Indiana Dept of Homeland Security
Received
OCT 25 2013

APPLICATION FOR HOSPITAL TO BE DESIGNATED "IN THE ACS VERIFICATION PROCESS"

State Form 55271 (5-13)

Date submitted *(month, day, year)*

APPLICANT INFORMATION		
Legal name Indiana University Health Arnett Hospital		
Mailing address *(number and street, city, state, and ZIP code)* 5165 McCarty Lane, Lafayette, IN 47905		
Business telephone number (765) 448-8000	24-hour contact telephone number (765) 412-7592	Business fax number (765) 838-4751

CHIEF EXECUTIVE OFFICER INFORMATION	
Name Alfonso W. Gatmaitan	Title Chief Executive Officer
Telephone number ( )	E-mail address
TRAUMA PROGRAM MEDICAL DIRECTOR INFORMATION	
Name Ruban Nirmalan	Title Trauma Medical Director
Telephone number (765) 448-8000	E-mail address rnirmal1@iuhealth.org
TRAUMA PROGRAM MANAGER INFORMATION	
Name Amanda Rardon	Title Trauma Program Manager
Telephone number (765) 838-5744	E-mail address arardon@iuhealth.org

TRAUMA LEVEL BEING REQUESTED *(check one)* ☐ LEVEL I ☐ LEVEL II ☑ LEVEL III

ATTESTATION

In signing this application, we are attesting that all of the information contained herein is true and correct and that we and the applicant hospital agree to be bound by the rules, policies and decisions of the Indiana Emergency Medical Services Commission regarding our status.

Signature	Printed name	Date *(month, day, year)*
Signature of chief executive officer Alfonso W Gatmaitan	Alfonso Gatmaitan	10/24/2013
Signature of trauma medical director Ruban N	Ruban Nirmalan	10/24/2013
Signature of trauma program ~~manager~~ Amanda Rardon RN	Amanda Rardon	10/24/2013

INSTRUCTIONS: Address each of the attached in narrative form

Indiana University Health Arnett

Application for "In the ACS Verification Process" Level III Trauma Center

Trauma Medical Director

Ruban Nirmalan MD is the trauma medical director for trauma services at Indiana University Health Arnett. He is Board Certified by the American Board of Surgery and is a Fellow of the American College of Surgeons. He takes regular trauma call and his ATLS certification is current with an expiration date of March 23, 2016. Please see attachments under Trauma Medical Director tab.

Trauma Program Manager

Amanda Rardon RN is the trauma program manager. She has a Bachelor's degree from Purdue University with a major in Nursing. She has been a nurse for 15 years with the last 11 years in the Emergency Department. For 2013, she currently has 18.25 CEU hours with plans to attend 2 additional offerings, as well as attendance at the District 5 sponsored IHEPS conference in August. She also continues to staff the Emergency Department on a PRN basis. Please see attachments under Trauma Program Manager tab.

Submission of trauma data to the State Registry

Indiana University Health Arnett submits quarterly data to the Indiana State Trauma registry. In April of 2013, IUHA also submitted 2012 data to the National Trauma Data Bank. Please see Trauma Registry tab.

Trauma Registrar

Teresa Williams RN is the Trauma Registrar. She has recently taken this position; however, she comes with several years of nursing, EMS and firefighting experience. Teresa will be taking the American Trauma Society Trauma Registrar course as soon as possible. Please see Trauma Registrar tab.

Tiered Activation System

Indiana University Health Arnett has a clearly defined Trauma Tiered Response, Activation, Trauma Service Admission and Trauma Service Transfer policy (IUHA Policy # ED 1.29). There are also clear trauma activation guidelines that are used. The Performance Improvement and Patient Safety

committee continuously monitors and evaluates trauma responses and provides corrective action as necessary. Please see Tiered Activation tab.

Trauma Surgeon Response Times

Our trauma surgeons are committed to meeting the standard of responding to the highest level of trauma activation. Our surgeons are required to be at the bedside of the trauma patient who was activated at the highest level within 30 minutes of the patients arrival. The PIPS process monitors and evaluates this continuously.

Dr. Nirmalan is a member of the hospital's disaster committee. Please see Trauma Surgeon tab.

In-House Emergency Department Physician Coverage

Joseph Moody MD is the current medical director for the emergency department. The emergency department is staffed by a Board Certified Emergency Medicine physician 24 hours a day. There is also coverage by a second physician from noon to midnight daily and coverage by mid-level providers from 0600-0200 daily. Please see Emergency Department tab for staffing pattern information.

Orthopedic Surgery

Indiana University Health Arnett has orthopedic physicians on call and available 24 hours a day/7 days a week. Should the need arise to use the operating room during "off hours", the orthopedics physicians are supported by an on call orthopedic surgical technician and IU Health Arnett offers 2 on-call OR teams. Please see Orthopedics tab.

Neurosurgery

Neurosurgery call is covered by Dr.'s Gehring and Crecelius of Goodman Campbell Brain and Spine. Indiana University Health Arnett is prepared to keep all neurological injuries over the age of 18, due to unavailability of Pediatric Intensive Care Unit at our facility. Should the need arise to transfer a patient with a neurological injury, there is a transfer agreement in place with Indiana University Health Academic Health Center, which includes Methodist Hospital and Riley Hospital for Children. Please see neurosurgery tab.

Transfer Agreements and Criteria

Trauma Services at Indiana University Health Arnett developed a transfer policy (Policy ED 1.31) to define the injuries that we are not able to provide full treatment for. We also have transfer agreements in place with the Indiana University Health Academic Health Center and the Wishard Burn Unit. Please see Transfers tab.

Trauma Operating Room, Staff and Equipment

Operating Room Staff have a 30 minute response time to be present and ready for the case when called in outside of normal OR hours. During normal OR hours, upon the activation of the highest level of trauma response, an operating room is help open until released by the trauma surgeon who responded to the activation.
There are 2 call teams available at all times (general: 1 RN and 1 CST) (open heart: 2 RN and 2 CST).
The operating room is always readily available; a general room is available for trauma cases and well as an Open Heart Room set up and ready use and a Neuro room set up and ready for emergency cases.
There is a 30 minute response time for anesthiology outside of normal OR hours with 3 anesthesiologists on call every day. Please see Operating Room tab.

Critical Care Physician coverage

Intensivists have a 30 minute required response time for arrival when needed in house after hours. Hospitalists are in house 24/7 and will respond for any emergencies and care for the critically ill patient until the Intensivist arrives and care is handed over. Please see Critical Care tab.

CT Scan and Conventional Radiology

IU Health Arnett has full service radiology available 24 hours a day/7 days a week. There are x-ray and CT scan technologists in house at all times. Please see Radiology tab.

Intensive Care Unit

In the ICU at IU Health Arnett, staffing for critically ill and injured patients never exceeds a patient:nurse ratio of 2:1 and often these patients are 1:1 care. The intensive care unit has the resources to care for and resuscitate all critically ill and injured patients including immediate post-open heart surgery patients, neurosurgery patients and all other critical patients. Please see Critical Care tab.

Blood Bank

Blood bank is available 24 hours a day/7 days a week and has continuous ability to type and cross match blood products. A full inventory is always maintained with Indiana Blood Center in Indianapolis, IN and American Red Cross in Fort Wayne, IN available should additional supply be needed. A massive blood transfusion policy has been written and is pending approval. Please see Blood Bank/Lab tab.

Laboratory Services

The laboratory is staffed and able to run all testing 24 hours per day. Please see Blood Bank/Lab tab.

Post-Anesthesia Care Unit

The post-anesthesia care unit is staffed during normal operating room hours and is covered by on call staff on off hours with the expectation of prompt response when called in. This is monitored by the Performance Improvement and Patient Safety committee. All PACU nurses are required to be ACLS certified and primary staff are also required to have PALS. Please see PACU tab.

Relationship With an Organ Procurement Organization (OPO)

Indiana University Health Arnett has a relationship with Indiana Organ Procurement Organization. There are also several policies in place that address end of life care and IOPO. Please see OPO tab.

Diversion Policy

Indiana University Health has a clearly defined Diversion Policy. In the past year, we have not been on diversion at any time. Please see Diversion tab.

Operational Process Performance Improvement Committee

Indiana University Health Arnett has two (2) separate trauma committees. The Performance Improvement and Patient Safety committee meets on even months with the purpose of doing case reviews and improving patient safety and care. The Trauma Operational Process Improvement Committee meets on the odd month with the purpose of overseeing the operations and processes of the trauma program, monitoring process improvement and patient safety. Please see TOPI tab.

Nurse Credentialing Requirements

All nurses employed by Indiana University Health Arnett are required to have a valid nursing license from the state of Indiana. All nurses in the Emergency Department are required to have current ACLS, PALS, TNCC and ENPC certifications. They are also required to do yearly mandatory in-services on the Level I Rapid Infuser, chest tubes, arterial lines and several other emergency and trauma related skills. All nurses in the Intensive Care Unit are required to have current ACLS certification. TNCC is strongly recommended, but not required at this time. The ICU nurses also have several yearly competencies that are mandatory as well. Please see Nurse Credentialing tab.

Commitment by the Governing Body and Medical Staff

Indiana University Health Arnett is committed to providing preeminent trauma care to Tippecanoe and surrounding counties. This has been reinforced and fully supported by the Board of Directors and the Medical Staff. Please see Hospital Commitments tab.

American College of Surgeons Consultation Visit

Indiana University Health Arnett underwent a consultation visit performed by the American College of Surgeons on April 30th and May 1st of 2013. The report from this visit is included under the ACS Consult Visit tab. As a result of this visit, IU Health Arnett has been focusing on our deficiencies and areas of weakness and is anticipating a visit from the American College of Surgeons for verification in the near future.

Ruban Nirmalan

Education

2001 Northeastern Ohio Universities College of Medicine
M.D. Rootstown, OH

1995 Youngstown State University
B.S. Combined Sciences

Professional experience

January 2010 - Present

Indiana University Health Arnett, Lafayette, IN – Attending General Surgeon
- Private practice in general surgery

2006 – 2010

Lakeland Regional Medical Center, Niles, MI – Attending General Surgeon
- Private practice in general surgery

2001 – 2006

St. John Hospital, Detroit, MI - Categorical Surgical Resident
- Caring for and treating patients with a wide variety of surgical problems while creating an atmosphere conducive to learning the art of Surgery.

2005 – 2006
St. John Hospital, Detroit, MI – Chief Surgical Resident
- Supervising and teaching general surgical residents and carrying out administrative responsibilities for the residency.

Certifications and licenses

Board Certified by the American Board of Surgery – 2008

Michigan medical license – Aug 2006 – present

Indiana medical license – May 2009 – present

Florida medical license – Aug 2009 – present

DEA license – Sept 2006 – present

Presentations and publications

Publication

F. Navarro, D. P. Orgill, R. Nirmalan; Two Photon Confocal Microscopy: A Nondestructive Method for Studying Wound Healing; *Plastics and Reconstructive Surgery;* July 2004; pp121-128.

Presentation

April 2004: Resident Research Day – St. John Hospital

Pectoralis Major Advancement Flap: A better way to treat Sternal would infections & Dehiscence

Research

September 2002 – Present

Resident Research

Dr. Michael. Busuito, St. John Hospital – Retrospective review of Pectoralis Major advancement flap for sternal wound infections.

June 1999 – August 1999

Research Assistant

Dr. Dennis. P. Orgill - Harvard Medical School/Brigham & Women's Hospital

Assisted with multiple research projects including the in vivo study of scar formation using the Two Photon Confocal Microscope.

