless otherwise ordered by physician)	Maternal-child overflow Adult GYN surgical Female medical (single system) Male medical/surgical (single system)	Adult M/S patients requiring negative pressure rooms, overdose, or multi-system issues or co-morbidities (e.g. CHF)
Maternity	Maternity	Maternity patients (post delivery)	Female GYN (non-infected)	

Holy Cross Germantown Hospital
Back-Up Plan When the CCU is Full

1. If CCU is full, notify the intensivist to identify a patient within the CCU for transfer to a lower level of care.
2. If absolutely no patient is eligible for transfer to a lower level of care, arrange for the two most stable patients to cohort in Acute Care Medicine 4 or 5 and assign a CCU nurse to care for them. Alternatively, the patient may be placed in PACU if that level of care is needed, and cared for by a CCU nurse.

DRAFT Charter: Cardiac Services Committee
Holy Cross Germantown Hospital

GOAL: Provide oversight and direction on the development and performance of the HCH cardiac services program. Help ensure compliance with terms and conditions of cardiac designations and waivers awarded by the State of Maryland.

Objectives

- Provide overall guidance on cardiac services development and care delivery, and facilitate the integration of the cardiac services program across care areas. Includes:
  - Identifying changes in how care is delivered based on medical practices and processes.
  - Reviewing and approving the adoption of evidence-based clinical practice guidelines for cardiac care.
  - Providing for continuous quality improvement through the evaluation of clinical and operational processes and outcomes.
  - Ensuring linkage to the HCH quality and patient safety structure
- Perform case reviews, performed by the pPCI program cardiac interventionalists, of all pPCI cases performed in the prior month; and, conduct at least a semiannual external review of the PCI program.
- Function as a Medical Review Committee under Health Occupations Article §1-401, Annotated Code of Maryland. Review performance data and oversee data submissions as required.
- Plan and provide continuing education for medical staff and supporting services.
- Annually review procedural protocols for the delivery of cardiac services.

Authority

- Submits recommendations to senior management concerning cardiac clinical and operational resource needs.
- Makes requests to HCH IRB for study protocol, consent, patient material, or related changes needing IRB approval.
- Approves enhancements to research study coordination and processes.
- Establishes subgroups focused on specific areas as needed (e.g., case review).

Meeting Parameters

- The committee is multi-disciplinary and meets the third Tuesday of every month.
- The standing agenda for each Committee meeting includes the following items:
  - A. Prior meeting minutes review/approval
  - B. Process and outcome reports for cardiac procedures
  - C. Case discussion
  - D. Additional agenda items
  - E. Open forum
  - F. Education

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- All committee or subgroup documents that reflect case discussions include the following clause: *"This is a confidential professional/peer review and quality improvement document of the hospital and the Trinity Health system of providers. It is protected from disclosure pursuant to the provisions of Code of Maryland, Health Occupations 1-401 which provides that "except as otherwise provided in that section, the proceedings, records, and files of a medical review committee are not discoverable and are not admissible in evidence in any civil action, "and other state laws as well as the federal Health Care Quality Improvement Act, 42 U.S.C. 11101, Patient Safety and Quality Improvement Act, 42 U.S.C. 299b-21-b-26 and other federal laws. Unauthorized disclosure or duplication is absolutely prohibited."*

Cardiac Services Committee Membership

Title
Core Team
• Cardiac Services Committee Co-Chair Medical Director, Cardiac Cath Lab
• Cardiac Services Committee Co-Chair • Director, Surgical Services/ Cath Lab/ IR
• Physician Representative for non-PCI procedures
• Chair, Emergency Medicine
• Lead Intensivist
• Director, Medical, Surgical, and Critical Care
• Director, Emergency Department
• Director, Performance Improvement
• Cath Lab Nurse and Technician
• Emergency Department Nurse Educator
Additional Members to attend as needed or available
• Chief Medical Officer
• Lead Hospitalist
• Chief Nursing Officer
• Director, Medical Imaging
• Lead Case Manager
• Cardiac Cath Lab Staff
• Nurse Educator
• Pharmacy Representative
• Emergency Medical Services Representative
• Director, Respiratory Therapy

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Exhibit 2

Letter of Commitment from the President, Holy Cross Germantown Hospital

HOLY CROSS GERMANTOWN HOSPITAL

19801 Observation Drive
Germantown, MD 20876
301-557-6000
www.holycrosshealth.org

October 13, 2015

Ben Steffen
Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Re: Letter of Commitment regarding establishment of a primary PCI program at Holy Cross Germantown Hospital

Dear Mr. Steffen:

It is my pleasure to submit this application for the establishment of a primary PCI program at Holy Cross Germantown Hospital.

In 2008, the Board of Directors of Holy Cross Health made a commitment to provide access to health care services in upper Montgomery County. It subsequently applied for a certificate of need to establish the first new hospital in Montgomery County in the past 35 years – Holy Cross Germantown Hospital. Since that time, Holy Cross Health successfully obtained the CON and opened the new hospital in October 1, 2014. In addition, the health system opened the Holy Cross Health Center in Germantown, Maryland, in June 2015. The Health Center was developed to provide primary care services to adults and children who may not have access to primary care due to lack of insurance. This is the fourth such center opened in Montgomery County by Holy Cross Health.

In advance of opening the hospital, I visited all of the MCFRS fire houses located in upper Montgomery County to ask the paramedics and other staff what services Holy Cross Germantown Hospital could offer that would help better serve the community. Unanimously, across every fire house I visited, the paramedics asked me to establish a primary PCI program at Holy Cross Germantown Hospital. The concerns raised by the paramedics included the following:

- In their words, "time is muscle." The paramedics were concerned that from many points in the upper Montgomery County area that they would drive by our hospital location to reach the nearest PCI center. This extra drive would cause the "EMS EKG to balloon" time to be increased for STEMI patients.
- The paramedics also stated that when current PCI centers in Montgomery County are on "red" or "yellow" diversion that they then drive much further to reach the nearest primary PCI center.
- The longer the ambulance is out of its local service area leads to greater times that the ambulance is unavailable for the next call. In addition, the paramedics talked about the extra miles that are put on the ambulance which makes its useful life shorter.

Acknowledging this request, it was important to me to submit an application requesting the establishment of a primary PCI program as soon as I was able to. In addition, while the hospital is not able to receive ambulances with a patient with a known STEMI, the hospital receives walk-in STEMI

patients frequently. In our first year of operation, the hospital has received 18 walk-in patients that needed to be transferred to the closest PCI center. Again, the transfer adds critical time to the "door to balloon" time for that patient.

To enable the development of the primary PCI center, I want to ensure that Holy Cross Germantown Hospital commits to key requirements listed in the application including the following. The hospital shall provide primary PCI services as soon as possible and not to exceed 90 minutes from patient arrival at the hospital, excluding transfer cases, for at least 75 percent of appropriate patients. The hospital shall also track the door-to-balloon times for transfer cases and evaluate areas for improvement. Further, I acknowledge that the hospital will support the program by providing the leadership and resources necessary to provide primary PCI services in accord with the requirements for primary PCI programs established by the Maryland Health Care Commission.

If the hospital obtains Commission approval to establish a primary PCI program it commits to meet the standards to:

- Identify a physician director of interventional cardiology services responsible for defining and implementing credentialing criteria for the catheterization laboratory and for overall primary PCI program management, including responsibility for equipment, personnel, physician call schedules, quality and error management, review conferences, and termination of primary PCI privileges. The hospital will provide this information to the Commission staff 90 days prior to first use approval. That notification will also include the following:
    - Name of the physician director
    - Evidence of the physician having achieved an average annual case volume of 50 or more PCI cases over a two-year period (using Form C in the Certificate of Conformance application)
    - Evidence of the physician having met the ACCF/AHA/SCAI 2013 Update of the Clinical Competence Statement on Coronary Artery Interventional Procedures:
        - board certification in interventional cardiology, unless that individual performed interventional procedures before 1998 or completed training before 1998 and did not seek board certification before 2003
        - completion of a minimum of 30 CME hours in the area of interventional cardiology during every two years of practice
    - Copy of the physician's signed agreement to participate in an on-call schedule and not to participate in simultaneous call
- Develop a formal, regularly scheduled (meetings at least every other month) interventional case review that requires attendance by interventionalists and other physicians, nurses, and technicians who care for primary PCI patients.
- Create a multiple care area group (emergency department, intensive care unit, and cardiac catheterization laboratory) that includes, at a minimum, the physician and nursing leadership of each care area and meets monthly to review any and all issues related to the primary PCI system, identify problem areas, and develop solutions.
- At least semi-annually, as determined by the Commission, conduct an external review of at least five percent of randomly selected PCI cases performed in the applicable time period and an internal review of at least 10 percent of randomly selected PCI cases performed in the applicable time period.

- Submit documentation that demonstrates compliance with the following standard 90 days prior to first use, *"Each physician who performs primary PCI services at a hospital that provides primary PCI without on-site cardiac surgery shall achieve an average annual case volume of 50 or more PCI cases over a two-year period."* The hospital shall submit to the Commission a roster of staff who will be performing primary PCI with documentation showing that each currently meets the case volume requirement, using Form C in the Certificate of Conformance application.

We are ready and excited to provide this critical service to our community.

If you have any questions, please do not hesitate to contact me at (301) 557-6020 or Doug.Ryder@holycrosshealth.org.

Sincerely,

Doug D. Ryder
President

cc: Kevin J. Sexton, President and CEO, Holy Cross Health
Kristin H. Feliciano, Chief Strategy Officer, Holy Cross Health
Eileen Fleck, Chief, Acute Care Policy and Planning, MHCC

Exhibit 3

Program Development and Implementation Plan

Holy Cross Germantown Hospital
Primary Percutaneous Coronary Angioplasty
Program Development and Implementation Workplan*
*assumes the MHCC will approve the application in December 2015

Program Element	Action	Responsible Party	Completion Date
Policies and Procedures	• Coordinate adoption of HCH pPCI program and Cardiac Interventional Center policies and procedures • Conduct inservices for Emergency Department, Cardiac Cath Lab, Intensive Care Unit physician and staff. Conduct pPCI policy tracers to test knowledge and identify areas for additional learning.	Chief Nursing Officer; Director, Surgery Services, Cardiac Cath Lab and Interventional Radiology	December 2015
Resources	• Submit purchase order and obtain Acist System, CVI and cart • Order and obtain supplies for pPCI procedures in the ED, CCL and critical care unit	Director, Surgery Services, Cardiac Cath Lab and Interventional Radiology; Senior Director, Supply Chain	January 2016
Leadership	• Appoint a CCL Medical Director	Chief Medical Office & VP of Medical Affairs	January 2016
Interventional Cardiologists	• Obtain participating interventional cardiologists' agreements to not take simultaneous call • For each interventionalist, obtain the number of primary and non-primary PCI procedures for which they were the primary operator in the most recent 8 calendar quarters	Director, Planning and Business Development	January 2016
	• Assemble documentation of interventional cardiologists' HCGH credentials to practice at HCGH: ➢ Physician's application for privileges at the hospital includes their request to provide C-PORT and shows their PCI volume in the 2 years before their application's date ➢ The hospital's approval of privileges for the physician (the approval letter) ➢ Delineation of the physician's hospital privileges (the delineation of privileges form)	Director, Medical Affairs	January 2016
Staffing	• Adopt HCH Cath lab staff clinical competencies	Director, Surgery Services, Cardiac Cath Lab and Interventional Radiology	December 2016
	• Recruit additional cath lab staff to achieve pPCI staffing complement	Director, Surgery Services, Cardiac Cath Lab and Interventional Radiology; Director, Recruitment	January 2016
Education and Training	• Finalize the Cath Lab, ED, and ICU staff pPCI training schedule. Includes CathPCI, ICD, and AMI Lifeline registry training for cath lab staff.	Director, Surgery Services, Cardiac Cath Lab and Interventional Radiology	December 2016
	• Implement the training schedule		January 2016
Quality and Program oversight	• Develop a pPCI quality plan for HCGH. Inservice the ED and interventional cardiology physicians about the plan.	Director, Performance Improvement	January 2016
	• Establish Cardiac Services Committee and annual meeting calendar. • Initiate monthly meetings	President, Holy Cross Germantown Hospital	November 2016

Exhibit 4

Transfer Agreements:

Suburban Hospital
Washington Hospital Center

PATIENT TRANSFER AGREEMENT
BETWEEN
SUBURBAN HOSPITAL, INC.
AND
HOLY CROSS HEALTH, INC.

THIS AGREEMENT, made as of the 1st day of October, 2014 ("Effective Date") by and between **SUBURBAN HOSPITAL, INC.** (herein called "Hospital") and **HOLY CROSS HEALTH, INC., D/B/A HOLY CROSS GERMANTOWN HOSPITAL** (herein called "Facility").

WHEREAS, Hospital and Facility desire, by means of this Agreement, to ensure continuity of care and treatment appropriate to the needs of the patients, (hereinafter referred to as "patients") in the Hospital and the Facility, utilizing the knowledge and other resources of both facilities in a coordinated and cooperative manner to improve the health and care of patients.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: That in consideration of the mutual advantages accruing to the parties hereto, Hospital and Facility hereby covenant and agree with each other as follows:

I. HOSPITAL AND FACILITY AGREE:

A. To the timely transfer of patients between Facility and Hospital (which may also be referred to herein as the "Transferring Party" or the "Receiving Party," as the case may be), as hereinafter provided, when medically appropriate and in accordance with applicable policies and procedures of the parties.

B. That, prior to transferring a patient, the Transferring Party must receive confirmation from the Receiving Party that it can accept the patient.

(i) In the case where Hospital is the Receiving Party, prior to transferring a patient, Facility shall contact Hospital via the 24 hour Hopkins Access Line ("HAL Line"), to arrange for the transfer. The HAL Line is accessed by calling 410-955-9444 or 1-800-765-JHHS (5447).

C. That the Transferring Party shall send with each patient to the Receiving Party at the time of transfer an abstract of pertinent medical and other information necessary to continue the patient's treatment without interruption and provide essential identifying information. The Transferring Party agrees to supplement the information as necessary for the maintenance of the patient at the Receiving Party. Both parties agree to maintain the confidentiality of the medical information so as to comply with all state and federal laws, rules and regulations regarding the confidentiality of patient records, including the Health Insurance Portability and

Accountability Act ("HIPAA").

D. That the Transferring Party shall have responsibility for obtaining the patient's consent to the transfer to the Receiving Party prior to the transfer, if the patient is competent. If the patient is not competent, Transferring Party shall attempt to obtain consent from any reasonably available legally responsible person acting on the behalf of the patient.

E. That the Transferring Party shall have the responsibility for arranging transportation of the patient to the Receiving Party. The Receiving Party's responsibility for the patient's care shall begin when the patient arrives at the Receiving Party. In the event Receiving Party utilizes its own transportation service or otherwise arranges to transport the patient, the Receiving Party assumes responsibility for the patient's care upon acceptance of the patient prior to transport.

F. That the Transferring Institution shall arrange for appropriate and safe handling of patients' valuables.

G. That clinical records of a patient transferred shall contain evidence that the patient was transferred.

H. That the transfer procedure is made known to the patient care personnel of each of the parties.

I. That neither party shall use the name of the other in any promotional or advertising material without the prior written approval of the other party.

J. That governing bodies of each institution shall have exclusive control of their policies, management, assets and affairs of their respective institutions.

K. That neither party assumes liability for any debts or other obligations for the other party's action.

L. Except primary and non-primary percutaneous coronary intervention ("PCI") patients and treatment of STEMI (ST Segment Elevation Myocardial Infarct), all transfers of patients shall be subject to the Hospital's having available space, services, personnel and equipment to provide the care needed by the patient and the determination by a physician at the Hospital that the transfer is appropriate. The provisions of this Section I.L. shall be construed to require the unconditional transfer of primary and non-primary PCI and STEMI patients from Facility to Hospital and the Hospital's unconditional acceptance of such patients for any required additional care, including for STEMI or emergent or elective cardiac surgery or PCI, and to provide timely transmission of required follow-up data on transferred patients.

II. EACH PARTY REPRESENTS AND WARRANTS UPON EXECUTION AND THROUGHOUT THE TERM OF THIS AGREEMENT THAT:

A. Hospital is an acute care hospital licensed by the state in which it is located and accredited by the Joint Commission, and Facility is a Maryland acute care hospital, expected to be accredited by the Joint Commission or by CMS through the state of Maryland soon after it opens on October 1, 2014 that as of the opening date, will not provide PCI or treatment of STEMI for heart attack patients.

B. All medical professionals providing services to patients at its facility are licensed in their profession by the state in which it is located and credentialed by Hospital or Facility, and that services provided to patients shall be within the scope of said medical professional's privileges;

C. It shall perform the services required hereunder in accordance with: (i) all applicable federal, state, and local laws, rules and regulations; and all applicable standards of the Joint Commission any other relevant accrediting organizations;

D. It has, and shall maintain throughout the term of this Agreement, all appropriate federal and state licenses and certifications which are required in order to perform the services required hereunder; and

E. Neither it nor any of its staff is sanctioned or excluded from any federally funded health care programs as provided in Sections 1128 and 1128A of the Social Security Act (42 U.S.C. 1320a-7a).

III. BILLING:

Bills incurred with respect to services performed by the Hospital or Facility for patient care shall be collected by the institution rendering such services directly from the patient, third party insurance coverage, or other sources normally billed by the institution. No clause of this Agreement shall be interpreted to require Hospital or Facility to compensate the other for services rendered to a patient transferred under this Agreement.

IV. **INSURANCE.** Each party shall be responsible for its own acts and omissions in the performance of the duties hereunder and the acts and omissions of their own, officers, agents, and employees. In addition, each party shall maintain throughout the term of this Agreement comprehensive general and professional liability insurance as follows: Both parties to this Agreement represent that they will be continuously and adequately covered by professional liability insurance (at least $1,000,000 per occurrence/ $3,000,000 in the aggregate), as well as by general liability insurance (at least $1,000,000 per occurrence/$3,000,000 in the aggregate). In addition, each party shall carry adequate worker's compensation insurance for its employees. All such insurance shall be considered primary, and copies of the certificates evidencing coverage shall be sent directly by each party's insurance company to the other

party upon execution of this Agreement and promptly upon reasonable request at other times. All such insurance shall be purchased from a carrier admitted to sell such insurance in Maryland; however, an adequate program of self-insurance may be accepted in lieu of commercial insurance. Each party agrees to immediately notify the other of any actual or intended changes, cancellation, or intended diminution of any insurance to be provided pursuant to this Section, and of the filing of any claims or suits arising out of professional services rendered pursuant to this Agreement.

V. TERM:

This Agreement shall be effective as of the Effective Date and shall continue in effect indefinitely, except that either party may withdraw by giving sixty (60) days written notice in advance of termination. However, if either party shall breach any of the representations and warranties set forth in Section II hereof, this Agreement shall terminate as of the date of such breach.

VI. GENERAL:

A. This Agreement may be modified or amended from time to time by mutual written agreement of the parties, and any such modification or amendment shall be attached to and become part of this Agreement.

B. An executed copy of this Agreement with all amendments, if any, shall be kept in the administrative file of each of the parties for reference.

C. Nothing in this Agreement shall be construed as limiting the rights of either party to affiliate or contract with any other hospital or facility, while this Agreement is in effect.

D. This Agreement is subject to all requirements of Maryland law and any regulations issued pursuant hereto and that where the Agreement is in conflict with the provision of the law or the regulations, the same shall be deemed to conform with the law and the regulations.

E. All notices hereunder by either party to the other shall be in writing, delivered personally, by certified or registered mail, return receipt requested, or by Federal Express or Express Mail, and shall be deemed to have been duly given when delivered personally or when deposited in the United States mail, postage prepaid, addressed as follows:

If to Hospital:

Suburban Hospital
Attn: President
4940 Eastern Avenue

Baltimore, Maryland, 21224

With a copy to:

The Johns Hopkins Health System Corporation
Attention: General Counsel
733 N. Broadway
Suite 102
Baltimore, Maryland 21205

If to Facility:

Holy Cross Health, Inc., d/b/a Holy Cross Germantown Hospital
19801 Observation Drive
Germantown, MD 20876
Attention: Legal Services Department

Or to such other persons as either party may from time to time designate by written notice to the other.

The signature page follows.

IN WITNESS WHEREOF, Hospital and Facility have executed this Agreement by their duly authorized representatives.

WITNESS: **SUBURBAN HOSPITAL, INC.**

Nancy C. Zuniteno

By: [signature]
Name: Robert Rothstein
Title: VPMA
Date: 11/10/14

This Agreement has been reviewed for legal sufficiency by The Johns Hopkins Health System Corporation Legal Department.

[signature]

WITNESS: **HOLY CROSS HEALTH, INC., D/B/A HOLY CROSS GERMANTOWN HOSPITAL**

[signature]

By: Doug D. Ryder
Name: Doug D. Ryder, President
Title: President
Date: 9/8/14

Exhibit 5

Transport Agreement

Butler Medical Transport, LLC

FOURTH AMENDMENT

This Fourth Amendment (the "Amendment") is entered into as of the 28th day of September 2015 (the "Effective Date") by and between Holy Cross Health, Inc. ("Facility" or "Transferring Facility") and Medstar Washington Hospital Center Corporation ("Hospital").

WHEREAS, Hospital and the Facility are parties to an agreement dated April 18, 2008 (the "Agreement") in which Hospital agreed to accept transfers of patients in need of emergent or elective cardiac surgery or PCI from Holy Cross Hospital in Silver Spring, Maryland.

WHEREAS, the Agreement has been amended and extended to April 17, 2017; and

WHEREAS, the parties now desire to amend the agreement to add Holy Cross Germantown Hospital in Germantown, Maryland.

NOW THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. **Name of Facility**. In the introductory paragraph, the signature page, and each place where the name of the Facility is mentioned, the name is changed to Holy Cross Health, Inc. Holy Cross Health, Inc. is deemed to include Holy Cross Hospital, 1500 Forest Glen Road, Silver Spring, MD 20910 and Holy Cross Germantown Hospital, 19801 Observation Drive, Germantown, MD 20876.

2. **Transfer of Patients**. Hospital agrees to accept transfers of patients in need of emergent or elective cardiac surgery or PCI from either hospital named in this Agreement.

3. **No Other Amendments**. Except as set forth above, there are no other amendments to the Agreement and all the terms and conditions of the Agreement remain in full force and effect.

The signature page follows.

TRANSFER AGREEMENT

THIS TRANSFER AGREEMENT ("Agreement") is made and entered into by and between Washington Hospital Center Corporation ("Hospital") and Holy Cross Hospital of Silver Spring, Incorporated ("Facility" or "Transferring Facility").

RECITALS:

A. The parties hereto desire to enter into this Agreement governing the transfer of patients from Facility to Hospital for any required additional care, including emergent or elective cardiac surgery or percutaneous coronary interventions ("PCI"), and to provide timely transmission of required follow-up data on transferred patients.

B. The parties hereto desire to enter into this Agreement in order to specify the rights and duties of each of the parties and to specify the procedure for ensuring the timely transfer of patients between the parties.