Professional memberships

2009 – Present

Fellow of the American Collage of Surgeons

July 2010 – Present

Member: Indiana State Medical Association

January 2009 – January 2010

Secretary/Treasurer of the Medical Staff – Lakeland Regional Medical Center

January 2009 – January 2010

Chair of the credentials committee – Lakeland Regional Medical Center

July 2005 – 2006

Member: Graduate Medical Education Representative

September 2003 – 2006

Member: St. John Hospital Trauma Committee

January 2004 – 2009

Candidate Member of American Collage of Surgeons

1997 – 2006

Member of American Medical Association

Languages

Tamil, Sinhalese & English

Community activities

May 2004

Volunteer Surgeon

- Operated on patients in rural Sri- Lanka

May 1993 – August 1995

Instructor: Safe Kids Coalition

- Volunteered to teach children and parents the importance and proper use of various child safety devices and techniques.

References

Dr. Larry Lloyd
Program Director
19229 Mack Ave.
Suite 38
Gross Pointe Woods, MI 48236
Tel: 313-885-1520
313-647-3995 Fax

Dr. John Boccaccio
19229 Mack Ave.
Suite 38
Gross Pointe Woods, MI 48236
Tel: 313-885-1520
313-647-3995 Fax

Dr. Ahmed Meguid
Eastside Surgical Specialists, PC
24911 Little Mack
Suite B
St Clair Shores, MI 48080
586-774-8811
586-774-6773 Fax

Interests

Traveling & spending time with my family

The American Board of Surgery
Incorporated

1617 John F. Kennedy
Boulevard
Suite 860
Philadelphia, PA 19103
phone 215.568.4000
fax 215.563.5718
www.absurgery.org

August 2, 2012

Re: Ruban Nirmalan, M.D.

Thank you for your recent inquiry to the American Board of Surgery (ABS) regarding the certification status of the above named surgeon. The specific status of this surgeon with the ABS is listed below.

Please be advised that the American Board of Surgery does not use or condone the term "board eligible" and therefore can neither affirm nor deny such status.

Certification: Surgery	**Current Status: Certified**

Certification History - Certificate #053791

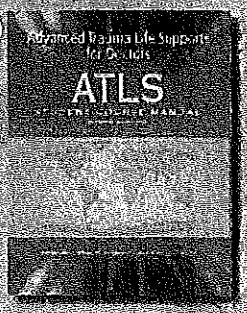
Status	Occurrence	Duration	Start Date	End Date
Active	Initial	Time-Limited	27 Oct 2008	01 Jul 2019

Please inform us immediately if your information differs from what we have supplied above. If you have questions regarding this information, please contact the ABS office.

Frank R. Lewis Jr. MD

Frank R. Lewis, Jr., M.D.
Executive Director

COMMITTEE ON TRAUMA | AMERICAN COLLEGE OF SURGEONS



Ruban Nirmalan

is recognized as having successfully completed the ATLS® Course for Doctors according to the standards established by the ACS Committee on Trauma.

Karen Brasel, MD, FACS
Chairperson, ATLS Subcommittee

Lewis E. Jacobson, MD, FACS
ACS Chairperson, State/Provincial Committee on Trauma

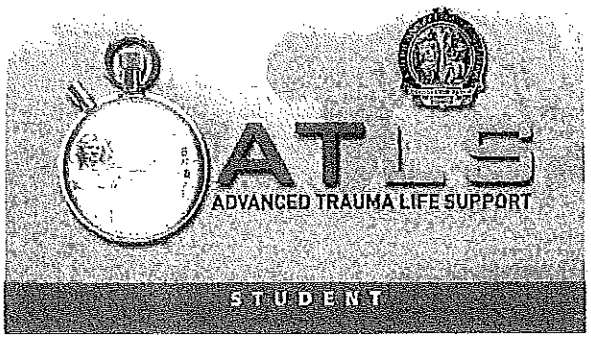
ATLS Course Director

Date of Issue: 03/23/2012

Date of Expiration: 03/23/2016

ATLS ADVANCED TRAUMA LIFE SUPPORT

COMMITTEE ON TRAUMA



Ruban Nirmalan

is recognized as having successfully completed the ATLS® Course for Doctors according to the standards established by the ACS Committee on Trauma.

Issue Date:03/23/2012 Expiration Date:03/23/2016

Chairperson, ATLS Subcommittee

ACS Chairperson, State/Provincial Committee on Trauma

ATLS Course Director

CS: 39789-P

ATLS ID:478399

Replacement ATLS cards are available for a $10 USD fee.

Indiana University Health

Job Description - "Medical Director-Trauma"

Job Title	Job Code	Date
Medical Director-Trauma		

Summary

This position exists to provide physician leadership in the development of departmental protocols and procedures. The incumbent will monitor the quality of clinical activities and protocols. The Trauma Medical Director in collaboration with the Trauma Program Manager is responsible for the ongoing development, growth and oversight/authority of the Trauma Program. The Trauma Medical Director is responsible for promoting high standards of practice through development of trauma policies, protocols and practice guidelines; participating in rigorous performance improvement monitoring; resident and staff education and trauma research. He/she has authority to act on all trauma performance improvement and administrative issues and critically review trauma deaths and complications that occur within the hospital. Decisions affecting the care of trauma patients will not be made without the knowledge, input and approval of the Trauma Medical Director.

Essential Functions

Clinical Leadership:

Assures that clinical guidelines are developed, communicated and implemented to all medical and professional personnel for the department. Participates in formulation of policies and procedures for the department. Assures adherence to the established protocols and policies, are monitored, and action taken where appropriate. Ensures compliance with standards of care. Exercises authority for all major medical administrative decisions for the department as they involve other hospital departments.

Quality Improvement:

Takes appropriate action to ensure quality patient care, assist the quality assurance director in developing a system for assessment of program quality through the use of defined key indicators of performance. Assesses program quality, and reviews variances to established protocols, policies, procedures, taking appropriate actions as necessary.

Market Development:

Provides input relating to market enrichment strategies and programs for implementation in conjunction with the Marketing Department. Contributes to a positive community image through promotional efforts with community and state agencies ad groups as requested.

Patient Care:

Provides medical consultation and oversees patient care delivered by the organization employees in adherence to the contractual agreement.

Education:

Participates in resident, medical student and other allied health personnel education, including the coordination of lectures, schedules, and patient rounds.

Operational Input:

Provides input into operational aspects of the department including budget, staffing, resource utilization, space requirements and program development.

Problem Resolution:

Works with team members for resolution of problems. Works with team members to ensure accurate and timely maintenance and completion of all departmental medical records.

Research Referral:

Investigates the feasibility of clinically relevant research. Identifies research topics, assists in developing protocols including estimates of man-hours needed for data collection.

Trauma PI:

Determines and implements PI activities appropriate to the trauma program. Oversees the trauma PI program and participate in other quality initiatives that deal with the care of injured patients. Reviews and investigates all trauma PI inquiries in collaboration with the Trauma Program Manager and refer to the appropriate committees. Monitors compliance with trauma treatment guidelines, policies and protocols. Assures that the quality and appropriateness of patient care are monitored and evaluated and that appropriate actions based on findings are taken on a consistent basis. Reports quality of care issues promptly to appropriate individuals, including Trauma Program Manager and hospital administration. Identifies and corrects deficiencies in trauma care policies, guidelines and protocols.

Trauma Administration:

Participates in the research, development and writing of trauma policies, protocols and practice guidelines. Implements trauma program policies and procedures in collaboration with the Trauma Program Manager as they pertain to patient care. Organizes, directs and integrates the trauma program with all other departments and services within the hospital. Promotes a cooperative and collaborative working environment among the clinical disciplines involved in trauma care. Maintains an effective working relationship with the medical staff, trauma service staff, administration and other departments. Provides oversight and direction in recommending privileges for the trauma service. Participates in trauma program marketing activities. Establishes a physician case management process that fosters cost-effective, high quality patient care. Assesses need for equipment, supplies, budget. Assists the leadership in developing and meeting the trauma program budgetary goals. Oversees, participate in and develop projects that ensure the cost-effectiveness of care provided by physicians and hospital.

Level III Trauma Responsibilities:

Leads efforts to develop and maintain a trauma center. Collaborates with senior leadership to establish trauma program goals and objectives consistent with those of the hospital and ensure that those of the trauma program are being met. Develops and provides input on the development and maintenance of practice guidelines, policies and methodologies for medical/surgical trauma care. Participates in site review by regulatory agencies. Organizes, directs and implements departmental practices to assure continued compliance with applicable laws including the guidelines established by the American College of Surgeons and the Joint Commission on Accreditation of Hospitals. Demonstrates positive interpersonal relationship with colleagues, referral MDs, hospital personnel, and patients/families in order to achieve maximum operational effectiveness and customer satisfaction. Assures transfer agreements in place and in good standing; maintain relationship with receiving facilities, foster collaborative relationship. Makes appropriate referrals for specialty services and communicate regularly with referring physician as appropriate. Assumes clinical responsibility for all trauma patients. Ensures that adequate attending physician availability is provided to render care to trauma patients. Ensures establishment of physician/surgeon call schedules for all trauma care, excluding those who do not meet educational and credentialing requirements. Provides trauma care leadership and consultation for emergency, surgery and intensive care unit departments. Participates in regional and statewide activities affecting the trauma program. Attends local and national meetings and conferences to remain current regarding issues relevant to the performance of duties. Demonstrates consistent, efficient, cost effective and quality trauma care at all times.

Licensure/Certification/Registrations:

Verifies that employee possesses documentation of current appropriate licensure/certification/registrations as required by job description.

The preceding essential function statements are not intended to be an exhaustive list of tasks and functions for this position. Job descriptions provide a representative summary of the major duties and responsibilities performed by incumbents. Other tasks and functions may be assigned as needed to fulfill the mission of the organization.

Job Family: (Senior Leadership)

Job Family || Job Behavior

QUALIFICATIONS/KNOWLEDGE/SKILLS/ABILITIES:

Requires a Medical Degree with board certification in General Surgery and licensure to practice in the state of Indiana.

Member in good standing of the hospital medical staff.

Currently certified in Advanced Trauma Life Support (ATLS).

Participates in trauma call.

Demonstrated history of positive collegial relations with colleagues, support staff, hospital-based providers, administrators and patients.

Requires strong leadership skills.

Requires marketing knowledge.

Requires knowledge of budgeting processes.

Requires academic interest and background.

Requires strong team management skills.

Requires knowledge of Quality Assurance.