NOW, THEREFORE, to facilitate the continuity of care and the timely transfer of patients and records between the parties, the parties hereto agree as follows:

1. **TRANSFER OF PATIENTS.** In the event that a patient of Facility is deemed by the Facility as requiring additional care which the Facility is unable to provide, including emergent or elective cardiac surgery or PCI and a transfer is deemed medically appropriate, a member of the nursing staff of Facility or the patient's attending physician will contact such individuals who are designated by the Hospital to determine whether transfer of the patient is appropriate. The Hospital agrees to admit the patient as promptly as possible, provided that all conditions of eligibility for admission are met and bed space, services, personnel and equipment are available to accommodate the patient. The Hospital shall give the Facility prompt confirmation of whether it can provide the appropriate care to meet the patient's medical needs. Prior to transferring the patient, Facility must receive confirmation from the Hospital's designated representative that it can accept the patient. All patient transfers shall be made in accordance with applicable federal and state laws and regulations, the standards of The Joint Commission ("TJC") and any other applicable accrediting bodies, and reasonable policies and procedures of the facilities. Both parties agree to retain data regarding performance measures of services provided herein for the purpose of certification or accreditation. Neither the decision to transfer a patient nor the decision to not accept a request to transfer a patient shall be predicated upon arbitrary, capricious, or unreasonable discrimination or based upon the patient's inability to pay for services rendered by either party. The Hospital's responsibility for the patient's care shall begin when the patient is admitted to the Hospital. The Hospital agrees to unconditionally accept the transfer of patients enrolled in the PCI Program at Facility for any required additional care, including emergency or elective surgery or PCI, and to provide timely transmission of required follow-up data on the transferred patient.

2. **SUPPORT OF C-PORT STUDY PROTOCOL.** If Transferring Facility receives a waiver to perform non-primary PCI as a participant in the Atlantic C-PORT Elective Angioplasty Study, Hospital will accept patients who are study participants at Transferring Facility for additional medical care, cardiac surgery or intervention in accordance with the terms of this Agreement. Hospital will provide to Transferring Facility data (medical and billing information) required to support the research study in accordance with the terms of this Agreement.

3. **RESPONSIBILITIES OF THE TRANSFERRING FACILITY.** The Facility shall be responsible for performing or ensuring performance of the following:

3.1. Provide, within its capabilities, for the medical screening and stabilizing treatment of the patient prior to transfer, to the extent that the Emergency Medical Treatment and Labor Act (EMTALA) and regulations issued thereunder apply.

3.2. Arrange for appropriate and safe transportation and care of the patient during transfer, in accordance with applicable federal and state laws and regulations.

3.3. Designate a person who has authority to represent the Facility and coordinate the transfer in receipt of the patient from the Facility.

3.4. Notify the Hospital's designated representative prior to transfer to receive confirmation as to availability of appropriate facilities, services, and staff necessary to provide care to the patient.

3.5. Prior to patient transfer, the transferring physician shall contact and speak with a receiving physician at the Hospital who agrees to accept the patient and attend to the medical needs of the patient and who will accept responsibility for the patient's medical treatment and hospital care after transfer to the Hospital.

3.6. Provide, within its capabilities, appropriate personnel, equipment, and services to assist the transferring physician with the coordination and transfer of the patient.

3.7. Provide, within its capabilities, personnel, equipment, and life support measures determined appropriate for the transfer of the patient by the transferring physician.

3.8. Forward to the receiving physician and the Hospital (a) a copy of those portions of the patient's medical record that are available and relevant to the transfer and continued care of the patient, including records related to the patient's condition, observations of signs or symptoms, preliminary diagnosis, treatment provided, results of any tests; (b) a copy of the patient's informed consent to the transfer or physician certification that the medical benefits of the transfer outweigh the risk of transfer (with respect to a patient with an emergency medical condition that has not been stabilized); (c) the name, address, and

telephone number of patient's guardian, authorized agent, or surrogate decision-maker; and (d) any information available to the Transferring Facility concerning advance directives of the patient. If all necessary and relevant medical records are not available at the time the patient is transferred, then the records will be forwarded by the Transferring Facility as soon as possible.

3.9. Transfer the patient's personal effects, including, but not limited to, money and valuables, and information related to those items.

3.10. Provide the Hospital any information that is available concerning the patient's coverage or eligibility under a third party coverage plan, Medicare or Medicaid, or a health care assistance program established by a county, public hospital, or hospital district.

3.11. Notify the Hospital of the estimated time of arrival of the patient.

3.12. Provide for the completion of a certification statement, summarizing the risk and benefits of the transfer of a patient with an emergency condition that has not been stabilized, by the transferring physician or other qualified personnel if the physician is not physically present at the Facility at the time of transfer.

3.13. Acknowledge any contractual obligations and comply with any statutory or regulatory obligations that might exist between a patient and a designated provider.

3.14. Obtain the patient's (or, if applicable, the patient's authorized representative's) consent to the transfer to the Hospital in accordance with all applicable laws.

3.15. Recognize the right of a patient to request to transfer into the care of a physician and hospital of the patient's choosing.

3.16. Recognize the right of a patient to refuse consent to treatment or transfer.

3.17. Establish a policy and/or protocols (i) for maintaining the confidentiality of the patient's medical records in accordance with applicable state and federal law and (ii) for the inventory and safekeeping of any patient valuables sent with the patient to the Hospital.

3.18. Identify and request specific data required for participation in the Atlantic C-PORT elective angioplasty study.

4. **RESPONSIBILITIES OF THE HOSPITAL.** The Hospital shall be responsible for performing or ensuring performance of the following:

4.1. Provide, as promptly as possible, confirmation to the Transferring Facility regarding the availability of bed(s), appropriate facilities, services, and staff necessary to treat the patient and confirmation that the Hospital has agreed to accept transfer of the patient.

4.2. Provide, within its capabilities, appropriate personnel, equipment, and services to assist the receiving physician with the receipt and treatment of the patient transferred.

4.3. Reserve beds, facilities, and services as appropriate for patients being transferred from the Transferring Facility who have been accepted by the Hospital and a receiving physician, unless such are needed by the Hospital for an emergency.

4.4. Designate a person who has authority to represent and coordinate the transfer and receipt of patients into the Hospital. MedSTAR Transport Communication Center will be the contact for WHC.

4.5. When appropriate and within its capabilities, assist with the transportation of the patient as determined appropriate by the transferring or receiving physician.

4.6. Acknowledge any contractual obligations and comply with any statutory or regulatory obligations that might exist between a patient and a designated provider.

4.6. Provide to Facility patient data required for the Atlantic C-PORT elective angioplasty study.

4.7. Establish a policy and/or protocols for the receipt of the patient into the Hospital and for the acknowledgment and inventory of any patient valuables transported with the patient.

5. **CONFIDENTIALITY OF PROTECTED HEALTH INFORMATION.** Each party agrees not to use or disclose any protected health information (as defined under 45 C.F.R. § 160.103) other than as permitted by the Health Insurance Portability and Accountability Act of 1996, Subtitle F, Public Law 104-191, Section 261, et seq., and the final rules promulgated thereunder from time to time by the United States Department of Health and Human Services (collectively, the "HIPAA Standards"). Accordingly, each party shall establish a policy and/or protocols for maintaining the confidentiality of the patient's medical and billing records in accordance with the HIPAA Standards and applicable state and federal law. The parties acknowledge that neither Hospital nor Facility are serving in the

capacity of a "business associate" (as defined under 45 C.F.R. § 164.501) of the other party in the performance of services hereunder.

6. **BILLING; PAYMENT FOR SERVICES.** All charges incurred with respect to any services performed by either party for patients received from the other party pursuant to this Agreement shall be billed and collected by the party providing such services directly from the patient, third party coverage, Medicare or Medicaid, or other sources normally billed by that party. In addition, it is understood that professionals will be billed by the physicians or other professional providers that may participate in the care and treatment of the patient at usual and customary charges. Each party agrees to provide information in its possession to the other party and such physicians/providers sufficient to enable them to bill the patient, responsible party, or appropriate third party payor. The parties agree that the patient being transferred is primarily responsible for the payment of care received at either the Hospital or Facility and that, prior to transfer, the patient shall be required, if competent, to acknowledge the obligation to pay for such care at the Hospital. Hospital shall have no responsibility for payment of services provided by Facility to patients transferred from Facility to Hospital. Facility shall have no responsibility for payment of services provided by Hospital to patients transferred from Facility to Hospital.

7. **RETRANSFER; DISCHARGE.** The Transferring Facility agrees accept back any patients that are determined by the patients attending physician at the Hospital to be medically appropriate for transfer back to the Transferring Facility. If the patient is to be transferred back to the Transferring Facility, the Hospital will be responsible for the care of the patient up until the time the patient is re-admitted to the Transferring Facility.

8. **COMPLIANCE WITH LAW.** Both facilities shall comply with all applicable federal and state laws, rules and regulations, including, without limitation, those laws and regulations governing the maintenance of medical records and confidentiality of patient information as well as with all standards promulgated by any relevant accrediting agency.

9. **RESPONSIBILITY; INSURANCE; INDEMNIFICATION.** The parties shall each be responsible for their own acts and omissions in the performance of their duties hereunder, and the acts and omissions of their own employees and agents. In addition, each party shall maintain, throughout the term of this Agreement, comprehensive general and professional liability insurance and property damage insurance coverage in minimum amounts of One Million Dollars ($1,000,000) per occurrence and Three Million Dollars ($3,000,000) in the aggregate and shall provide evidence of such coverage upon request. Each party (the "indemnifying party") agrees to defend, indemnify, protect, and hold harmless the other party, its affiliates and its/their officers, directors, affiliates, employees, and agents (each an "indemnified party"), from and against any and all liability, obligation, damage, loss, cost, claim, and demand whatsoever, of any kind or nature, including reasonable attorney's fees, arising directly or indirectly from any negligent or willful act or

omission of the indemnifying party or its employees, agents, or subcontractors. This section shall survive the termination of this Agreement.

10. **TERM; TERMINATION.**

10.1 The initial term of this Agreement ("Initial Term") shall be for a period of two (2) years, commencing April __, 2008 unless sooner terminated as provided herein. At the end of the Initial Term and each Renewal Term (as hereinafter defined), if any, this Agreement shall automatically renew for additional terms of two (2) years ("Renewal Terms") but only upon mutual written agreement of the parties.

10.2 In the event the parties continue to abide by the terms of this Agreement after the expiration of the Initial Term or any Renewal Term, this Agreement shall continue on a month-to-month basis thereafter.

10.3 Either party may terminate this Agreement without cause upon thirty (30) days written notice to the other party. Either party may terminate this Agreement upon breach by the other party of any material provision of this Agreement, provided such breach continues for five (5) days after receipt by the breaching party of written notice of such breach from the non-breaching party. This Agreement may be terminated immediately upon the occurrence of any of the following events:

A. Either party closes or discontinues operation to such an extent that patient care cannot be carried out adequately.

B. Either party loses its license, is convicted of a criminal offense related to health care, or is listed by a federal agency as being debarred, excluded or otherwise ineligible for federal health care program participation.

11. **ENTIRE AGREEMENT; MODIFICATION.** This Agreement contains the entire understanding of the parties with respect to the subject matter hereof and supersedes all prior agreements, oral or written, and all other communications between the parties relating to such subject matter. This Agreement may not be amended or modified except by mutual written agreement.

12. **GOVERNING LAW.** This Agreement shall be governed by and construed in accordance with the laws of the jurisdiction where the services are provided. The provisions of this Paragraph shall survive expiration or other termination of this Agreement regardless of the cause of such termination.

13. **PARTIAL INVALIDITY.** If any provision of this Agreement is prohibited by law or court decree of any jurisdiction, said prohibition shall not invalidate or affect the remaining provisions of this Agreement.

14. **NOTICES.** All notices hereunder by either party to the other shall be in writing, delivered personally, by certified or registered mail, return receipt requested, or by overnight courier, and shall be deemed to have been duly given when delivered personally or when deposited in the United States mail, postage prepaid, addressed as follows:

If to Hospital: Washington Hospital Center Corporation
110 Irving Street, NW
Washington, DC 20010
Attn: Janis M. Orlowski, M.D., Senior Vice President for Medical Affairs and Chief Medical Officer

If to Facility: Holy Cross Hospital
1500 Forest Glen Road
Silver Spring, MD 20910
Attn: Sarah Shulman, Esq.

or to such other persons or places as either party may from time to time designate by written notice to the other.

15. **WAIVER.** A waiver by either party of a breach or failure to perform hereunder shall not constitute a waiver of any subsequent breach or failure.

16. **ASSIGNMENT; BINDING EFFECT.** Neither party shall assign or transfer, in whole or in part, this Agreement or any of the party's rights, duties or obligations under this Agreement without the prior written consent of the other party, and any assignment or transfer by either party without such consent shall be null and void. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective heirs, representatives, successors and permitted assigns.