AMANDA GAIL RARDON

PROFESSIONAL SUMMARY

Registered Nurse

- Highly skilled career professional with more than 15 years experience in physician office, occupational health, emergency department and trauma services.
- Assisted with establishing Trauma Services at Indiana University Health Arnett and tasked with obtaining American College of Surgeons Level III Trauma Center verification status.
- Policy and procedure development for trauma program. Ensure that performance improvement is continually monitored. Enter and verify trauma registry data.
- EMS liaison for Indiana University Health Arnett

CREDENTIALS

Board Examination 1998

License, State of Indiana 1998-current

EXPERIENCE

Trauma Program Manager/EMS Liaison 2011-present
Indiana University Health Arnett, Lafayette, Indiana

Shift Coordinator Emergency Department 2008-2011
Indiana University Health Arnett, Lafayette, Indiana

Charge Nurse/Staff Nurse Emergency Department 2006-2008
Indiana University Health North, Carmel, Indiana

Charge Nurse/Staff Nurse Emergency Department 2002-2006
Home Hospital, Lafayette, Indiana

Occupational Health Nurse 1999-2002
Subaru-Isuzu Automotive, Lafayette, Indiana

Float Nurse/Diabetes and Asthma Educator 1998-1999
Arnett Clinic, Otterbein, Indiana

EDUCATION

Purdue University. Bachelor Degree 1998
School of Nursing
Major: Nursing
Minor: Psychology
West Lafayette, Indiana

AFFILIATIONS AND CERTIFICATIONS

Emergency Nurses Association
Society of Trauma Nurses
Trauma Nursing Core Course Instructor
Emergency Nursing Pediatric Course Instructor
BLS, ACLS, PALS and AMLS Certified

References on Request

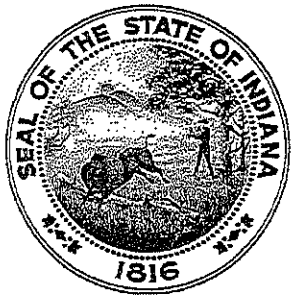
Certificate of Completion

Continuing Education Units (3 hours)

Statewide Trauma Education Session

District 4 - Lafayette

May 14, 2013



William C. VanNess II, M.D.
State Health Commissioner
Chair, Indiana State Trauma Care Committee

Indiana State
Department of Health

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Indiana University Health

Continuing Education

Certifies that:

Amanda Rardon, RN, BS

Has attended and successfully completed the educational activity:

"New Drug Update: Anticoagulants"

At: Indiana University Health, Indianapolis On: February 8, 2013

Number of contact hours awarded 1

Marcy L Strine

Marcy Strine, RN
Continuing Education

IU Health Indianapolis (OH-412, 6/1/2013) is an approved provider of continuing nursing education by the Ohio Nurses (OBN-001-91), an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

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Indiana University Health

Continuing Education

Certifies that:

Amanda Rardon, RN

Has attended and successfully completed the educational activity:

"First Person Donor Designation"

At: Indiana University Health, Indianapolis On: May 10, 2013

Number of contact hours awarded **0.75**

Marcy L Strine

Marcy Strine, RN
Continuing Education

IU Health Indianapolis (OH-412, 6/1/2013) is an approved provider of continuing nursing education by the Ohio Nurses (OBN-001-91), an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

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PARKVIEW
HEALTH

EDUCATIONAL SESSION CONTACT HOUR RECORD

This will verify that

Name/Credentials Amanda Bardon BS, RN

Address

Attended

Title: The 24 th Annual Trauma Symposium: Cutting-Edge Trauma Resuscitation
ID #: 04-13-03
Date: May 3, 2013
Location: Ceruti's Reception Hall
Address: 6601 Innovation Blvd.
Fort Wayne, IN. 46818

and has been awarded 6.25 CONTACT HOURS

Debra L. Stam RN. B.S.N.

Debra Stam, MPA, BSN, RN, Director, Leadership and Organizational Development

Parkview Health System (OH-427, 6/1/2015) is an approved provider of continuing nursing education by the Ohio Nurses Association (OBN-001-91), an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.
The Indiana State Nurses Association has designated ONA as the official approver of CNE Providers and activities for Indiana

PARKVIEW HEALTH
FORT WAYNE, INDIANA 46805
260/373-4000

Indiana University Health

Continuing Education

Certifies that:

Amanda Rardon, RN, BS

Has attended and successfully completed the educational activity:

"Trauma Topics"

At: Indiana University Health, Indianapolis On: April 9, 2013

Number of contact hours awarded **7.25**

Marcy L Strine

Marcy Strine, RN
Continuing Education

IU Health Indianapolis (OH-412, 6/1/2013) is an approved provider of continuing nursing education by the Ohio Nurses (OBN-001-91), an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

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Indiana University Health

POSITION DESCRIPTION

POSITION TITLE: Trauma Program Manager

JOB NUMBER:

REPORTS TO: Emergency Department Director

DEPARTMENT: Trauma (363210)

EFFECTIVE:

SUPERSEDES: NEW

BASIC FUNCTION:
This position exists to manage the overall operation of the Trauma Level III program. The position manages the resources and ongoing analysis, development and implementation of systems and methods to provide and improve all trauma related services and functions. This position is the liaison with internal and external trauma and emergency response services.

ESSENTIAL FUNCTIONS:
All employees will be held accountable to the Indiana University Health Arnett Standard of Service that is defined by Service Excellence

Planning:
Contributes to the development and implementation of annual operating plans and assist with financial analysis and formulation of recommendations to achieve plan objectives.

Employee Management:
Effectively manages assigned staff in a manner consistent with organizational policies and values. Supervises the Trauma Registrar, the trauma program providers and staff. Serves as resource for trauma related clinical practices. Maintains employee feedback process to enhance employee retention and engagement, work processes and employee understanding. Demonstrates skill in identifying and selecting the best applicants. Demonstrates ability to proactively identify and resolve conflict. Recognizes special contributions, excellence and achievements.

Accreditation
Ensures compliance with all applicable quality and accreditation standards within the assigned area. Ensures verification as Level III Trauma Program with the American College of Surgeons is achieved and maintained.

Trauma III Services Program Accountabilities
Works in close collaboration with the Trauma Medical Director. Is responsible for organization of services and systems necessary for a multidisciplinary approach to providing care to injured patients. Assumes day-to-day responsibility for process and performance improvement activities as they relate to nursing and ancillary personnel and assists the Trauma Medical Director in carrying out the same functions for the physicians. Provides leadership in all facets of quality care for the trauma patients. Initiates and completes the business and quality management plans of the program. Serves as liaison to establish and maintain an effective network to provide high quality trauma care. This liaison responsibility extends within the organization and external to the organization, including but not limited to emergency medical service agencies. Develops and implements trauma education. Develops and maintains a communication system which assures effective flow of information. Impacts customer satisfaction by assessing customer needs. Assists department and emergency services to develop and implement plans that respond to the customer needs (voice of the customer). Directs community trauma education and prevention programs. Participates in the development of trauma care systems at local, state and national level.

Financial Management
Manages the operational, personnel and financial aspects of the trauma program. Provides for effective monitoring and financial management of assigned areas. Seeks and recommends opportunities for cost containment and analyzes variances from budget plan.

Leadership and Professionalism
Assists with planning and program development within assigned area and directs and coordinates the ongoing activities to meet established objectives and aims. Coordinates management across the continuum of trauma care, which includes planning and implementation of clinical protocols and practice management guidelines as well as monitoring care of in-house trauma patients. Represents the Trauma Program on various hospital and community committees to enhance and foster optimal care of the trauma patient. Behaves in a way that is consistent with values, mission and vision of the organization. Maintains good working relationships with managers, leaders, peers inside and outside the department.

Quality Assurance and Continuous Improvement:
Initiates, promotes, and supports the participation of staff in applying the principle/model of continuous improvement to improve existing processes and enhance the effective utilization of resources. Provides for intra-facility and regional professional staff development. Facilitates and participates in Trauma Peer Review committee and Trauma Program Operational Process Performance Committee (TPOPPC) meetings. Completes a minimum of 16 hours (internal or external) of trauma related continuing education per year.

Culture Champion:
Responsible for being a culture champion by participating in the development, monitoring and sustainment of the culture that is an integral part of the IU Health Arnett philosophy and vision. Is responsible for embracing and demonstrating the culture of energy, passion, and positive atmosphere while delivering excellent care and superb customer service.

The preceding essential function statements are not intended to be an exhaustive list of tasks and functions for this position. Other tasks and functions may be assigned as needed to fulfill the mission of the organization.

QUALIFICATIONS/KNOWLEDGE/EDUCATION:

Requires current RN licensure in the state of Indiana.
Requires BSN degree; Master's degree in Nursing, business or related field preferred.
Requires BLS, ACLS, PALS, TNCC, ENPC.
Requires clinical experience that includes at least 2 years of Emergency Room or Trauma Care.
Requires maintaining competency and continuing education in area of specialty.
Requires knowledge of state and national regulatory agency standards.
Requires knowledge of business applications.
Requires a high-degree of self-motivation to direct, plan and implement new programs.
Requires ability to plan and manage the utilization of resources.
Requires ability to facilitate and lead work groups.
Requires knowledge of IU Health personnel policies and procedures.
Requires effective written and verbal communication skills.
Requires strong customer service skills.
Requires ability to promote environment for teamwork and build effective relationships.
Requires ability to take initiative and meet objectives.
Requires a high level of interpersonal, problem-solving, and analytical skills.
Requires knowledge of basic computer software applications.

Logged in as: Amanda Rardon (logout)

Indiana Patient Registry

Inbox Help

My Facility | Data Exchange | Report Writer | Search: Enter Incident Or Account Number Go

Data Exchange > NTR Import

Import Data

NTR Import

Export Data

NTR Export

Privacy Statement

Import XML File

Import Date	Import File	Import Type	Total Records	Status
07/02/2013 09:19	NTDS_SDL_18023_20130701143627.XML	Indiana Import	115	☑
06/26/2013 11:01	NTDS_SDL_18023_20130626105304.XML	Indiana Import	117	☑
04/01/2013 15:43	NTDS_SDL_18023_20130401154441.XML	Indiana Import	138	☑
01/11/2013 15:12	NTDS_SDL_18023_20130111151113.XML	Indiana Import	115	☑
01/10/2013 10:09	NTDS_SDL_18023_20130110095817.XML	Indiana Import	179	☑
12/18/2012 12:25	NTDS_SDL_10003_20121108114436.XML			⚠

Records 1-6 of 6 | First | << | >> | Last Per Page 10

= View Details ☑ = Completed ☒ = Failed ⚠ = Completed w/ Error(s) ☐ = Pending Import (Please check back at a later time.)

To download the file, right click on the file link and select 'Save Target As'.

Import Information

Facility to Import To: IU Health - Arnett Hospital

Location of XML file: Browse...

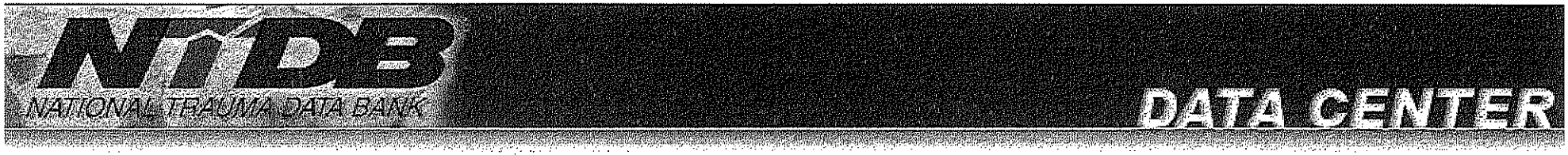
Notification Preference: ☐ Email ☐ Internal Messaging

Form Type to Import: Trauma Incident Form (Full Record)

Import

Import Instructions

1. From the drop-down, select the facility to which the import should insert the data.
2. Use the **Browse...** button to navigate to the import file.
3. After you have verified that the destination and file path are correct, click **Import** button to start the file transfer. Depending on the number of incidents, this step may take a moment. Be patient and when it is complete you'll be notified.
4. The system will automatically run the data importing, processing, and validation routines.Changes will be reflected in the system within 24 hours.



Activity Menu | Reports | Facility Info | Support

Please click here to submit data

Year of Submission:

Search

NOTE: In order to **finalize your submission**, you must hit the **[Accept]** link on the files you wish to submit. You will only see the **[Accept]** link if the Processing Status is set to **'Pending User Approval'.**

NOTE: If you wish to **cancel a submission**, you must hit the **[Reject]** link on the file. You may **cancel a submission** after you accepted it, as long as the Call for Data is active.

23

Sub ID	Facility Name	Date/Time of Submission	Processing Status	Disposition Status	File Name	Accept	Reject	Validator Report - Summary	Validator Report - Detail	Submission Frequency Report	Submitted User Name	File Type
7935	Indiana University Health Arnett	04/02/2013 03:57 PM	Processed	Loaded	NTDS_18023_20130402144158						Amanda Rardon	NTDB

Prev Next

Total Records: 1 - Page 1 of 1

American College of Surgeons National Trauma Data Bank®
633 N. Saint Clair St. - 26th Floor, Chicago, IL 60611-3211
Phone: +1 (312) 202-5917 Fax: +1 (312) 202-5015 Email: NTDB@facs.org

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Teresa S. Williams R.N., BSN

EDUCATION:

Western High School 1976
Indiana University-Kokomo 1997 (Bachelor Science Nursing)

SUMMARY OF QUALIFICATIONS:

ACLS Certified & Instructor
PALS Certified
ENPC Certified
TNCC Certified
BLS Certified
Previous EMT-A Certification (expired)
Patient Advocate
Outstanding interpersonal and communication skills
Experience providing 911/Emergency service on BLS unit.
10 years ED experience as RN
6 years paid Firefighter/EMT experience (24 hr shifts)
Ability to work competently isn stressful environment.
Self motivated. Team Player

PROFESSIONAL SERVICE:

1984-1990 Purdue University Fire Department

1996-1999 St Joseph Hospital ED
Pt care assistant 2years and RN 2 years

2003-2006 St. Joseph Hospital
RN on chemical addiction/psych unit

2006-2008 Logansport Memorial Hospital ED

2008-present IU Health Arnett ED
Staff RN
Charge RN

Indiana University Health

POSITION DESCRIPTION

POSITION TITLE: **Trauma Registrar/Injury Prevention and Outreach Coordinator**

JOB NUMBER:

REPORTS TO: **Trauma Manager**

DEPARTMENT: **Trauma**

EFFECTIVE: **6/1/2013**

SUPERSEDES: **NEW**

BASIC FUNCTION:
This position is accountable for prioritizing and coordinating the activities for the Trauma Registry in order to meet schedules and deadlines, maintain current and accurate procedures and practices. The Registrar performs a variety of functions to support the collection and coordination of Trauma Performance Improvement statistics with emphasis on data entry into a comprehensive computerized management system. The incumbent acts as a liaison with the Trauma Program Manager, Medical Director(s) and trauma staff to provide reports on a scheduled and ad hoc basis. The incumbent collects trauma data for injury research and prevention, as well as quality improvement tracking and assures accuracy and confidentiality in the handling of all Trauma Registry related matters and is concerned with and active in the improvement of Trauma Program within the facility. The incumbent is responsible for coordination of Injury Prevention activities in the community, including but not limited to Health Fairs, convocations and individual group requests. Also, is responsible for the coordination of Outreach and Education for members of the trauma team, including, but not limited to EMS, nursing staff and physicians. Contacting physicians, as needed, for clarification of diagnosis or treatment data. Abstracting core information from patient medical records (including demographic characteristics, history of injuries, diagnostic procedures and treatment); if needed, contacts referring hospitals and Emergency Medical Services for missing records. Providing written reports from the Trauma Registry Software on a monthly basis from the direction of the Trauma Medical Director and Trauma Program Manager. All duties must be accomplished in a manner that is consistent with the Mission and Philosophy of Indiana University Health Arnett. This position will report to the Trauma Program Manager.

ESSENTIAL FUNCTIONS:
All employees will be held accountable to the Clarian Arnett Standard of Service that is defined by Service Excellence

Clinical Judgment:
Conducts accurate clinical assessments; identifies and prioritizes patient/family strengths, needs and priorities; develops, implements then evaluates the patient's individualized plan of care; and modifies plan to meet mutually agreed-upon clinical outcomes. Care is consistent with established policies, procedures and standards of care (follows algorithms, decision trees, and protocols in the delivery of patient care). Identifies the normal course of illness in assigned patient population recognizing and intervening when deviations occur. Provides for and maintains a safe patient/family environment. Accurately communicates patient information and thoroughly documents nursing actions and plan of care. Manages own patient assignment by delegating effectively based on patient needs and skills of team members. Seeks validation of clinical judgment from more experienced clinicians. Designs an effective transfer/discharge plan.

Caring Practices:
Shows respect for patients/family dignity and privacy in all patient/family interactions. Establishes and maintains mutual trust within the nurse-patient/family relationship. Corrects patient's service problems promptly and objectively. Listens and acknowledges patient's/family's knowledge of self and engages their participation in care. Provides for optimum comfort of patients and families utilizing standard evidence based approaches. Able to successfully use multiple forms of communication to appropriately provide patient/family support (presence, touch, eye contact, etc.). Supportive to new staff members and helps to facilitate their transition into unit. Demonstrates self-care in order to preserve one's endurance as a care giver within a stressful environment.

Response to Diversity:
Seeks opportunities for individual growth in diversity training and responsiveness. Identifies, implements, and then documents a plan of care that is sensitive to the unique needs of the patients and families. Aware of the usual cultural norms for key patient population seeking validation in individual situations. Provides age specific and developmentally appropriate patient/family care. Embraces diversity in the work environment as a means to achieve enhanced patient care outcomes.

Advocacy/Moral Agency:
Does not allow own values/beliefs to bias the care given to patients and families. Respects patient/family confidentiality and autonomy. Recognizes patient/family rights through support of their informed decisions and advanced directives. Recognizes ethical dilemmas within one's practice area and uses available resources to intervene effectively. Communicates patients/family's needs/values and priorities and consistently meets those needs on a daily basis. Recognizes the impact of words and actions when creating a case to influence others. Established effective and appropriate therapeutic, collaborative relationships with patient/family, facilitating and fostering independence to extent possible for both patient and family.

Facilitator of Learning:
Assesses common learning needs and develops an educational plan for patients and families within one's practice area. Recognized patients/families as active participants in their own learning. Identifies patient/family-learning priorities. Minimizes common barriers to patient/family learning. Oversees the completion of teaching plan by evaluating then documenting patient/family learning. Completes an accurate self-evaluation and actively seeks opportunity to improve one's personal performance. Sets and works to meet challenging goals.

Collaboration:
Recognizes patient and families as integral members of the health care team and establishes patients/families relationships that facilitate their participation in care and decision-making. Works effectively within teams to help achieve both patient and unit goals. Initiates appropriate referrals for continuing care needs throughout the care continuum. Seeks guidance when facing novel situations and is receptive to input from others. Participates in peer review. Conflict resolution skills support patient/family and peer and team relations. Expresses pride, pleasure and or dedication about being a part of Clarian Arnett. Celebrates expressions of mission, values and strategies.

Clinical Inquiry:
Aware of current process improvement initiatives within one's clinical setting. Identifies and takes personal accountability to systematically resolve patient/family problems within one's clinical area. Stays informed of patient/family satisfaction results and incorporates behavior expectations to improve or maintain patient/family satisfaction scores. Implements identified appropriate evidenced-based practice changes and system improvements. Contributes to the spirit of inquiry by supporting the clinical research of colleagues.

Systems Thinking:
Uses available system tools and resources to effectively resolve patient care problems and to facilitate patient/family transition across the care continuum. Participates in the development, implementation and evaluation of unit-based goals for improvement (Clinical, People, Financial, and Service); links unit-based goals for improvement to Clarian's strategic mission. Recognizes that patients/families have insight into what can improve the experience and system of care and collectively identifies opportunities to improve services provided to patients and families at the unit level. Remains flexible and positive toward change and actively participates in change processes and/or work methods to enhance the care environment. Remains informed about changes in departmental policy, procedure, and equipment. Recognizes the impact of one's performance on system functioning.

Safety:
As appropriate for the respective position, the incumbent is responsible for the participating in the development, monitoring and sustainment of a safe, highly reliable and functional environment for all occupants of Arnett, as supported by the following behaviors-open communication, consistent work habits, and compliance with identified departmental safety measures.

ASSISTS WITH IDENTIFYING PERFORMANCE IMPROVEMENT ISSUES:
Identifying performance improvement issues on isolated injuries not seen by the trauma/acute care surgeons. Notifies the Trauma Program Manager for issues that cannot be closed within the Performance Improvement section software.
Assists Performance Improvement Clinician with identification and tracking of variance issues. Assures that the "loop" is closed when issues are entered into the trauma registry. Develops tracking system that assures monthly monitoring of an issue will not fall through the "loop closure" process.
Runs performance improvement reports (missing EMS runs, inpatient/outpatient, etc.) as scheduled or when instructed by the Trauma Program Manager or Trauma Medical Director.

Culture Champion:
Responsible for being a culture champion by participating in the development, monitoring and sustainment of the culture that is an integral part of the Clarian Arnett philosophy and vision. The employee is responsible for embracing and demonstrating the culture of energy, passion and positive atmosphere while delivering superb customer service.

The preceding essential function statements are not intended to be an exhaustive list of tasks and functions for this position. Other tasks and functions may be assigned as needed to fulfill the mission of the organization.

KNOWLEDGE/EDUCATION:

Requires current state of Indiana license as Registered Nurse.

Completion of the American Trauma Society's Registrar Course within 1 year of hire

Trauma experience preferred

Basic Life Support certification required within 1 month of hire or upon completion of department orientation.

Other advanced life support certifications may be required per unit/department specialty.

Ability to provide clinical reasoning; decision-making and clinical thinking.

Ability to promote compassion and a therapeutic environment.

Ability to provide multiple forms of communication (presence; touch; eye contact; etc.).

Ability to recognize and appreciate cultural diversity at many levels.

Ability to provide high level of patient confidentiality.

Strong written and verbal communications skills at the staff; patient and family levels.

Ability to actively seek educational opportunities to improve clinical practice.

Ability to maintain quality-working relationship with peers.

Ability to react appropriately in any environment or situation.

Experience with Microsoft Office products Word and Excel

Indiana University Health

Evaluation of Tiered Activation System

Indiana University Health Arnett Hospital's tiered trauma activation and response system is continuously monitored and evaluated by the trauma medical director, trauma program manager and the trauma Performance Improvement and Patient Safety committee. Over and under triage is monitored according to our trauma activation guidelines as well as trauma patients who did not meet clear activation criteria. Thorough analysis is made of these cases and changes are made as needed to improve the care and outcomes of trauma patients.

9/16/13

Ruban Nirmalan MD — Date
Trauma Medical Director
IU Health Arnett

Amanda Rardon RN 9/16/13

Amanda Rardon RN — Date
Trauma Program Manager
IU Health Arnett

IU Health Arnett
P.O. Box 5545
Lafayette, IN 47903-5545

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iuhealth.org

Indiana University Health	Section: ED Policy: 1.29	Effective Date: January 2012
	Author/Responsibility: Amanda Rardon, RN Title: Trauma Program Coordinator	Next Review Date: January 2015

TRAUMA TIERED RESPONSE ACTIVATION, TRAUMA SERVICE ADMISSION, AND TRAUMA SERVICE TRANSFER

APPLIES TO: ☒ **Organization (Arnett)** ☐ **Departmental (Arnett)**

I. PURPOSE

A. Initial management of major trauma patients requires rapid and efficient mobilization of personnel and resources essential for diagnosis and treatment of the patient's injuries.

II. SCOPE

A. Indiana University Health Arnett Hospital

III. EXCEPTIONS

A. None

IV. DEFINITIONS

A. None

V. POLICY STATEMENT(S)

A. The mobilization of personnel and resources should match the guidelines provided by The American College of Surgeons' Committee on Trauma regarding the Field Triage Decision Scheme that determines which injured patients should be taken to a Trauma Center (American College of Surgeons: Chapter 3: Prehospital Trauma Care. In: *Resources for Optimal Care of the Injured Patient 2006*, Chicago, IL, American College of Surgeons, 2006, p.22).