17. **CHANGES IN LAW.** The parties agree to use their respective best efforts to modify this Agreement in the event of any changes to EMTALA or any other law or regulation applicable to this Agreement that materially affects any provision of this Agreement, if necessary to preserve the parties' original intent as reflected herein; in the event that they are unable to do so within thirty (30) days of the date one party notifies the other of the need for such a modification in writing, either party may terminate the Agreement upon ten (10) days written notice to the other party.

18. **ANTI-FRAUD AND ABUSE.** Nothing in this Agreement shall be construed as an offer or payment by one party to the other party or any affiliate of the other party of any remuneration, whether directly or indirectly, overtly or covertly, specifically for patient referrals or for recommending or arranging the purchase, lease or order of any item or service.

P.08

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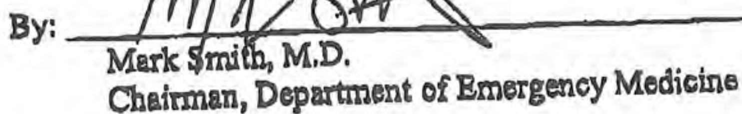
19. **ADVERTISING AND PUBLIC RELATIONS.** Neither party shall use the name of the other in any promotional or advertising material unless the party whose name is to be used first reviews and approves the intended promotion or advertisement. The parties shall deal with each other in good faith, and each party shall maintain good public and patient relations and efficiently handle complaints and inquiries with respect to transferred or transferring patients.

THE PARTIES HERETO have executed this Agreement on April __, 2008.

WASHINGTON HOSPITAL CENTER CORPORATION RTC 4/17/08

By: ______________________ 4.18.08

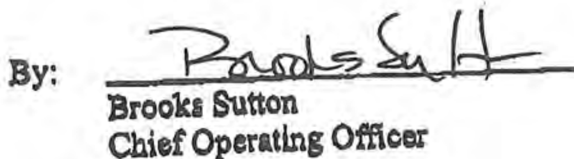
Janis M. Orlowski, M.D.
Senior Vice President for Medical Affairs and Chief Medical Officer



By: ______________________

Mark Smith, M.D.
Chairman, Department of Emergency Medicine

HOLY CROSS HOSPITAL OF SILVER SPRING, INCORPORATED



By: ______________________

Brooks Sutton
Chief Operating Officer

Exhibit 5

Transport Agreement:

Butler Medical Transport, LLC

SERVICE AGREEMENT
Between
Holy Cross Health, Inc.
And
Butler Medical Transport, LLC

HEALTH CARE SERVICES AGREEMENT

THIS AGREEMENT ("Agreement"") is made and entered into as of this 1st day of October, 2014, by and between HOLY CROSS HEALTH, INC. (hereinafter referred to as "HOLY CROSS HEALTH"), a Maryland non-stock corporation, the corporate address of which is 1500 Forest Glen Rd, Silver Spring MD, 20910 and BUTLER MEDICAL TRANSPORT, LLC (hereinafter referred to as "'BUTLER MEDICAL"), a Maryland limited liability company, whose address is 10233 S. Dolfield Rd, Owings Mills, MD 21117.

RECITALS

WHEREAS, Butler Medical is a commercial ambulance service initiating calls in Maryland and is, and must be, licensed by the Maryland Institute for Emergency Medical Services System (MIEMSS) under Education Article 13-515, Annotated Code of Maryland, and COMAR 30.09. Butler Medical is a provider of Specialty Care Transport, Advanced Life Support and Basic Life Support ambulance services operating under the MIEMSS commercial license number 105, and

WHEREAS, Butler Medical offers a full range of ground transportation services, including, but not limited to, transportation to the Hospital, from the Hospital to another facility for admission, and/or treatment, diagnostic study, or consultation; return to the hospital; and discharge from the Hospital; and

WHEREAS, Holy Cross Health operates hospitals at two locations: Holy Cross Hospital ("HCH") at 1500 Forest Glen Road, Silver Spring, MD and Holy Cross Germantown Hospital ("HCGH") or collectively ("Hospital(s)"). Both HCH and HCGH require ground ambulance and specialty services, including ALS and cardiac transports.

WHEREAS, the Hospital and Butler Medical desire to enter into an agreement whereby Butler Medical will provide ground ambulance services on a scheduled and non-scheduled basis to the Hospital, and

NOW, THEREFORE, the parties do hereby agree as follows:

Article I - Term and Termination

A. Term. This Agreement will commence on October 1st, 2014, and continue for a term of five (5) years, expiring at the midnight on September 30th, 2019 (the "Initial Period"), unless earlier terminated as provided in the Agreement. After the Initial Period, the parties may mutually agree in writing to extend the Agreement for additional one (1)-year periods (each commencing on October 1st of each year and ending on September 30th of the following year) (hereinafter, sometimes referred to as a "Renewal Period").

B. Termination. This Agreement may be terminated as follows:

1. *Breach.* Either party will have the right to terminate this Agreement in the event of the other party's breach of this Agreement by providing at least thirty (30) days written notice to the other party to cure such breach. Any such notice will specify the cause upon which it is based. The breaching party will have the thirty (30) day notice period in which to rectify the cause specified in the notice of termination, and, if such cause is not rectified to the satisfaction of the non-breaching party within such thirty (30) day period, then this Agreement will terminate.

2. *Automatic Termination.* Either party will have the right to terminate this Agreement upon written notice to the other party if a party (i) loses its license as a Maryland provider; (ii) is sanctioned or excluded from participation in any federally funded health care program, including Medicare or Medicaid; (iii) is convicted of a criminal offense (iv)(a) applies for or consents to the appointment of a receiver, trustee or liquidator of all or a substantial part of its assets, (b) files a voluntary petition in bankruptcy, or admits in writing its inability to pay its debts as they come due, (c) makes an assignment for the benefit of creditors, (d) files a petition or an answer seeking a reorganization or an arrangement with creditors or seeking to take advantage of any insolvency law, (e) performs any other act of bankruptcy, or (f) if there is otherwise filed against a party or any of its assets any proceeding under any bankruptcy, reorganization, arrangement, insolvency, readjustment, receivership or like law or statute, and such is not dismissed within sixty (60) days.

Article II - Transport Services - Ground

A. Overview of Services. Butler Medical will provide the following ground services: *Neonatal Intensive Care Transport (NICU), Specialty Care Transport* (SCT), *Specialty Care Transport with Registered Nurse* (SCT-RN), *Advanced Life Support* (ALS) *Transport, Advanced Life Support* 2 (ALS 2) *Transports, Basic Life Support* (BLS) *Transports*, and *Wheelchair Transport*.

1. *Neonatal Intensive Care Transport (NICU).* NICU Transport includes a specially licensed and equipped truck for the transfer of critically ill neonates with the staff and equipment provided by HCH.

2. *Specialty Care Transport (SCT).* The SCT Transport(s) includes: medications including common sedatives, analgesics, paralytics, antihypertensive agents, volume expanders, vasopressors, bronchodilators, antianginals, thrombolytics, anticoagulants, antiemetics, antibiotics, and others; invasive procedures and/or the monitoring of invasive procedures including nasotracheal intubation, endotracheal intubation, retrograde intubation, surgical crichothyroidotomy, chest escharotomics, ET tube suctioning, NG and OG tube management, urinary catheter management, rapid sequence intubation, chest tube management, and IO management and others; monitoring of invasive procedures including IV pumps, pulse oximetry, ECG monitoring (standard and 12 lead), glucose monitoring, cardiac defibrillation, trancutaneous pacing, AED use, and others; system monitoring including arterial lines, CVP lines, ICP lines, Swan-Ganz, End tidal CO2, and others; and the use of specialized equipment including transport ventilators, special ventilators, internal pacemakers, intra-aortic balloon pumps, transport isolette, ventricular assist devices, nitric oxide, and others as referenced in the current version of the Maryland Medical Protocols for EMS Providers.

2. *Specialty Care Transport with Registered Nurse (SCT-RN).* SCT RN Transports are SCT transports, which require a RN for transport per Maryland Medical Protocols for EMS Providers.

3. *Advanced Life Support Transports (ALS).* ALS Transports include any transport that requires skills in the Maryland Protocols that are above the level of a BLS provider but are within the scope of practice of an ALS provider, not including optional protocols. Butler Medical participates in the optional protocols that allow EMT-P's to administer IV Heparin, IV Integrilin, and to use and manage chronic ventilator-dependent patients. Examples of ALS transports include: ECG monitor, Lidocaine drip management, managing a patient with an External Jugular or IO infusion line.

4. *Advanced Life Support 2.* ALS 2 Transports are transports requiring response to critically ill patients, which requires at least one skill, which may include intubation, pacing, and/or defibrillation. There also must be the administration of at least three medications.

5. *Basic Life Support Transports.* BLS Transports include patient assessment, airway monitoring, suction, oxygen therapy, splinting and fracture management, bleeding management, bandaging, cardiopulmonary resuscitation, automated external defibrillation ("AED"), emergency childbirth, and any patient who is non-ambulatory, which does not require higher level of care than BLS pursuant to Maryland Medical Protocols for EMS Providers.

6. *Wheelchair Transportation.* Wheelchair Transports are transport of a patient that: (a) can transfer themselves from a chair into a wheelchair with minimal or no assistance, (b) does not require monitoring or one-on-one supervision during the transport, (c) is not on oxygen other than that provided by and monitored by the patient, and (d) must sit safely on their own without any assistance.

B. Hours of Service. Continuous coverage is provided twenty-four (24) hours a day, seven (7) Days a week for NICU, SCT, ALS, ALS 2 and BLS transports.
Wheelchair service will be provided to the Holy Cross Hospital at their request between the hours of 0800-2000 (8:00 am to 8:00 pm), seven (7) days a week.

C. Staff. All vehicles are staffed with a provider that is at least a Maryland State Certified Emergency Medical Technician Basic (EMT-B), Emergency Medical Technician Intermediate (EMT-I) or Emergency Medical Technicial Paramedics (EMT-P). All drivers will have a minimum of First Responder, licensed in accordance with the Code of Maryland Regulations (COMAR) Title 30 subtitle 09: Commercial Ambulance Services. Butler Medical will maintain appropriately trained staff (both clinical and customer service skills) and provide evidence of their existing training program, certifications, and health screening in each area when requested.

D. Health Screening Requirements. Each ambulance staff shall fulfill the following health screen requirements: (i) a complete Hepatitis B vaccination series (series of three or waiver), (ii) annual TB screening, (iii) MMR vaccination(s) or positive titer(s), (iv) varicella vaccination or a varicella titer (i) and flu vaccine during flu season September to April. For each flu season, the deadline for vaccination is estimated to be October 31, though it varies based on vaccine availability and prevalence in the community. For the first year of this Agreement, ambulance staff is required to comply with this Section within sixty (60) days of the Effective Date.

D. MIEMSS. Butler Medical participates in MIEMSS Optional Supplemental Program, Specialty Care Paramedic (COMAR 30.03.03.06). All medical transports are governed by the Maryland Medical Protocols for EMS Providers, and Butler Medical agrees to comply with such regulations.

E. Holidays. Holidays will be defined as Christmas Day, New Year's Day, Thanksgiving and the 4th of July. During said holidays, wheelchair service will not be provided, and Non-Time Critical Transports may be up to one hundred and twenty (120) minutes.

F. Dispatch Services. Butler Medical will provide a single direct line phone number (with the appropriate roll-over services) to its dispatch center, and the Hospital (including its employees, contractors, and related staff) will have a designated phone number for requesting all transport services under this Agreement.

Article III - Nursing Coverage

A. Butler Medical agrees that as a part of its SCT Program it has a full-time Nursing Transport Coordinator that is part of the Specialty Care Transport Team. It is also recognized that, in rare instances, nursing staff from HCH or HCGH may need to accompany a Specialty Care Paramedic or other ALS provider due to the needs of the patient during transport, as determined by the sending Hospital after discussion with the Butler Nursing Transport Coordinator. Should this become necessary, Butler Medical will take the following steps in priority order: (1) attempt to, in good faith , find an additional Butler medical nurse to assist with the transport; (2) attempt to arrange with the sending and/or receiving physician the patient care that will allow the patient to travel with a paramedic; (3) attempt to locate an alternative vendor whom is able to provide said services (4) advise the Hospital that a Hospital nurse will be necessary to assist with the transport.