B. The Tiered Trauma Response Activation Policy provides mechanisms for the mobilization of essential personnel and resources prior to or upon arrival of critically injured patients.

C. This policy delineates criteria for trauma patient activation response, deactivation, admission, transfer to specialty services, and performance improvement

VI. PROCEDURES

A. Tiered Trauma Response Activation

1. All injured patients will be categorized using the Tiered Trauma Response Activation Criteria Checklist (attached).
2. Prior to patient arrival in the Emergency Department, a Trauma 1 or Trauma Alert can be activated by the triage personnel, Emergency Department Charge Nurse or the Emergency Physician based on the Tiered Trauma Response Activation Checklist criteria (see below).
3. When Emergency Department personnel receive information from an incoming ambulance about a trauma patient, the following steps should occur:
   a. The Emergency Department personnel obtains information and categorizes the patient as a Trauma 1 or Trauma Alert by reviewing the patient's physical findings and mechanisms according to the Tiered Trauma Response Activation.
   b. Checklist:
      i. If a patient meets ***any*** of the Trauma 1 Activation Criteria, that patient is designated a Trauma 1.
      ii. If a patient meets ***none*** of the Trauma 1 Activation Criteria but meets ***any*** of the Trauma Alert Activation Criteria, that patient is designated a Trauma Alert.
      iii. If a patient does not meet any of the Trauma 1 or Trauma Alert criteria the patient is designated a Trauma Consult
4. Any Emergency Department caregiver may upgrade a response from a Trauma Alert to a Trauma 1 based upon objective criteria or clinical concerns for major or multisystem injury.
5. In a Trauma One activation, the Emergency Department Physician is responsible for the overall care of the patient until the attending surgeon arrives. The attending surgeon then assumes responsibility for the patient. The Emergency Department Physician remains responsible for airway control while the patient remains in the Emergency Department.

B. Tiered Trauma Response

1. The following individuals are charged with responding to a Trauma 1 Activation:
   a. Trauma attending surgeon (should be physically present within 30 minutes of patient arrival)
   b. Emergency Department physician
   c. Emergency Department Charge Nurse
   d. Emergency Department Trauma Nurse
   e. Emergency Department Trauma Tech and/or 2nd RN
   f. Respiratory therapist
   g. Social Worker (if available)
   h. Radiology Tech
   i. CT Tech
   j. Chaplain (if available)

k. House Supervisor
l. Security
m. OR is notified and open operating room is to be held open until cleared by ED physician or trauma physician.

2. The following individuals are charged with responding to a Trauma Alert Activation:
   a. Emergency Department physician
   b. Emergency Department Charge Nurse
   c. Emergency Department Trauma Nurse
   d. Emergency Department Trauma Tech and/or 2nd RN
   e. Respiratory therapist
   f. Social Worker (if available)
   g. Radiology Tech
   h. CT Tech
   i. Chaplain (if available)
   j. House Supervisor
   k. Security
   l. OR is notified and open operating room is to be held open until cleared by ED physician or trauma physician

Once the patient has arrived and assessment is complete, non-essential personnel will be dismissed by the ED physician or the trauma surgeon.

C. Admission
1. Following the ATLS primary and secondary survey, all Trauma 1 activation patients requiring hospital admission will be admitted to the Trauma Service for at least the first 24 hours.
2. All patients admitted to the Trauma Service will undergo a tertiary survey:
   a. upon regaining consciousness (defined as a Glasgow Coma Scale of 15) for those patients who were unconscious on admission;
   b. prior to ambulation for all patients who were non-ambulatory on admission;
   c. prior to release for those patients under observation, such as those admitted to observation status;
   d. prior to transferring the patient from the Trauma Service to another primary service
3. Trauma Alert patients who require a surgical procedure and/or admission to the hospital will be:
   a. evaluated for potential missed injuries by the Emergency Physician who responded to the Trauma Alert notification,
   b. evaluated preoperatively as appropriate by a Hospitalist, Anesthesiology Cardiology, Pulmonology, etc.; and/or
   c. admitted to the specialty requesting the admission or to the Hospitalist service.

D. Transfer of Care or Discharge

1. Patients with a single system non-general surgical injury who are found to be physiologically stable and without any new concerns following their tertiary survey can be either:
   a. Transferred to the specialty primarily responsible for the injury (i.e. extremity fractures and dislocations would transfer to orthopedics, neurologic injuries to neurosurgery, urologic injuries would transfer to urology, etc.)
   b. Transferred to a hospitalist service (if in-patient care is thought appropriate for reasons other than trauma in nature), or
   c. discharged
2. Patients with 2 or more system injuries will remain on the Trauma Service until such time as the injuries in question can be managed as an outpatient. If outpatient management is appropriate for all but one remaining single-system injury, then the patient can be either:
   a. transferred to the specialty primarily responsible for the injury (i.e., extremity fractures and dislocations would transfer to orthopedics, neurologic injuries would transfer to neurosurgery, urologic injuries would transfer to urology, etc.),
   b. transferred to a hospitalist service (if in-patient care is thought appropriate for reasons other than traumatic in nature), or
   c. discharged.
3. Guidelines for Transfer of Care from the Trauma Service following Tertiary Survey
   a. Single system injury requiring inpatient care
   b. No acute general surgical issues
   c. Approval by Trauma Attending
   d. Specialty Service notification of transfer of care
   e. The Trauma Service provider will contact the service that will be receiving the patient to provide patient information for the transfer of care.
   f. Trauma Service will write the Transfer of Care order
   g. The receiving service always has the option and availability to re-contact the Trauma Service regarding the patient's care issues at any time

VII. CROSS REFERENCES

None

VIII. REFERENCES/CITATIONS

American College of Surgeons: Chapter 3: Prehospital Trauma Care.
In: *Resources for Optimal Care of the Injured Patient 2006*, Chicago, IL, American College of Surgeons, 2006, p.22).

IX. FORMS/APPENDICES

Appendix A – Trauma Response Activation Criteria Checklist

X. APPROVAL BODY

Indiana University Health Arnett Hospital Trauma Committee

XI. APPROVAL SIGNATURES

Medical Director, Trauma Services
Medical Director, Emergency Department
Chief Nursing Executive/VP Patient Care Services

XII. DATES

Effective Date: January 2012

Trauma Activation Guidelines

Trauma One (activate surgeon)

All guidelines apply to patients with a traumatic injury:

- Systolic blood pressure less than 90 at any time or age appropriate hypotension (due to trauma)
- Gunshot wound to neck/chest/abdomen
- GCS < 8 with mechanisms attributed to trauma
- Transfer patients from other hospitals receiving blood to maintain vital signs (because of a traumatic injury)
- Intubated patient or patient with respiratory compromise (due to traumatic injury)
- ER discretion
- Traumatic cardiac arrest

Trauma Alert (ER/in house activation only)

1) GCS 9-14 with head injury
2) Penetrating injuries to head/neck/torso other than gunshot wound
3) Penetrating injury to upper extremity above elbow
4) Penetrating injury to lower extremity above knee
5) Any burn patient meeting the following criteria:
    a. Second & third degree burns greater that 20% TBSA
    b. Any electrical, chemical or thermal burn with inhalation injury
    c. Any circumferential burn or combination trauma and burn
6) Unstable fractures of pelvis
7) Fracture of two or more long bones; e.g. Humerus-femur, humerus-humerus, femur-femur
8) Amputation or near amputation above the wrist or ankle
9) Crushed, mangled or degloved extremity
10) Adult sustaining a fall from > 20 feet
11) Child sustaining a fall from > 10 feet or 2-3 times the height of the child
12) Ejection (partial or complete) from vehicle or motorcycle
13) Rollover vehicular crash
14) Death of another individual in the same compartment of vehicle
15) Automobile vs. pedestrian

16) Automobile vs. bicyclist
17) Automobile crash with prolonged extrication (> 20 minutes)
18) Motorcycle crash > 20 mph
19) Any patient judged by the ED physician/triage nurse to be at significant risk, base on mechanism of injury.

Trauma Consult

Any trauma patient who does not meet Trauma 1 or Trauma Alert criteria

LETTER OF AGREEMENT FOR TRAUMA SERVICE ON CALL

WITNESSETH:

THIS LETTER OF AGREEMENT entered into this 1st day of July, 2013, by and between Indiana University Health Arnett, Inc. (IUHA) and each of the General Surgeons signing below as part of the Trauma Program ("Surgeon").

DEFINITIONS:

QUALIFIED PARTICIPANT: A "Qualified Participant" shall mean a practicing physician with full medical staff privileges at I.U. Health Arnett that takes call as part of the Medical Staff requirements and the Level III Trauma Program and meets the requirements of the American College of Surgeons for response and care of patients.

RECITALS:

WHEREAS, IUHA and the Surgeon desire to achieve and maintain Level III trauma certification in the Emergency Department, thereby meeting the American College of Surgeons Trauma response requirements for documentation, attendance at meetings and response time.

NOW, THEREFORE, in consideration of the terms contained herein, the parties agree as follows:

I. TERM

This initial term (the "Initial Term") of this Letter of Agreement shall begin July 1, 2013 and continue for a twelve (12) month period ending on June 30, 2014. At the end of the Initial Term, and each Renewal Term, this Agreement shall be automatically renewed for an additional term of one year ("Renewal Term"). Either party may terminate this Agreement following sixty (60) days' advance written notice to the other party.

II. TRAUMA RESPONSE

A. During the term of this Letter of Agreement, the Surgeon shall at all times maintain status as a Qualified Participant and agrees to abide by the American College of Surgeons accreditation program requirements as the standard for performance for response times, proper documentation, and attendance at meetings for the Trauma program as follows:
   1. Response that meets the criteria for a Level III Trauma Center
   2. Ensuring complete and adequate documentation is provided
   3. Required representation of attendance at Trauma Multidisciplinary Peer Review Committee Meetings.

II. EXECUTION

IN WITNESS WHEREOF, the duly authorized officer and representative of the IUHA and the Surgeon have executed this Agreement the ____ day of June, 2013.

"IUHA"

By: Alfonso W. Gatmaitan

Printed: Alfonso W. Gatmaitan, FACHE
Chief Executive Officer
Indiana University Health Arnett, Inc.

"TRAUMA MEDICAL DIRECTOR"

By: 9/16/13

Printed: Ruban Nirmalan, MD

.[Signature page of Letter of Agreement for Trauma Service On Call]

"SURGEON"

By:_____
Printed: Roger G. Bangs, M.D.

"SURGEON"

By:_____
Printed: Richard C. Berg, M.D.

"SURGEON"

By:_____
Printed: James Maresh, M.D.

Indiana University Health

Commitment of General Surgeons to Provide Trauma Coverage

The general surgeons at Indiana University Health Arnett are committed to provide trauma coverage for the injured patient by ensuring that a general surgeon is on call and promptly available twenty-four (24) hours a day. The surgeons are committed to responding to the highest level of activation within thirty (30) minutes of the patient's arrival. These response times are continuously monitored and evaluated through the trauma Performance Improvement and Patients Safety committee.