B. In the event that Hospital provides Butler Medical a Hospital nurse for a transport under Section A above, Butler Medical will be responsible for safely and promptly transporting the nurse back to the Hospital.

C. Butler Medical will ensure that any clinical staff member who accompanies a transport of a pediatric patient is PALS certified.

Article IV-Response Times – Ground Ambulance Time-Critical Transports and (Non) Time-Critical Transports

A. Time-Critical Transports. Time-Critical Transports, will be defined as, and limited to the transfer of an acute care inter-facility patient requiring a minimum of an ALS level of care and a lights & sirens transport, which will be defined as an ambulance transport, where all emergency warning devices are activated during transport. Said transports must be requested by a physician, who will be required to provide his or her name as the ordering physician who requests a Time-Critical transport. For "Time-Critical Transports", Butler Medical will arrive at The Hospital within thirty (30) minutes of receiving the call. If for any reason, the time frame for arrival is greater than thirty (30) minutes, the Hospital, in its sole discretion, may request Butler Medical to call other transport companies to provide patient transport or the Hospital may call another transport company to provide the patient transport.

B. Non Time-Critical Transports. For "Non Time-Critical Transports", Butler Medical will arrive at The Hospital within sixty (60) minutes of the Hospital providing all necessary items required for transport, subject to the provisions of Article II, Section E for Holidays, and Article VII - Inclement Weather. If, for any reason, the time frame for arrival is greater than sixty (60) minutes, the Hospital in its sole discretion, may request Butler Medical to call other transport companies to provide patient transport or the Hospital may call another transport company to provide the patient transport.

C. Special Request Patients. For "Special Request Patients", Butler Medical will arrive at The Hospital within two hundred and forty (240) minutes of the Hospital providing all necessary items required for transport. "Special Request Patients", by definition cannot be either "Non Time-Critical Transports", or "Time-Critical Transports", they are defined as patients whose transport is greater than seventy miles one direction, and or, require a special stretcher including but not limited to a bariatric stretcher and or Large Body Surface Area Stretcher.

D. Cardiac Intervention. For patients requiring cardiac intervention, Butler Medical will arrive at the Hospital as outlined in Exhibit C.

E. Stroke. For patients identified as patients meeting the MIEMSS defined stroke center criteria needing transfer from one Hospital campus to another Hospital (either Holy Cross or otherwise). Butler Medical will arrive at the Hospital within thirty (30) minutes of receiving the call. Hospital agrees to put Butler Medical on standby for any impending transfers of this nature as soon as they are aware there is a "possibility" of transfer of a patient meeting this criteria.

F. STEMI. For patients identified as patients meeting the MIEMSS defined STEMI criteria needing transfer from HCGH to another Hospital (HCH, Shady Grove, Frederick or Suburban or otherwise). Butler Medical will arrive at the Hospital within thirty (30) minutes of receiving the call. Hospital agrees to put Butler Medical on standby for any impending transfers of this nature as soon as they are aware there is a "possibility" of transfer of a patient meeting this criteria.

G. Response Time Reporting. Butler Medical acknowledges and agrees that the timely transport of patients is extremely important to the Hospital and it is a material part of this Agreement. Accordingly, Butler Medical will keep accurate records of its response times, and provide the Hospital with a monthly report (in a format mutually agreeable by the parties) of response times ("Response Time Reports"). If Butler Medical fails to maintain a 93% "on time" reliability factor (i.e., it must meet the response times set forth in this Agreement 93% of the time), then Butler Medical will report weekly to the Hospital on changes or improvements it is implementing to rectify the situation and obtain the 93% reliability factor. Butler Medical will provide the Hospital with weekly Response Time Reports until it has obtain and maintained a 93% reliability factor for three (3) consecutive weeks, and then it will resume its monthly Response Time Reports. If Butler Medical fails to meet the 93% reliability factor for a total of twelve (12) weeks in any 12 month rolling period or fails to meet the 93% reliability factor for eight (8) consecutive weeks, then such will be deemed a material default of this Agreement. It is acknowledge and agreed that the response times and reliability factor contemplated herein will be measured and determined, collaboratively, based on all transports in the three categories of service as provided in subsections A, B, and D above, including any specifically scheduled transports.

Article V - Responsibilities of Hospital

Except for neonates, the Hospital will provide Butler Medical, at the time of the transport request, with demographic sheet to include two (2) patient identifiers, the patient's date of birth, and social security number. For neonates, date of birth and name of patient suffice.

The Hospital through their IT services will work to allow Butler Medical's billing department access to the patient records system of the Hospital on a limited basis, and to limited Butler Medical Staff through a separate agreement to allow for easy access of demographic information and other certificates to ensure the ease of billing and highest rate of collection possible.

All requests for ground transportation for all patients leaving the hospital shall be made through Butler Medical's communications center, unless the patient's insurance dictates otherwise (Kaiser). Except in instances of patient preference or as previously approved by Butler such as with Kaiser patients, if the Hospital utilizes another company to transport a patient without first requesting Butler Medical, and Butler Medical was otherwise ready, able and willing to handle such transport, then the Hospital shall be billed for such transport at 75% of the HCH Rate specified on Exhibit A. Before charging the Hospital under the terms of this paragraph. Butler Medical shall first provide the Hospital with written notice that it has used another company to transport a patient without first requesting Butler Medical to provide the service, and thereafter the Hospital shall have ten (10) days to resolve the matter. Except for patient preference or as previously approved by Butler such as Kaiser patients, if the Hospital continues to use another company for transport without first requesting Butler Medical to handle the transport after such 10 day period, then the Hospital shall be billed as provided herein for such services. It is agreed, however, that the Hospital shall in no event be billed for using another company for transport as provided herein if Butler Medical was not otherwise ready, able and willing to handle such transport or the Hospital was unable to contact Butler Medical because of circumstances beyond either party's control.

Article VI - Responsibilities of Butler Medical – Ground Ambulance

It is acknowledged and agreed that this Agreement is to provide the Hospital with a single "one-stop shop" for all of the Hospital's (including its patients) ground transportation needs, including without limitation a single call center to handle all of the Hospital's transportation requests. Accordingly Butler Medical agrees to create (to the extent it does not currently exist) as of the Effective Date of this Agreement and maintain throughout the tem of this Agreement an appropriate dispatch communications center with the appropriate capacity to timely receive, manage, administer, and otherwise handle all of the Hospital 's requests for patient transports and to maintain the required trained staff and fleet or vehicles to service the Hospital 's patient transports. The Hospital's requests for patient transports shall be made to Butler Medical's dispatch/communications center in accordance with Article II above. It is acknowledge and agreed, however, that from time to time during the term of this Agreement and because of spikes or peaks in the demand for patient transports, Butler Medical may not be able to timely fulfill a patient transport request from the Hospital. In such case, Butler Medical will promptly notify the Hospital and Butler shall be responsible for obtaining a secondary source of transport for the Hospital. The Hospital will make the final decision regarding alternative transportation; provided, however, that the Hospital shall be required to accept any qualified licensed provider of transport services arranged by Butler Medical (whose charges and rates are within industry standard). Butler Medical shall not be held financially responsible for transports completed any another vendor if the Hospital elects to use another resource.

The Hospital will work collaboratively with Butler Medical to request transports as soon as the hospital identifies the need to transfer to another healthcare organization. This will help facilitate Butler Medical to provide a better experience for the hospital and the patient

Article VII - Responsibilities of Butler Medical – Air Ambulance

A. **Air Transport Requirements.** Butler Medical agrees to arrange for air transport for Primary PCI and Non-primary PCI/C-Port E transports as described **in Exhibit C** to this Amendment through a Holy Cross Hospital approved company which meets the following requirements and such requirements must be in evidence a contract between Butler Medical and such air transport company:

1. Be Licensed by the state of Maryland (including but not limited to Federal Aviation Administration ("FAA") air worthiness certification and proof of adequate insurance)
2. Be accredited by the Commission on Accreditation of Medical Transport Systems ("CAMTS") and notify Butler Medical and Holy Cross Hospital of any loss of accreditation in writing within five (5) days
3. Be staffed with a commercial ambulance crew, including a pilot who meets the requirements of FAA licensure and at least two (2) additional individuals who meet or exceed the requirements for CAMTS accreditation at the level which the service is providing
4. Carry oxygen cylinders that meet FAA requirements

5. Carry equipment and supplies listed in COMAR 30.09.19-13 that are EMI certified for air operations.
6. Maintain insurance consistent with industry standards, a minimum of One Million Dollars per occurrence ($1,000,000.00) and Three Million Dollars ($3,000,000.00) in the aggregate in which Hospital is added as an additional insured and provide proof of such insurance upon request of Holy Cross Hospital.

Article VIII - Wheelchair Service

Butler Medical reserves the right to substitute ambulance service for any wheelchair request, with the understanding that the responsible party will be billed at the wheelchair rate.

Article IX - Inclement Weather

In the event of inclement weather, defined as _significant stormy and turbulent weather...__, it is recognized that Butler Medical may institute their Code Blue weather policy in various degrees depending on weather severity. This is done in order to ensure that patient and crew safety comes first and foremost. Code Blue is a staged implementation in the following order:

(1) Suspension of all wheelchair van transports.
(2) Implementation of a Priority 9 Response Profile
(3) Suspension of all residence transports.

Butler Medical shall not take the following steps except when State and/or county authorities have declared a state of emergency

(4) Suspension of all non-interfacility emergency transports
(5) Suspension of all service.

Butler Medical agrees to promptly notify the designated person at the Hospital (which the Hospital from time to time identifies via written notice to Butler Medical) upon the implementation and cessation of the Code Blue weather policy. Upon implantation of Phase (2) of the Code Blue Weather Policy, wheelchair service will not be provided, Time Critical Transports may be up to one hundred and twenty (120) minutes, and Non-Time Critical Transports up to two hundred and forty (240) minutes. It is mutually understood that during this time the safety of the crew and patient, is of the highest priority, even above the timeliness of service.

Article X - NICU Service

NICU Transports may be either a Time-Critical Transport or a Non-Time Critical Transport. It should be noted that the response standard as outlined in Article IV is to pick up the team at HCH and transport them to HCGH

HCH will make available the clinical staff (transport team) consistent with the level of care necessary as dictated by the patient's condition. The clinical staff will include at a minimum a registered nurse.

The team can include additional staff as provided by Hospital, of either a second nurse, a physician or a respiratory therapist. For logistical reasons, the team cannot include more than two Hospital staff members as a Butler Medical Paramedic, will also accompany said patient. Hospital will ensure that effective January 1st 2015, all staff members will be current in both STABLE, and NRP. Additionally prior to any transport, Hospital will provide Butler Medical a copy of provider's certifications in STABLE, and NRP, and applicable professional license i.e., RN, RT, MD/DO.

Hospital agrees to provide all equipment as required to outfit NICU licensed ambulance as specified in COMAR 30.09.12, with the exception of COMAR 30.09.12.03.

Hospital shall provide Butler Medical a parking space the HCH campus for an ambulance, which shall include an electrical outlet. If said parking space and appropriate electrical resources are not provided, Butler Medical will not be held to the standards of this Article, nor Article IV above.

Article XI – Compensation; Billing and Collections – Ground Ambulance

A. <u>Insured Patients Discharged from The Hospital.</u>

1. *Medicare.* Butler Medical agrees to accept Medicare coverage and not to balance bill patients other than for deductibles or co-pays as applicable by Federal and State law. Hospital agrees to provide such certifications and authorizations (prior to transport or as completed by case management) as necessary to allow for appropriate billing.
2. *Medical Assistance Patients.* Transportation arrangements for Medical Assistance patients are made through the appropriate County Health Department. Hospital staff will be responsible for obtaining the appropriate Authorization Number and/or required Authorization form within two (2) business days of transport. Should Hospital fail to obtain a required authorization for reimbursement by the applicable County Health Department, then Hospital shall become liable for the Community Service Rate for that transport (see Exhibit A).