9/16/13

Ruban Nirmalan MD Date
Trauma Medical Director
IU Health Arnett

IU Health Arnett
P.O. Box 5545
Lafayette, IN 47903-5545

T 765.448.8000 800.899.8448
iuhealth.org

Surgeon Response Times

Level I Trauma Activation 1st Quarter 2013					
Date	**Name**	**MR#**	**Surgeon**	**Response time met (Y/N)**	**Response Time**
1-Jan-13			Nirmalan	Y	13 minutes
4-Feb-13			Bangs	Y	16 Minutes
7-Feb-13			Nirmalan	Y-responded-called off by ERP	N/A
15-Feb-13			Maresh	Y	1 minute
24-Mar-13			Bangs	Y	23 minutes

Surgeon Response Times

Level I Trauma Activation 2nd Quarter 2013					
Date	**Name**	**MR#**	**Surgeon**	**Response time met (Y/N)**	**Response Time**
20-Apr-13			Nirmalan	Y	15 minutes
20-Apr-13			Nirmalan	Y	10 minutes
23-Apr-13			Bangs	Y	13 minutes
24-Apr-13			Berg	Y	13 minutes
24-Apr-13			No surgeon paged	N/A	N/A
2-May-13			Nirmalan	Y	On pt. arrival
11-May-13			Maresh	Y	On pt. arrival
17-May-13			No surgeon paged	N/A	N/A
24-Jun-13			Bangs	Y	2 minutes
29-Jun-13			Berg	Y	8 minutes
30-Jun-13			Berg	Y	20 minutes

Surgeon Response Times

Level I Trauma Activation 3rd Quarter 2013						
Date	**Name**	**MR#**	**Surgeon**	**Response time met (Y/N)**	**Response Time**	
3-Jul-13			Nirmalan	Y	21 minutes	
7/20/2013			Bangs	Y	27 minutes	
23-Jul-13			Bangs	Y	4 minutes	
23-Jul-13			Bangs	Y	4 minutes	
27-Jul-13			Berg	Y	18 minutes	
28-Jul-13			Berg	Y	25 minutes	
29-Jul-13			Bangs	Y	13 minutes	*upgraded to Trauma One
29-Jul-13			Bangs	Y	25 minutes	
5-Aug-13			Maresh	Y	17 minutes	
10-Aug-13			Nirmalan	Y	On pt. arrival	
8/13/2013			Berg	Y	4 minutes	
8/16/2013			Bangs	Y	15 minutes	
8/25/2013			Berg	Y	27 minutes	
8/28/2013			Maresh	Y	On pt. arrival	

Indiana University Health

September 11, 2013

This letter is to confirm that Dr. Ruban Nirmalan, Trauma Medical Director, is an active member of Indiana University Health Arnett Hospital's Disaster and Emergency Preparedness Committee.

Tom Fuson, BSRT
Director, Environment of Care and Emergency Preparedness
Indiana University Health Arnett

IU Health Arnett
P.O. Box 5545
Lafayette, IN 47903-5545

T 765.448.8000 800.899.8448
iuhealth.org

IU Arnett Hospital Schedule - September 2013

Shifts	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	*Labor Day* 2	3	4	5	6	7
Day	CWood	Steele	Heniff	Solway	Steele	Moody	JWoods
Mid	Kotnik	Fried	Zenarosa +1.5	JWoods	Alaimo	Kaup	M Heniff
Mid2	Bertsch +1	Moody	Fried	CWood	JWoods	Heniff	Kaup
Night	JWoods	Ward +1	Alaimo	Kaup	Bertsch	Coughlin +1	Coughlin
	8	9	10	11	12	13	14
Day	Lane	Zenarosa	JWoods	Solway	Peggs	Bertsch	Steele
Mid	JWoods	Fried	CWood	Zenarosa	M Heniff	Heniff	Peggs
Mid2	Solway	Heniff +2	Alaimo	Fried	Zenarosa	CWood	Fried
Night	Coughlin	Ward	Heniff	Coughlin	Kotnik	Kaup	CWood
	15	16	17	18	19	20	21
Day	Alaimo	Zenarosa	JWoods	M Heniff	Peggs	Bertsch	Seagren
Mid	Solway	Seagren	Fried	JWoods	JWoods	Lane	Kaup
Mid2	Fried	Solway	Peggs	Kotnik	CWood	JWoods	JWoods
Night	Steele	Ward	Coughlin	Solway	Zenarosa	Moody	Moody
	22	23	24	25	26	27	28
Day	Alaimo	Seagren	Peggs	Moody	Heniff	Kaup	Bertsch
Mid	Fried	Steele	Steele	Fried	Lane	Moody	Moody
Mid2	CWood	JWoods	Lane	Zenarosa	Fried	Alaimo	Steele
Night	Kaup	Ward	JWoods	JWoods	Seagren	Lane	Heniff
	29	30	1	2	3	4	5
Day	Alaimo	JWoods					
Mid	Fried	CWood					
Mid2	Seagren	Fried					
Night	Coughlin	Peggs					

Open Pending My Shift My Picked Up Shift My Posted Shift My Pending Shift Split Shift Modified Times

Day 0700-1500 Mid 1200-2200 Mid2 1500-0000 Night 2200-0700

Printed: 08-07-2013 03:43pm

Lafayette Emergency Physicians
PA-NP Schedule
September 2013

~ September 2013 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 6a Thornburg +1 11a OPEN 4p Reynolds +1	2 Labor Day 6a Kelly 11a Widau +.75 4p Thornburg +1.5	3 6a Small +1.5 11a Kelly 4p Thornburg (+1)	4 6a Reynolds +1 11a Bowman +1 4p Widau +.50	5 6a Roscoe 11a Kelly 4p Thornburg (+2)	6 6a Reynolds +1 11a Bowman 4p Widau +1.5	7 6a Reynolds +0.5 11a Kelly +0.5 4p Widau +.25
8 +0.5 6a Reynolds 11a Kelly +.5 4p Widau +2	9 (+1) 6a Thornburg 11a Kelly +2 4p Reynolds +0.5 +2	10 6a Bowman +1 11a Thornburg 4p Kelly (+1)	11 6a Widau 11a Reynolds 4p Thornburg	12 6a Roscoe 11a Reynolds 4p Kelly	13 6a Widau 11a Reynolds 4p Thornburg	14 6a Widau 11a OPEN 4p Reynolds
15 6a Thornburg 11a OPEN 4p Reynolds	16 6a Widau 11a Kelly 4p Thornburg	17 6a Small 11a Widau 4p Thornburg	18 6a Kelly 11a Reynolds 4p Widau	19 6a ~~Roscoe~~ Reynolds 11a Bowman 4p ~~Reynolds~~ Widau	20 6a Kelly 11a Widau Thornburg 4p Reynolds	21 6a Harper 11a ~~Thornburg~~ Roscoe 4p Kelly
22 6a OPEN 10 Thornburg 3p Pree	23 6a Reynolds 10a Kelly 3p Pree	24 6a Bowman 10a Thornburg 3p Pree	25 6a Reynolds 10a Thornburg 3p Small	26 6a Roscoe 10a Reynolds 3p Thornburg	27 6a Kelly 10a Bowman 3p Pree OR Reynolds	28 6a Harper 10a Widau 3p Kelly
29 6a Widau 10a Pree 3p Kelly	30 6a Reynolds 10a Widau 3p Pree	Notes:				

44

Created with WinCalendar Calendar Creator

More Templates: 2013 Calendar, 2014 Calendar

Appendix #9 - Emergency Medicine

Please list all emergency physicians on the trauma panel

Delete	Name	Residency (were and when completed)		Board Certification (type and year) If "NOT" board certified within 5 years of completion of residency/fellowship, the surgeon must apply for the "Alternate Pathway". Please contact the VRC office concerning this before completing this section.		ATLS Instructor/Provider Status & Expiration P=Provider I=Instructor		Number of shifts per month	Length of shifts
		Where	When	Type	Year	Status	Expiration Date		
	Thomas Heniff	Indiana University; Methodist Hospital	1996	Emergency Medicine	2006	P	N/A-expired	14	8-10 hours
	Lauren Kaup	Indiana University; Methodist Hospital	2011	Emergency Medicine	2012	P	7/18/12	14	8-10 hours
	Chris Wood	Indiana University; Methodist Hospital	2004	Emergency Medicine and Pediatrics	2005	P	N/A-expired	14	8-10 hours
	Steven Lane	Indiana University; Methodist Hospital	1994	Emergency Medicine	2005	P	N/A-expired	14	8-10 hours
	John Woods	University of Illinois Associated Hospitals	1982	Emergency Medicine	2004	P	Expired 2007	14	8-10 hours
	Kristy Ward	Indiana University; Methodist Hospital	1997	Emergency Medicine	2008	P	Expired	10	9 hours
	Andrew Alaimo	Metropolitan Hospital, Grand Rapids, MI	2002	Emergency Medicine	2003	P	Expired	14	8-10 hours
	Cody Bertsch	Indiana University; Methodist Hospital	2008	Emergency Medicine	2009	P	Expired	7	8-10 hours
	Joseph Moody	St. Francis Medical Center, Peoria, IL	2000	Emergency Medicine	2011	P	Expired	16	8-10 hours
	Lance	UMC	1982	Emergency	1986	P	Expired	12	8-10

	Seagren	UFHSC		Medicine					hours
	Glen Kotnik	Indiana University; Methodist Hospital	1993	Emergency Medicine	1993	P	Expired	12	8-10 hours
	Jonathan Fried	Ball Memorial Hospital, Muncie, IN	1989	Internal Medicine	1990-board certified for life	P	3/23/16	14	8-10 hours
	Melanie Heniff	Indiana University; Methodist Hospital	1998	Emergency Medicine/Ped	2011	P	Expired	14	8-10 hours
	Johanna Coughlin	Indiana Universtiy Methodist Hospital	2012	Board Eligible		P	2013	14	8-10 hours
	Makayla Solway	Indiana University; Methodist Hospital	2012	Board Eligible		P	2013	14	8-10 hours
	Rena Zenarosa	Indiana University; Methodist Hospital	2008	Emergency Medicine	2010	P	Expired	12	8-10 hours

LETTER OF AGREEMENT FOR
TRAUMA SERVICE ON CALL

WITNESSETH:

THIS LETTER OF AGREEMENT entered into this 1st day of July, 2013, by and between Indiana University Health Arnett, Inc. (IUHA) and the each of the Orthopedic Surgeons signing below as part of the Trauma Program ("Surgeon").

DEFINITIONS:

QUALIFIED PARTICIPANT: A "Qualified Participant" shall mean a practicing physician with full medical staff privileges at I.U. Health Arnett that takes call as part of the Medical Staff requirements and the Level III Trauma Program and meets the requirements of the American College of Surgeons for response and care of patients.

RECITALS:

WHEREAS, IUHA and the Surgeon desire to achieve and maintain Level III trauma certification in the Emergency Department, thereby meeting the American College of Surgeons Trauma response requirements for documentation, attendance at meetings and response time.

NOW, THEREFORE, In consideration of the terms contained herein, the parties agree as follows:

I. TERM

This initial term (the "Initial Term") of this Letter of Agreement shall begin July 1, 2013 and continue for a twelve (12) month period ending on June 30, 2014. At the end of the Initial Term, and each Renewal Term, this Agreement shall be automatically renewed for an additional term of one year ("Renewal Term"). Either party may terminate this Agreement following sixty (60) days' advance written notice to the other party.

II. TRAUMA RESPONSE

A. During the term of this Letter of Agreement, the Surgeon agrees to maintain status as a Qualified Participant and to abide by the American College of Surgeons accreditation program requirements as the standard for performance for response times, proper documentation, and attendance at meetings for the Trauma program as follows:
   1. Response that meets the criteria for a Level III Trauma Center
   2. Ensuring complete and adequate documentation is provided
   3. Required representation of attendance at Trauma Multidisciplinary Peer Review Committee Meetings.