3. *Other Insured Patients.* For patients with valid insurance coverage, Butler Medical assumes all risk of collection. Butler Medical will bill the patient and their insurance directly at the rates in Exhibit A. Certain insurance carriers require the discharging/referring hospital to obtain authorization for services. In such cases, the Hospital will provide Butler with an authorization number. Butler Medical will accept all risk of collection for medically necessary services to insured patients; however, in the event that services are not medically necessary or are an uncovered benefit then Butler Medical shall bill the patient for the transport, following the procedure described in Article XI Section B.2.d. Billing and collection records will be maintained by Butler Medical for a minimum of seven (7) years as required by law, and Hospital may review these records upon reasonable notice during normal business hours.

B. Uninsured Patients or Insured Patients Without Transport Benefits Discharged from The Hospital.

1. *Uninsured Patients or Insured Patients Without Transport Benefits Discharged from Hospital.*
Butler Medical will only directly bill Hospital for the patient's transportation, when pre-authorized in writing by Hospital's Case Management Department staff, a psychiatry liaison, an Emergency Center Department charge nurse, or the Administrative Coordinator. Hospital will pre-authorize Butler Medical to bill it related to transports provided to uninsured patients that Hospital knows in advance either meet its financial assistance criteria and/or have no source of payment. Butler Medical will bill Hospital for pre-authorized transports at the community service rates listed in Exhibit A.

2. *Uninsured Patients Other Than Those with Written Pre-Authorization to Bill Hospital and/or Insured Patients Without Transport Benefits.*

   a. Fees. Butler Medical will bill uninsured patients, who were not preauthorized for payment consistent with Article XI, Section B.1, above, in accordance with the standard patient charge listed Butler Medical fee schedule attached as Exhibit A. In addition, if a patient has insurance but the services are not medically necessary or are an uncovered benefit Butler Medical will bill the patient in accordance with the standard Butler Medical fee schedule attached as Exhibit A.

   b. Fee Notification and Payment. Hospital staff will notify the patient of the fee for transport. Butler Medical may require payment at time of service on certain elective transports.

   c. Financial Assistance. If at any time in the course of billing it is determined that the patient may meet the financial assistance criteria of Hospital as outlined in Exhibit B, Butler Medical will advise those patients (with the written statement in Exhibit B) of the availability of the Hospital financial assistance program. Butler Medical will bill Hospital for financial assistance patients at the community service rates listed in Exhibit A.

d. Billing Process. When Butler bills these patients described in subsection (2)(a), the billing process must include at least three (3) statements or letters sent to the patient's address. Of the three (3) required collection attempts, the final statement must include the written statement (Exhibit B) in both English and Spanish explaining how uninsured patients can obtain Hospital financial assistance and indicate that in the absence of payment the patient's unpaid account will be reported to a credit agency. In cases where one hundred and twenty (120) days have passed, the required statements have been sent and a patient described in this subsection (2)(a) has not paid or is eligible for financial assistance under subsection (2)(c), Butler Medical will bill Hospital for any unpaid balance at the community service rate listed in Exhibit A less any payments received from any source. The community service rate will serve as the maximum total amount that can be collected from Hospital (ceiling price of the collection amount from both Hospital and the patient) by Butler Medical

C. Inpatient Roundtrip Transportation. When Case Management, the Oncology Manager or the Administrative Coordinator authorizes any inpatient transported to another health service facility and returned to Hospital within the same day, Butler Medical will bill Hospital at the Non-Community Benefit Rates in Exhibit A. This fee schedule is equal to a discounted rate of twenty percent (20%) below the national fee schedule for ambulance services furnished as a benefit under Medicare Part B and is adjusted annually on January 1st of each year by the Centers for Medicare & Medicaid Services. Accordingly with this adjustment by the Centers for Medicare & Medicaid Services to the national fee schedule, Butler Medical will adjust its rate schedule between
Butler Medical and Hospital each January1st. The current rate schedule effective for the calendar year 2014 is listed in Exhibit A of this Agreement. Butler Medical may not bill patients for inpatient round trip transports.

D. HCGH to HCH Transfers. When Butler Medical is requested to transport any patient from HCGH to HCH, Butler Medical will bill Hospital at the Non-Community Benefit Rates in Exhibit A. Butler Medical may not bill patients for transfers between the two facilities.

E. Invoice Statements. Within the first ten (10) days of the month, Butler Medical will mail an invoice for services and uncollected accounts. This invoice must include in the following four (4) sections: (a) transports pre-authorized for HCH payment performed during the prior month, (b) transports for inpatient round trips/HCGH to HCH transfer performed in the prior month, (c) uncollected accounts now being presented for the first time to Hospital for payment within the month after meeting the requirements of Section Article XI, Section B. These statements must include a patient-by-patient listing showing base rate, mileage, and any add on charges for all patients the preceding month. Each invoice must also include for each transport: (a) a run number, (b) some unique and consecutive invoice number and (b) the date of service. Butler must apply checks received from Hospital to the patients' accounts identified on the check. All invoices must be mailed to PO BOX 5905, Troy MI, 48007-5905. Hospital is not required to pay invoices that do not meet the requirements of this Section E and/or arc not submitted with in the timeframe specified by this Section E. All invoices are to be paid by Hospital within thirty (30) days from receipt of the invoice, or they shall be considered delinquent.

Article XII – Compensation; Billing and Collections – Air Ambulance

All charges incurred with respect to any services performed by either Butler Medical or its approved subcontractor for air transports pursuant to this Agreement shall be billed and collected by the air vendor providing such services directly from the patient, third party coverage, Medicare or Medicaid, or other payors, or by such other arrangement contracted between Butler Medical and its subcontractor for air transports. Hospital shall not provide compensation for services related to the air transports under this Agreement.

Article XII - Patient Preference

All patients needing transport to any hospital will be transported to the nearest appropriate hospital. In the event that Butler Medical is requested to transport a patient to a hospital that is not the nearest appropriate, it is recognized that some insurance companies may no longer cover the cost of said transport. The cost of said transport will be the responsibility of the patient and payment will be required at time of service unless approved for payment by The Hospital.

Article XIV - Medicare

Butler Medical is a provider for Medicare Part B. Assignments will be taken for any medically appropriate transfers. The patient must be transferred to a Medicare approved destination, meet Medicare's medical necessity criteria and have a valid certification of medical necessity ("CMN"') form

Article XV - Insurance

Butler Medical shall maintain and provide evidence to Hospital of the following coverages:

- Medical Malpractice Liability Insurance - providing coverage with respect to any and all claims relating to or arising from the rendering of any professional services, the omission of such services, or any medical treatment with respect to operations pursuant to this agreement. Limits of not less than $1,000,000 per claim with $3,000,000 aggregate.
- Commercial General Liability Insurance - Limits of not less than $1,000,000 per occurrence with $3,000,000 aggregate adding Holy Cross Health as Additional Insured.
- Commercial Automobile Liability "Including" Ambulance Liability Insurance with limits of not less than $1,000,000 per occurrence.
- Workers Compensation & Employers Liability Insurance - evidence of statutory WC coverage and $100,000 limit for EL.

Article XVI - Indemnification by Butler Medical

Butler Medical will indemnify and hold Hospital harmless from and against any and all **claims of third parties relating to** liability, losses, damages, claims, causes of action and expenses connected therewith (including reasonable attorneys' fees) caused or asserted to have been caused, directly or indirectly, by or as a result of any negligent or intentional act or omission by Butler Medical, its employees, agents or contractors under this Agreement.

Article XVII - Indemnification by Hospital

The Hospital will indemnify and hold Butler Medical harmless from and against any and all **claims of third parties relating to** liability, losses, damages, claims, causes of action and expenses connected therewith (including reasonable attorneys' fees) caused or asserted to have been caused, directly or indirectly, by or as a result of any negligent or intentional act or omission by the Hospital, its employees and agents under this Agreement.

Article XVIII- Quality Assurance

Butler Medical is dedicated to the quality of services it provides, and will perform its services under the Agreement consistent with industry standards, in compliance with all federal, state local laws, regulations, and ordinances, and through the use of reasonable care. Butler Medical represents and warrants that it has obtained, and will maintain throughout the term of this Agreement, all required permits, licenses, and related governmental approvals to perform the services under this Agreement, including without limitations any and all permits, licenses, and related governmental approvals required to operate the vehicles used to perform the services hereunder. All patient care records are reviewed by an EMS supervisor for accuracy and completeness. Any major event or incident that occurs will be reviewed at the next regularly scheduled Quality Assurance Board Meeting. All questions or concerns communicated to the management of Butler Medical will be addressed and responded to immediately. Butler Medical will be responsible for the licensure and credentialing/competency of its own staff, proof of which will be provided to Holy Cross Health upon request. Butler Medical will immediately notify the Hospital in the event of an injury or death of a patient of the hospital while in the care of Butler Medical and/or if there is any accident (vehicle or otherwise) involving Butler Medical while it is transporting or otherwise caring for a Hospital patient. Butler Medical will cooperate with the Hospital in completing any follow-up investigation of the matter.

Article XIX -Medical Education/Medical Direction

In accordance with the Code of Maryland Regulations (COMAR) Title 30.09, Butler Medical is required to have an arrangement whereby the medical staff of Butler Medical may receive continuing medical education and practical experience. Butler Medical is contracted with a professional teaching agency to provide and maintain certification and licensure.

Article XX – Fuel Costs

Butler Medical reserves the right to increase mileage charges with 30 days advanced written notice to the Hospital if there has been a greater than 15% increase in the cost of fuel as of the date of this Agreement in accordance with the following: Butler Medical's right to increase mileage charges will be based on the American Automobile Association's ('"AAA") determination for the average cost of gasoline (or diesel) for Montgomery County, Maryland pursuant to its on-line "fuel price finder" calculator (or other similar publication if AAA no longer publishes its "Fuel Price Finder" Portal). The increase in mileage charges applied will be the actual increase in the price of a gallon of gasoline (or diesel) as set forth above divided by the average miles per gallon obtained from the vehicles used to provide the services under this Agreement (which may be reasonably estimated by Butler Medical). If Butler Medical desires to increase the mileage chargers herein, it will notify the Hospital and the parties will mutually agree on such increase; provided, however, the Hospital agrees that it will not unreasonably withhold its consent to such increase provided that Butler Medical has reasonably shown that the fuel prices have increased by more than 1 5% in accordance with the terms set forth herein. If there is an increase in mileage chargers as provided herein, then Butler Medical will be required to decrease the mileage charges as fuel prices decline (based on the same procedure noted above); provided, however, that the mileage charges will never be less than the original amount specified on **Exhibit A**.

Article XXI – Patients Considered to be Patients of the Hospital

Patients being transferred from the Hospital are considered to be inpatients of the Hospital until delivered to and received by a responsible party at the designated destination facility. Patients who are admitted to or have been discharged from the Hospital and are not being transferred to another facility are not considered inpatients of the Hospital.

Article XXII - Access to Records

Butler Medical agrees that they will make available, upon request, to the Secretary of the Department of Health and Human Services, the Comptroller General, their duly authorized representatives, or other proper governmental regulatory or reimbursement agency, this Agreement and any books, documents and records that are necessary to certify the nature and extent to the costs of this Agreement, pursuant to the status and regulations in effect at the time of the request. This section will remain in effect until the expiration of four (4) years after furnishing of services under this Agreement, or for such other time period as the law may require.

Article XXIII- Patient Records; Privacy

Each party and its agents, employees, and representatives will comply with all state and federal laws and regulations concerning the privacy and confidentiality of protected health information (PHI). PHI includes, without limitation, patient medical records, patient billing information, patient lists, and patient names. The Hospital will provide Butler Medical with the Patient's demographic information and medical records related to the transport provided, when requested by Butler Medical, for treatment and reimbursement purposes only. Each of the parties will not access, use, or disclose PHI except as permitted by its policies and procedures or as permitted or required by law. Each of the parties will follow appropriate safeguards to prevent the unauthorized access use, or disclosure of such PHI. Where applicable, the parties agree to execute any agreements that might be required pursuant to the Health Insurance Portability and Accountability Act ("HIPAA") and any regulations promulgated there-under. Butler specifically agrees to sign Holy Cross Health's Business Associate Agreement.

Article XXIV - Books and Records

To the extent Section 1861 (v)(1)(I) of the Social Security Act (codified at 42 U.S.C. 1385x(v)(I)) applies to this Agreement, the Hospital agrees to the following concerning the maintenance of documentation to verify the cost of services rendered hereunder.

a. Until the expiration of four (4) years after the furnishing of such services, Butler Medical and the Hospital will make available, upon written request by the Secretary of the Department of Health and Human Services, or upon request by the U.S. Comptroller General. or any of their duly authorized representatives, this Agreement and the books, documents, and records of Butler Medical and the Hospital that are necessary to certify the nature and extent of

charges to the Hospital.

b. If Butler Medical or the Hospital are requested to disclose any books, documents, or records relevant to this Agreement for the purpose of an audit or investigation relating directly to the provision of services under this Agreement (e.g., a governmental investigation of billing practices or services), the party receiving the request will notify the other and will make available to such other party, upon written request, all such books,documents, or records.

Article XXV – Governing Law

This Agreement will be governed by and will be construed in accordance with the laws of the state of Maryland. Any dispute among the parties or any claimed breach or default under the terms of this Agreement (hereinafter, collectively, a "Dispute") shall be resolved in accordance with the following:

Article XXV – Dispute Resolution

1. The parties shall first in good faith mutually attempt to resolve any dispute informally among themselves.

2. In the event that informal dispute resolution is unsuccessful, the parties are permitted to resort to the legal remedies they deem appropriate.

Article XXVI - Invalidity of Provisions

If any provision of this Agreement or the application of any provision hereof to any person or circumstance is held invalid, the remainder of this Agreement and the application of such provision to other persons or circumstances will not be affected unless the invalid provision substantially impairs the benefits of the remaining portions of this Agreement.

Article XXVII- Severability

In the event any provision of this Agreement is held to be invalid, illegal or unenforceable for any reason and in any respect, such invalidity, illegality or unenforceability thereof shalt not affect the remainder of this Agreement which will be in full force and effect, enforceable in accordance with its terms.

Article XVIII- Headings

The headings of the sections hereof are inserted for convenience only and in no

way define, limit, or prescribe the intent of this Agreement. Each and every provision, section, subsection, paragraph, subparagraph, and clause will be separable from each and every part thereof and will not affect the validity of the remainder.

Article XXIX - Binding Effect

This Agreement will be binding upon and inure to the benefit of the parties hereto and their respective legal representatives, trustees, receivers, successors, and permitted assignee. Neither party will have the right to assign all or any portion of their respective rights and obligations under this Agreement to a third party without the written consent of the other party.

Article XXX - Notice

Any notice, demand or communication required, permitted or desired to be given hereunder to Butler Medical, will be deemed effectively given when personally delivered, via facsimile transmission, or mailed by prepaid certified mail, return receipt requested to:

Butler Medical Transport
William Rosenberg, M.S., NR-P, CCEMT-P
Chief Operating Officer
10233 S Dolfield Rd
Owings Mills, MD 21117

Any notice, demand or communication required, permitted or desired to be given hereunder to Hospital, will be deemed effectively given when personally delivered, via facsimile transmission, or mailed by prepaid certified mail, return receipt requested to:

Holy Cross Health, Inc.
Legal Services Department
1500 Forest Glen Rd
Silver Spring, MD 20910

Article XXXI- Entire Understanding

This Agreement sets forth the entire agreement and understanding between the parties as to the matters contained herein and merges and supersedes all prior discussions, agreements, and understandings of every kind and nature among them. No party will be bound by any condition, definition, or representation other than as expressly provided for in this Agreement.

Article XXXII - Non-Discrimination

Both parties and their professional, technical, and administrative personnel agree to treat indigent patients and patients receiving medical benefits or assistance under any Federal health care program, including but not limited to, Medicare, Medicaid, and TriCare, in a non-discriminatory manner. Both parties agree that they will not discriminate against any individual on the basis of race, color, religion, national origin, disability, gender, gender identity, age, or veteran status.

Article XXXIII- Execution Procedure/Amendment

This Agreement and its amendments may be executed in multiple copies, with each multiple copy to be deemed an original, but all multiple copies together constituting one and the same instrument. The parties acknowledge and agree that during the term of this Agreement certain changes in the laws and regulations pertaining to the services provided by Butler Medical and/or the general health care services provided by the Hospital may require or otherwise necessitate changes and modifications in this Agreement. Accordingly, each party agrees to cooperate with each other, and execute such amendments to this Agreement that may be needed to adjust and amend the terms of this Agreement to allow each party to comply with such new laws and regulations, and otherwise adjust its operations to comport with such new laws and regulations. Any such amendment or changes to this Agreement, however, will not change or modify the general business terms of this Agreement (e.g., the amounts to be paid for services, etc.).

Article XXXIV -Independent Contractor Status

Notwithstanding anything in this Agreement to the contrary, it is mutually understood and agreed that the parties are acting and have entered into this Agreement as independent contractors. Accordingly, this Agreement will not create a partnership, employment, or joint venture relationship between the parties. Neither party will have the right to enter into or otherwise bind the other party to any agreement, contract or other matter. Further, nothing in this Agreement will be construed to create an employment relationship between the parties. As independent contractors, the parties mutually agree to accept and be responsible for their own acts and omissions, as well as the acts or omissions of their own Directors, officers, employees, agents, or representatives, and Indemnify each other as otherwise provided in this Agreement.

Article XXXV- Excluded Provider

Both parties represent and warrant that they and their employees are not now listed by a federal agency as excluded, debarred, suspended, or otherwise ineligible to participate in federal programs, including Medicare and Medicaid, and is and are not now listed, nor has any current reason to believe that during the term of this agreement will be so listed, on the HHS-OIG Cumulative Sanctions Report of the General Services Administration List of parties Excluded from Federal Procurement, and Non-Procurement Programs. The parties agree that either may terminate this Agreement, upon notice to the other, in the event that the other party is listed on the HHS-OIG Cumulative Sanctions Report or the General Services Administration List of Parties Excluded from Federal Procurement and Non-Procurement Programs.

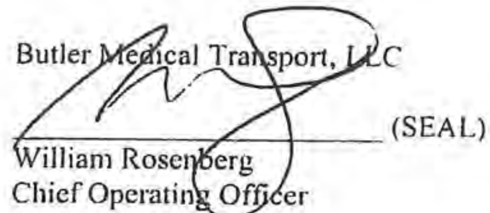
WITNESS the following signatures and seals:

Holy Cross Health, Inc.

________________________ (SEAL)

Kevin J. Sexton
President & CEO

Butler Medical Transport, LLC



________________________ (SEAL)

William Rosenberg
Chief Operating Officer

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WITNESS the following signatures and seals:

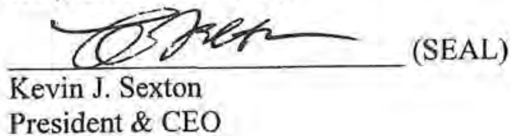
Holy Cross Health, Inc.	Butler Medical Transport, LLC
 (SEAL)	______________________ (SEAL)
Kevin J. Sexton President & CEO	William Rosenberg Chief Operating Officer

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Exhibit A

Charge	HCH Non-Community Service	HCH Community Service	Retail Cost
	$ 618.38	$ 485.00	$ 1,100.00
SCT-RN Base Rate	$ 618.38	$ 450.00	$ 1,100.00
SCT Base Rate	$ 618.38	$ 450.00	$ 900.00
ALS Emergency Base Rate	$ 361.52	$ 191.00	$ 550.00
ALS Non-Emergency Base Rate	$ 228.33	$ 191.00	$ 475.00
BLS Emergency Base Rate	$ 304.43	$ 85.00	$ 350.00
BLS Non-Emergency Base Rate	$ 190.27	$ 85.00	$ 250.00
Wheelchair Base rate	$ 50.00	$ 50.00	$ 75.00
Waiting Time – SCT-RN	$ 65.00/15 minutes	$ 40.00/15 minutes	$ 75.00/15 minutes
Waiting Time - SCT	$ 40.00/15 minutes	$ 30.00/15 minutes	$ 50.00/15 minutes
Waiting Time – ALS	$ 27.50/15 minutes	$ 25.00/15 minutes	$ 37.50/15 minutes
Waiting Time – BLS	$ 15.00/15 minutes	$ 20.00/15 minutes	$ 25.00/15 minutes
Waiting Time - W/C	$ 10.00/15 minutes	$ 16.25/15 minutes	$ 16.25/15 minutes
Mileage – NICU/Ambulance	$ 5.73/mile	$ 5.00/mile	$ 10.00/mile
Mileage – SCT-RN/Ambulance	$ 5.73/mile	$ 5.00/mile	$ 10.00/mile
Mileage - SCT/Ambulance	$ 5.73/mile	$ 5.00/mile	$ 10.00/mile
Mileage - ALS/Ambulance	$ 5.73/mile	$ 5.00/mile	$ 9.00/mile
Mileage - BLS/Ambulance	$ 5.73/mile	$ 5.00/mile	$ 9.00/mile
Mileage - Wheelchair	$ 2.50/mile	$ 1.50/mile	$ 3.00/mile

- Waiting Time is based in 15-minute increments, with the first 1/2 hour being free
- All rates are based on one way transportation

Exhibit B
Financial Assistance Program Disclosure and Guidelines

FINANCIAL ASSISTANCE PROGRAM DISCLOSURE STATEMENT

This statement is to be included with the third statement sent to any non-paying uninsured patient and to any patient identified at any time in the collection process as likely to meet Holy Cross Hospital's financial assistance criteria by Butler Medical or its billing or collection firm.

Statement in English:

Holy Cross Hospital provides a financial assistance program for members of the' community that have insufficient income and assets to pay for their medically necessary services at Holy Cross Hospital. This program may be able to assist you with this bill as well as services provided during your hospital stay. This bill will be reported to credit reporting agencies and or collection agencies if it remains unpaid. If you are unable to pay this bill, please contact Holy Cross Financial Counselors at (30 1) 754-7195 who can assist you be determining your eligibility for financial assistance and/or other assistance programs.

Statement in Spanish:

El Hospital Holy Cross ofrece un programa de asistencia financiera para los miembros de la comunidad que no tienen su:ficientes ingresos y bienes para pagar por sus servicios necesarios en el hospital de Holy Cross. Este programa puede ser capaz de ayudarle con esta cuenta, asi como los servicios provistos durante su estancia en el hospital. Esta cuenta seni comunicada a las agencias de informaci6n de credito y las agencias de colecci6n si se sigue pendiente de pago. Si usted no puede pagar esta cuenta, puede ponerse en contacto con los consejeros :financieros del Hospital Holy Cross al numero (30 I) 754-7I 95, que pueden ayudar a determinar de su elegibilidad para recibir asistencia financiera y I o de otros programas de asistencia.

FINANCIAL ASSISTANCE PROGRAM GUIDELINES

1. Family Size

    a. Definition of Family Size: The number of individuals in a household who are supported by one income. Generally the IRS guidelines are used by Holy Cross to determine the dependent status of individuals. The head of household plus dependents comprise the family for financial assistance eligibility purposes.

    b. Criteria for Determining Family Size based on IRS guidelines: (All criteria must be met for an individual to be included in the family size computation):

    - Member of Household or Relative
    - *Support Test:* Head of household provides more than 50% of the individual's total living expenses.