II. EXECUTION

IN WITNESS WHEREOF, the duly authorized officer and representative of the IUHA and the Surgeon have executed this Agreement the ___ day of June, 2013.

"IUHA"

By: _____

Printed: Alfonso W. Gatmaitan, FACHE
Chief Executive Officer
Indiana University Health Arnett, Inc.

"TRAUMA MEDICAL DIRECTOR"

By: _____ 9/16/13

Printed: Ruban Nirmalan, MD

[Signature page for Letter of Agreement for Trauma Service On Call]

This contract shall include Addendum #1 (attached)

"SURGEON"

By: _____
Printed: Joseph Hubbard, D.O.

"SURGEON"

By: _____
Printed: Eric Orenstein, M.D.

"SURGEON"

By: _____
Printed: Peter Seymour, D.O.

ADDENDUM #1

Over the past 3 years, the Orthopedic Department at IU Health Arnett has been focused on rebuilding our reputation and position within the community. Success has been achieved by providing quality and unparalleled care for our patients and improving access to specialized care. To maintain this level of preeminent care and accessibility to our patients, it is imperative that the following criteria must be in place.

1.) In order to provide preeminent orthopedic service, we shall require, and be guaranteed, the support of midlevel providers (nurse practitioner / physician assistant) both in the clinic, as well as hospital setting.

2.) As level 3 trauma center, access to the operating room at IU Health Arnett shall be no less than a two hour wait before the second call team is accessed during evening and weekend hours.

3.) Upon hiring another provider, and the subsequent loss of orthopedic hardship on call pay, the orthopedic surgeons shall be subsidized with trauma pay, consistent with the hardship pay schedule as stated in the previously agreed contract.

4.) If the volume of orthopedic trauma entering through our emergency department reaches a burdensome level, consideration will be given to the hiring of an orthopedic hospitalist (or equivalent) to help efficiently treat orthopedic trauma patients in a timely fashion.

Joseph Hubbard, D.O.

Addendum #1

Over the past 3 years, the Orthopedic Department at IU Health Arnett has been focused on rebuilding our reputation and position within the community. Success has been achieved by providing quality and unparalleled care for our patients and improving access to specialized care. To maintain this level of preeminent care and accessibility to our patients, it is imperative that the following criteria must be in place.

1.) In order to provide preeminent orthopedic service, we shall require, and be guaranteed, the support of midlevel providers (nurse practitioner / physician assistant) both in the clinic, as well as hospital setting.

2.) As level 3 trauma center, access to the operating room at IU Health Arnett shall be no less than a two hour wait before the second call team is accessed during evening and weekend hours.

3.) Upon hiring another provider, and the subsequent loss of orthopedic hardship on call pay, the orthopedic surgeons shall be subsidized with trauma pay, consistent with the hardship pay schedule as stated in the previously agreed contract.

4.) If the volume of orthopedic trauma entering through our emergency department reaches a burdensome level, consideration will be given to the hiring of an orthopedic hospitalist (or equivalent) to help efficiently treat orthopedic trauma patients in a timely fashion.

Eric Orenstein, M.D.

Addendum #1

Over the past 3 years, the Orthopedic Department at IU Health Arnett has been focused on rebuilding our reputation and position within the community. Success has been achieved by providing quality and unparalleled care for our patients and improving access to specialized care. To maintain this level of preeminent care and accessibility to our patients, it is imperative that the following criteria must be in place.

1.) In order to provide preeminent orthopedic service, we shall require, and be guaranteed, the support of midlevel providers (nurse practitioner / physician assistant) both in the clinic, as well as hospital setting.

2.) As level 3 trauma center, access to the operating room at IU Health Arnett shall be no less than a two hour wait before the second call team is accessed during evening and weekend hours.

3.) Upon hiring another provider, and the subsequent loss of orthopedic hardship on call pay, the orthopedic surgeons shall be subsidized with trauma pay, consistent with the hardship pay schedule as stated in the previously agreed contract.

4.) If the volume of orthopedic trauma entering through our emergency department reaches a burdensome level, consideration will be given to the hiring of an orthopedic hospitalist (or equivalent) to help efficiently treat orthopedic trauma patients in a timely fashion.

Peter Seymour, D.O.

~ September 2013 ~

◄ Aug 2013 | Oct 2013 ►

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 Dr. Hubbard Beth Kiger	2 Dr. Hubbard Beth Kiger	3 Dr. Orenstein Nicole Gick	4 Dr. Hubbard Beth Kiger	5 Dr. Seymour Erin Verhoeven	6 Dr. Orenstein Laura Slentz	7 Dr. Orenstein Nicole Gick
8 Dr. Orenstein Nicole Gick	9 Dr. Seymour Erin Verhoeven	10 Dr. Hubbard Beth Kiger	11 Dr. Seymour Erin Verhoeven	12 Dr. Orenstein Nicole Gick	13 Dr. Hubbard Beth Kiger	14 Dr. Hubbard Laura Slentz
15 Dr. Hubbard Laura Slentz	16 Dr. Seymour Erin Verhoeven	17 Dr. Orenstein Nicole Gick	18 Dr. Seymour Laura Slentz	19 Dr. Hubbard Beth Kiger	20 Dr. Seymour Erin Verhoeven	21 Dr. Seymour Nicole Gick
22 Dr. Seymour Nicole Gick	23 Dr. Orenstein Nicole Gick	24 Dr. Seymour Erin Verhoeven	25 Dr. Hubbard Beth Kiger	26 Dr. Seymour Erin Verhoeven	27 Dr. Orenstein Laura Slentz	28 Dr. Orenstein Laura Slentz
29 Dr. Orenstein Laura Slentz	30 Dr. Hubbard Beth Kiger	**Notes: Revised 7.26.13**				

LETTER OF AGREEMENT FOR
TRAUMA SERVICE ON CALL

WITNESSETH:

THIS LETTER OF AGREEMENT entered into this 1st day of July, 2013, by and between Indiana University Health Arnett, Inc. (IUHA) and each of the Neurosurgery Services physicians signing below as part of the Trauma Program ("Surgeon").

DEFINITIONS:

QUALIFIED PARTICIPANT: A "Qualified Participant" shall mean a practicing physician with full medical staff privileges at I.U. Health Arnett that takes call as part of the Medical Staff requirements and the Level III Trauma Program and meets the requirements of the American College of Surgeons for response and care of patients.

RECITALS:

WHEREAS, IUHA and the Surgeon desire to achieve and maintain Level III trauma certification in the Emergency Department, thereby meeting the American College of Surgeons Trauma response requirements for documentation, attendance at meetings and response time.

NOW, THEREFORE, in consideration of the terms contained herein, the parties agree as follows:

I. TERM

This initial term (the "Initial Term") of this Letter of Agreement shall begin July 1, 2013 and continue for a twelve (12) month period ending on June 30, 2014. At the end of the Initial Term, and each Renewal Term, this Agreement shall be automatically renewed for an additional term of one year ("Renewal Term"). Either party may terminate this Agreement following sixty (60) days' advance written notice to the other party.

II. TRAUMA RESPONSE

During the time of this Letter of Agreement, the Surgeon shall at all times maintain status as a Qualified Participant and agrees to abide by the American College of Surgeons accreditation program requirements as the standard for performance for response times, proper documentation, and attendance at meetings for the Trauma program and participate in establishing the type of neurologic injuries which should remain at IUHA for treatment and which types of injuries should be transferred for higher levels of care.

II. EXECUTION

IN WITNESS WHEREOF, the duly authorized officer and representative of the IUHA and the Surgeon have executed this Agreement the ___ day of June, 2013.

"IUHA"

By: _____
Printed: Alfonso W. Gatmaitan, FACHE
Chief Executive Officer
Indiana University Health Arnett, Inc.

"TRAUMA MEDICAL DIRECTOR"

By: _____
Printed: Ruban Nirmalan, MD

"SURGEON"

By: _____
Printed: Jeffrey L. Crecelius, M.D.

Indiana University Health	Section: ED Policy #: 1.31	Effective Date: April 2012
	Author/Responsibility: Amanda Rardon RN Title: Trauma Program Coordinator	Next Review Date: April 2015
TRAUMA TRANSFER GUIDELINES		
APPLIES TO: ☐ Arnett All ☒ Arnett Hospital ☐ Arnett Medical Offices		

I. PURPOSE

A. To identify the guidelines for consideration of transferring a trauma patient from Indiana University Health Arnett to the appropriate Level I trauma center.

II. POLICY

A. Transfers from Indiana University Health to appropriate Level I trauma centers will be done in accordance with this policy and will be conducted by mutual agreement of the transferring and receiving hospitals based upon transfer agreements (See appendix A) following stabilization of life threatening injuries.

III. PROCEDURES

A. Transfer Guidelines

1. CNS Injuries
   a. Any CNS injury in patients 17 years old or younger requiring ICU care
2. ENT Injuries
   a. Penetrating injuries to the face or neck
3. Chest/cardiothoracic Injuries
   a. Tracheal trauma
4. Abdominal Injuries
   a. Pancreatic and liver injuries-case specific
5. Pelvic Injuries
   a. Acetabular fracture
   b. Any unstable pelvic fracture
6. Burn Injuries
   a. 1st and 2nd degree burns of > 10% BSA
   b. Burns of the face, hands, feet, genitalia, perineum or joints
   c. 3rd degree burns
   d. Pediatric patients < 18 years of age
   e. Electrical burns

f. Chemical burns
g. Inhalation/ingestion burns
h. Burns with concomitant trauma

7. Pediatric Patients
   a. Any patient 17 years old or younger that needs intensive care admission

Note: No patient should be transferred without speaking to appropriate trauma surgical service on call physician.

IV. CROSS REFERENCES

None

V. FORMS/APPENDICES

None

VI. APPROVAL BODY

Indiana University Health Arnett Hospital Trauma Committee

VII. APPROVAL SIGNATURES

Medical Director, Trauma Services
Medical Director, Emergency Department
Chief Nursing Executive/VP Patient Care Services

VIII. DATES

Effective Date: April 2012

Indiana University Health	Section: PC Policy #: 1.22	Effective Date: October 2011
	Author/Responsibility: Monette Cochran, RN Title: Registered Nurse, ICU	Next Review Date: October 2014

INSERTION AND MAINTENANCE OF AN INTRACRANIAL PRESSURE MONITOR

APPLIES TO: ☒ **Organization (Arnett)** ☐ **Departmental (Arnett)**

PURPOSE

To provide guidelines for monitoring of intracranial pressure with an invasive ICP catheter that allows for evaluation of intracranial pressure and the effects of therapeutic interventions on ICP.

SCOPE

This policy and procedure applies to RN's in the Intensive Care Units of IU Health Arnett.

DEFINITIONS

Intracranial Pressure (ICP)	The fluid pressure of Cerebral Spinal Fluid in the intraventricular, subarachnoid, intraparenchymal, epidural, or subdural spaces. Normal value usually 0-15 mmHg
Intracranial Pressure Monitoring system	A system consisting of a sterile transducer-tipped pressure monitoring catheter with accessory items to be used as a diagnostic tool which rapidly determines and continuously monitors intracranial pressure.
CSF	Cerebral Spinal Fluid
Cerebral Perfusion Pressure (CPP)	A calculated value which indirectly reflects the adequacy of cerebral blood flow. Calculated by subtracting the ICP from the mean systemic arterial blood pressure. (CPP=MAP-ICP)

POLICY STATEMENT(S)

Care of the patient with an ICP monitor requires special knowledge, skill and equipment. Nursing staff in the ICU are educated in the techniques and procedures for the care of ICP monitoring systems to minimize complications and integrate the pressure reading with the patient's physical assessment.