2. Income Test and Asset Test

a. Supporting Documents:

(1) Pay Stubs2 or 3 most recent pay-stubs

- Letter from Employer (if pay-stubs cannot be produced)
- Letter should indicate what the employee does, how much they are paid, and how often payments are made
- Employers name, address, phone number & signature must be on the letter

(2) Tax Forms

(3) Bank Statement

(4) Mortgage Statement, Rental Contract, or Letter from Homeowner

b. Other Supporting Documents:

(I) Pension statements

(2) Social Security Income statements

(3) Disability income statements

(4) Child support statements

(5) Letter of support

# of	Level of Financial Assistance Available				
	100%	90%	75%	50%	25%
1	$15,315	$20,420	$23,789	$27,158	$30,630
2	$20,535	$27 ,380	$31,897	$36,415	$41,070
3	$25,755	$34,340	$40,005	$45,671	$51,510
4	$30,975	$41,300	$48,113	$54,928	$61,950
5	$36,195	$48,260	$56,222	$64,185	$72,390
6	$41,415	$55,220	$64,330	$73,441	$80,000
7	$46,635	$62,180	$72,438	$80,000	$80,000
8	$51,855	$69,140	$80 ,000	$80,000	$80,000
9	$57,075	$76,100	$80,000	$80,000	$80,000
10	$62,295	$80,000	$80,000	$80,000	$80,000

c. Assets. If an individual has more than $ 10,000 in assets or if a family has more than $25,000 in assets (i.e. bank account, home equity, car) they will not be eligible for financial assistance. Anyone with income in excess of $80,000 is not eligible for financial assistance, but anyone who owes Holy Cross Hospital in excess of $ 1 0,000 may request an individual review of his or her circumstances to determine if assistance outside of this schedule might be available.

Exhibit C

Primary PCI and Non-primary PCI/C-Port E
Transports

1. **Notification.** If HCH or HCGH requires ground or air transport of a primary PCI or non-primary PCI/C-Port E patient, it will notify Butler Medical by calling (888) 602- 4007. The Hospital will (1) identify the facility as either HCH or HCGH and (2) notify Butler Medical there is a patient about to undergo primary PCI or non-primary PCI/ C-Port E and that ground or air transportation may be necessary. The Hospital will also provide Butler Medical with the logistical information, patient demographics and brief clinical information that it may reasonably request, which may include faxing the "face sheet" to Butler Medical at (410) 602-4006. If a transport is deemed unnecessary, the Hospital will notify Butler Medical.

2. **Transport.** For patients participating in the non-primary PCI/ C-Port E research protocol, Butler Medical will respond to the call with an ALS equipped ambulance or coordinate air transport and will be on site for an emergency transport of such patients within thirty (30) minutes of Holy Cross Silver Spring Hospital of the initial call for the transport and transport the patient from Holy Cross Silver Spring Hospital to the receiving facility within sixty (60) minutes. For patients participating in the primary PCI protocol, Butler Medical will respond to the call and will be on site for an emergency transport or coordinate air transport of such patients within thirty (30) minutes of Holy Cross Silver Spring Hospital of the initial call for the transport.

Exhibit 6

Expressions of Support:

Holy Cross Health Board Resolution
Montgomery County Fire and Rescue Service Letters of Support
Frederick County Division of Fire and Rescue Services Letters of Support

Resolution of the Board of Directors, Holy Cross Health

Whereas: It is the mission of Holy Cross Health to serve with Trinity Health in the spirit of the Gospel as a compassionate and transforming healing presence within our communities. We carry out this mission in our communities through our commitment to be the most trusted provider of health care services; and,

Whereas: Holy Cross Health is committed to strengthening emergency care provided for patients exhibiting signs and symptoms of ST segment elevation myocardial infarction in the Germantown area; and,

Whereas: Holy Cross Health wishes Holy Cross Germantown Hospital to be authorized by the Maryland Health Care Commission to provide primary percutaneous coronary intervention (pPCI) procedures for eligible ST-segment elevation myocardial infarction patients by meeting criteria established in the *State Health Plan for Facilities and Services: Specialized Health Care Services - Cardiac Surgery and Percutaneous Coronary Intervention Services, Proposed Permanent Regulations COMAR 10.24.17*, and will seek such authorization through a Certificate of Conformance application submitted on October 16, 2015; and,

Whereas: Upon the recommendation of the President and CEO, the Board designates the President of Holy Cross Germantown Hospital to complete the Maryland Health Care Commission's Certificate of Conformance application affidavit on its behalf.

Now, Therefore be it Resolved: The Board of Directors of Holy Cross Health is committed to primary percutaneous coronary intervention at Holy Cross Germantown Hospital and agrees to meet the standards of COMAR 12.27.14 for pPCI.

Elizabeth A. Simpson

Elizabeth Simpson
Assistant Secretary

Dated this 2ND day of October, 2015

Approval of Resolution Committing the Board's Support for Primary Percutaneous Coronary Intervention Services at Holy Cross Germantown Hospital

Approved by Unanimous Written Consent of Executive and Governance Committee on Behalf of the Holy Cross Health Board of Directors via Email on September 25, 2015-October 1, 2015

Holy Cross Health will seek State approval on October 16, 2015 to provide primary percutaneous coronary intervention (pPCI) services at Holy Cross Germantown Hospital, and a board resolution committing the Board's support of the program will strengthen our application. The proposed Resolution is attached, and background information appears below.

Background

In July 2010 and again in October 2013, the Board of Directors of Holy Cross Health committed to and agreed to meet certain standards of care for primary percutaneous coronary intervention at Holy Cross Hospital, and these Resolutions were included in applications for designation and re-verification as a Cardiac Interventional Center in the State of Maryland.

Holy Cross Hospital participated in the landmark C-PORT research study, which conclusively demonstrated in 2006 that patients requiring emergency treatment for STEMI could safely receive pPCI care in a local hospital without cardiac surgery on site. The hospital has successfully maintained authorization by the Maryland Health Care Commission for its pPCI program since 2007.

By obtaining a certificate of conformance to establish a new pPCI program at Holy Cross Germantown Hospital in accordance with regulations adopted by the State of Maryland in August 2015, Holy Cross Health will be able to provide access to that same level of timely, high quality care to for the emergency treatment of eligible patients with ST-segment elevation myocardial infarction living in its new hospital's service area.

The Holy Cross Germantown Hospital's application for a certificate of conformance will be strengthened by a board resolution stating that the hospital agrees to meet the standards for *COMAR 10.24.17, State Health Plan for Facilities and Services: Specialized Health Care Services - Cardiac Surgery and Percutaneous Coronary Intervention Services.* The standards ensure that necessary personnel and processes are in place to ensure a timely provision of pPCI to STEMI patients and an ongoing commitment to education and process improvement.

Meeting these requirements will involve establishing processes and training staff based on the successful pPCI program model at Holy Cross Hospital, and the purchase of a $26,000 for additional equipment specifically for performing pPCI procedures. No additional facility or capital expenditures will be necessary until such time as volume warrants the construction of an additional catheterization lab.

Recommended action

Upon the recommendation of the President and CEO, approve on behalf of the Holy Cross Health Board of Directors the attached resolution stating the board's commitment to primary percutaneous coronary intervention (pPCI) at Holy Cross Germantown Hospital.

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

Isiah Leggett
County Executive

Scott E. Goldstein
Fire Chief

October 12, 2015

Mr. Doug Ryder, President
Holy Cross Germantown Hospital
19801 Observation Drive
Germantown, Maryland 20876

Dear Mr. Ryder:

I am writing to express my strong support for Holy Cross Germantown Hospital (HCGH) efforts to establish a new primary percutaneous coronary angioplasty (pPCI) program and subsequently achieve designation as a Cardiac Interventional Center. Doing so will enable HCGH to provide prompt, life-saving pPCI on-site to walk-in and in-house patients who are diagnosed with ST elevated myocardial infarctions (STEMIs). Such a program would eliminate the time it would take to transfer STEMI patients to the nearest available hospital with a pPCI program for diagnosis and treatment, and potentially help avoid further transfer to a tertiary hospital with a cardiac surgery program.

As a member of the emergency response community, I can state that having HCGH as a pPCI designated center would allow MCFRS to better serve the community in both responsiveness and timeliness of care. Currently, when MCFRS encounters patients in the Germantown area presenting with a STEMI, that patient must be transported to a more distant hospital. In the case of a STEMI patient self-presenting to HCGH, MCFRS is frequently involved in the emergent transfer of this patient to a more distant pPCI hospital. Although MCFRS is glad to provide these life-saving transports, it is obvious that both of these scenarios increase EMS out-of-service time and decrease the number of EMS resources available for the next emergency.

We are aware that improving rapid recognition and treatment of STEMI patients has always been a priority for Holy Cross Health. Applying to the Maryland Health Care Commission for a Certificate of Conformance to establish a new primary PCI program at HCGH is another indicator of Holy Cross Health's commitment to serve the needs of its community for quality care and timely access to treatment for STEMI patients.

Office of the Fire Chief

100 Edison Park Drive, 2nd Floor • Gaithersburg, Maryland 20878 • 240-777-2486 • 240-777-2443 FAX
www.montgomerycountymd.gov/mcfrs

montgomerycountymd.gov/311 MC311 301-251-4850 TTY

We are also aware that Holy Cross Hospital in Silver Spring participated in the landmark 2006 C-PORT research study which conclusively demonstrated that patients requiring emergency treatment for STEMIs could safely receive pPCI care in local hospitals that lacked cardiac surgery capabilities. As a result of the study, Holy Cross Silver Spring gained authorization by the Maryland Health Care Commission for its pPCI program in 2007 and has successfully maintained it since. By granting a Certificate of Conformance to HCGH, the Maryland Health Care Commission will enable HCGH to provide similar access to timely, high quality care to patients living in the Germantown market area.

In closing, I want to note that since its opening in 2014, HCGH has been a valued partner in training and education for our EMS providers. We highly value this relationship and look forward to our continued collaboration. I strongly support this application. If I can be of further assistance, please do not hesitate to contact me.

Sincerely,

Scott E. Goldstein
Fire Chief

SEG/ld

Jan H. Gardner
County Executive

FREDERICK COUNTY GOVERNMENT

DIVISION OF FIRE & RESCUE SERVICES
Emergency Services Section

Thomas W. Owens, Chief
Thomas Coe, Acting Deputy Chief

Doug Ryder
President
Holy Cross Germantown Hospital
19801 Observation Drive
Germantown, Maryland 20876

Re.: Letter of Support to Establish a Primary PCI Program at Holy Cross Germantown Hospital

Dear Mr. Ryder,

I am writing to express my strong support for Holy Cross Germantown Hospital (HCGH) to establish a new primary percutaneous coronary angioplasty (pPCI) program and subsequently achieve designation as a Cardiac Interventional Center. Doing so will enable the hospital to provide prompt, life-saving pPCI on-site to walk-in and in-house patients who are diagnosed with ST elevated myocardial infarction. This would eliminate the time it would take to transfer them to the nearest, available hospital with a pPCI program for diagnosis and treatment, and potentially further transfer to a tertiary hospital with a cardiac surgery program.

As a member of the emergency response community, having HCGH as a pPCI designated center would allow us to better serve the community in both responsiveness and timeliness of care.
Improving rapid recognition and treatment of STEMI patients has always been a priority for Holy Cross Health. Applying to the Maryland Health Care Commission for a Certificate of Conformance to establish a new primary PCI program at HCGH is another indicator of Holy Cross Health's commitment to serve the needs of its community for quality care and timely access to treatment for STEMI patients. Holy Cross Hospital in Silver Spring participated in the landmark C-PORT research study which conclusively demonstrated in 2006 that patients requiring emergency treatment for STEMI could safely receive pPCI care in a local hospital without cardiac surgery on site. That hospital has successfully maintained authorization by the Maryland Health Care Commission for its pPCI program since 2007. By granting a certificate of conformance to HCGH, the Commission will enable it to provide similar access to timely, high quality care to patients living in the Germantown market area.

In closing, I want to note that since its inception in 2014, HCGH has been a valued partner in training and education for our EMS providers. We highly value this relationship and look forward to our continued collaboration. I strongly support this application. If I can be of further assistance please do not hesitate to contact me.

Sincerely,

Thomas Coe
Acting Deputy Chief
Frederick County Fire and Rescue

5370 Public Safety Place, Frederick, MD 21704 • 301-600-1780 • Fax 301-600-2592
www.FrederickCountyMD.gov