PROCEDURE

A. Insertion
   1) Assemble equipment and monitor supplies.
   2) Assist physician zeroing transducer.
      a) If transducer cable is not sterilized, the nurse must hold the cable while physician zeros transducer.
      b) If transducer cable is sterilized, the physician will hold and zero.

3) Attach probe to monitoring system.
4) Calibrate ICP monitor to bedside monitor.

B. Maintenance
1) The physician should outline call orders for patient specific parameters for ICP, cerebral perfusion pressure (CPP), and B/P. Notify physician of significant changes in these parameters and/or according to call orders.
2) Extreme caution should be used when handling the fiber optic probe. Probe may be loosely taped to prevent damage to the fiber optic. (Bending or kinks can disrupt/damage the performance of the fiber optic pressure transducer.)
3) Maintain dressing if present.
4) Calibrate ICP monitor to bedside monitor every shift and PRN with disconnection of system.

C. Discontinuing of an ICP Monitoring Device
1) Gather supplies and assist the physician to discontinue the fiber optic probe.
2) Apply sterile dressing to insertion site.
3) Monitor insertion site for bleeding and/or drainage. Notify the physician if bleeding and/or drainage noted.

D. Documentation
1) ICP/CPP values recorded hourly
2) Any abnormal of the insertion site appearance
3) Nursing measures that affect ICP/CPP.
4) Treatments of increased ICP and corresponding results.
5) Neurological assessment every 1hr or as ordered by physician.
6) Education.
7) Amount and description of CSF.
8) If available, ICP waveforms.

CROSS REFERENCE
Refer to manufacturer's recommendation for specific equipment use.

REFERENCE
Hickey, J. V. The Clinical Practice of Neurological and Neurosurgical Nursing, 5th Edition. JB Lippencott: St. Louis, 2003.

APPROVAL BODY
ICU CPC 9/1/2011
Clinical Practice Council 9/20/2011

APPROVAL SIGNATURES
Chief Nursing Executive/VP Patient Care Services

DATES
Effective Date: August 2008
Revision Dates: October 2011

Indiana University Health	Section: PC Policy #: 1.21	Effective Date: October 2011
	Author/Responsibility: Monette Cochran , RN Title: Registered Nurse, ICU	Next Review Date: October 2014
EXTERNAL VENTRICULAR DRAIN &/OR SUBDURAL DRAIN MANAGEMENT		
APPLIES TO: ☒ **Organization (Arnett)**	☐ **Departmental (Arnett)**	

PURPOSE
To provide guidelines for the management of a patient with a External Ventricular &/or Subdural Drain

SCOPE
This policy applies to all RNs in IU Health. Under the direction of the RN, Health Care Assistants (HCA), may emergently clamp drain.

DEFINITIONS

External Ventricular Drain (EVD)	Catheter placed within the ventricular system to facilitate drainage of CSF & instillation of antibiotics
Subdural Drain (SDD)	A catheter inserted into subdural space to facilitate drainage of fluid.

POLICY STATEMENTS
Care of the Patient with an external ventricular &/or subdural drain requires special knowledge, skill, and equipment. Nursing staff are educated in the techniques and procedures of the care to minimize complications associated with the drainage of cerebral spinal fluid, via external ventricular &/or subdural drain.

PROCEDURE

A. Insertion
   1. Assemble equipment, drainage supplies, transducer as needed and assist M.D.

B. Maintenance
   1. Using a zero reference point on the ventriculostomy drip chamber adjust/level the height as ordered by the physicians.
   2. External Drain output is to be recorded at frequency of M.D. order and notify M.D. if not within call orders. **Turn collection system off to patient while draining collection chamber.
   3. Anytime the patients HOB is changed adjust drainage system to maintain prescribed drainage level.
   4. Anytime patient is transported or removed from bed, the system should be off to the patient and the collection chamber maintained in an upright position.
   5. Drainage bag to be changed prn and when full.
   6. Maintain dry and occlusive dressing and a closed drainage system.

** Any break or leakage in the drainage system should be reported to the physician immediately.

7. If draining an EVD intermittently, should not leave unattended.

C. Monitoring ICP with use of a Transducer

1. Flush transducer section of pressure tubing only with preservative free normal saline, being careful to not introduce air bubbles into the system. (no continuous flush infusion into pt.) Remove syringe and replace with dead end cap.
2. Attach transducer to drainage system at zero point of external auditory meatus (EAM), and zero to monitor.
   a) The main system stopcock to the drainage system must be closed.
   b) The patient line stopcock is positioned so the ventricular catheter communicates only to the transducer.
   c) Record ICPs as ordered.
   d) Call for sustained ICP above call orders.

D. Obtain culture from EVD &/or SDD

1. Gather supplies – 3 3ml syringes, Chloraprep antiseptic solution, sterile gloves, lab forms and labels.
2. Perform hand hygiene and don gloves.
3. Cleanse CSF sampling port closest to patient with Chloraprep antiseptic solution.
4. Turn distal stopcock off to the transducer & drainage system stopcock off to drip chamber.
5. Slowly aspirate 1ml of CSF and disgard as waste.
6. Slowly aspirate additional 2ml of CSF.
7. Fill out lab form and labels. CSF fluid should not be sent via pneumatic tube system to lab.

E. Notification of Physician

1. Drainage of CSF ceases & catheter occlusion is suspected.
2. Neurological deterioration occurs
3. Catheter insertion site appears infected.
4. Increased or new blood appears in the CSF
5. Excessive CSF is inadvertently drained

F. Documentation

1. Vital signs, neuro checks, ICP recordings as ordered.
2. Position zero point at patient's external auditory canal.
3. Position collection chamber as ordered by physician.
4. Amount & color of CSF. (CSF is normally watery, clear and colorless. Bright red blood indicates new hemorrhage and the need for prompt intervention.)
5. Abnormal appearance of site/type of dressing

G. Changing of CSF Drainage Bag

1. Drainage Bag should be changed PRN &/or when full.
2. Obtain single drainage bag.
3. Check that drainage bag is not open to patient

4. Keep connections sterile, disconnect old bag and replace with new bag.
5. Discard CSF drainage bag in appropriate receptacle.
6. Check that collection chamber is open to patient.

H. Dressing Change

1. Dressing changes are to be completed prn when non-occlusive or soiled by a physician unless otherwise directed.
2. Do not use scissors or non-padded hemostats when caring for ventricular drains.
3. Supplies needed:
   Central line dressing change kit with transparent dressing
4. Procedure:
   a. Explain procedure to patient
   b. Perform hand hygiene
   c. Open dressing change tray
   d. Don non-sterile gloves and carefully remove old dressing from ventricular drains
   e. Inspect site for redness or drainage. If present, notify physician.
   f. Re-shave area around insertion site if needed.
   g. Perform hand hygiene and don sterile gloves.
   h. Clean ventricular drain site and 2-3 inch area surrounding site in a circular fashion with Chloraprep antiseptic solution, allow to dry.
   i. Clean catheter with Chloraprep antiseptic solution, beginning at insertion site and working outward. Being careful not to dislodge catheter.
   j. Apply skin prep or benzoin to area around drain where dressing will be applied.
   k. Loop catheter and tubing on top of dressing and apply tape for added security.
   l. Apply transparent dressing so that center of dressing is over the insertion site. Leave at least a one inch sealed margin on all sides of the catheter insertion site.
   m. Label the dressing with date and initials.
5. Document date and time dressing was changed, document condition of skin, presence of redness or drainage at drain site.

I. Discontinuing a Ventriculostomy

1. Gather supplies and assist the physician in discontinuing the ventriculostomy.
2. Apply sterile occlusive dressing over the insertion site if ordered.
3. Monitor insertion site for bleeding and/or drainage. Notify physician if bleeding and/or drainage occurs.
4. Continue to monitor patient for signs and symptoms of increased intracranial pressure.

CROSS REFERENCE
Methodist Policy NS 1.06: External Ventricular &/or Subdural Drain (EVD) Management

REFERENCES/CITATIONS
Manufacturers usage guidelines.

Lynn-McHale, D.J. & Carlson, K.K. (Ed.) AACN: ACCN Procedure Manual for Critical Care, 5th Edition, 2001. W.B. Saunders: St. Louis.

APPROVAL BODY
ICU CPC 9/1/2011
Clinical Practice Council 9/20/2011

SIGNATURE
Chief Nursing Executive/VP Patient Care Services

DATES
Effective Date: August 2008
Revision Dates: October 2011

Indiana University Health	Section: ED Policy #: 1.31	Effective Date: April 2012
	Author/Responsibility: Amanda Rardon RN Title: Trauma Program Coordinator	Next Review Date: April 2015

TRAUMA TRANSFER GUIDELINES

APPLIES TO: ☐ Arnett All ☒ Arnett Hospital ☐ Arnett Medical Offices

I. PURPOSE

A. To identify the guidelines for consideration of transferring a trauma patient from Indiana University Health Arnett to the appropriate Level I trauma center.

II. POLICY

A. Transfers from Indiana University Health to appropriate Level I trauma centers will be done in accordance with this policy and will be conducted by mutual agreement of the transferring and receiving hospitals based upon transfer agreements (See appendix A) following stabilization of life threatening injuries.

III. PROCEDURES

A. Transfer Guidelines

1. CNS Injuries
   a. Any CNS injury in patients 17 years old or younger requiring ICU care
2. ENT Injuries
   a. Penetrating injuries to the face or neck
3. Chest/cardiothoracic Injuries
   a. Tracheal trauma
4. Abdominal Injuries
   a. Pancreatic and liver injuries-case specific
5. Pelvic Injuries
   a. Acetabular fracture
   b. Any unstable pelvic fracture
6. Burn Injuries
   a. 1st and 2nd degree burns of > 10% BSA
   b. Burns of the face, hands, feet, genitalia, perineum or joints
   c. 3rd degree burns
   d. Pediatric patients < 18 years of age
   e. Electrical burns

f. Chemical burns
g. Inhalation/ingestion burns
h. Burns with concomitant trauma

7. Pediatric Patients
   a. Any patient 17 years old or younger that needs intensive care admission

Note: No patient should be transferred without speaking to appropriate trauma surgical service on call physician.

IV. CROSS REFERENCES

None

V. FORMS/APPENDICES

None

VI. APPROVAL BODY

Indiana University Health Arnett Hospital Trauma Committee

VII. APPROVAL SIGNATURES

Medical Director, Trauma Services
Medical Director, Emergency Department
Chief Nursing Executive/VP Patient Care Services

VIII. DATES

Effective Date: April 2012

HOSPITAL TRANSFER AGREEMENT

This Agreement is entered into by and between Indiana University Health, Inc. ("IU Health") and Indiana University Health Arnett, Inc. ("IU Health Arnett").

WITNESSETH:

WHEREAS, IU Health and IU Health Arnett are fully accredited by the Joint Commission on Accreditation of Hospitals and licensed by the Indiana State Board of Health; and

WHEREAS, it is in the public interest that hospitals make transfer agreements available to other hospitals so as to encourage continuity of quality care to patients; and

WHEREAS, IU Health operates a Level I Adult Trauma Center at its IU Health Methodist Hospital Facility and a Level I Pediatric Trauma Center at its IU Health Riley Hospital Facility; and

WHEREAS, IU Health and IU Health Arnett both desire to enter into this Transfer Agreement for the transfer of patients, including trauma patients, between their facilities;

NOW, THEREFORE, IT IS AGREED:

1. The parties may transfer patients between their respective institutions whenever such transfer is medically appropriate, as determined by the patient's attending physician and by a member of the Medical Staff of the receiving institution who shall be the admitting physician. All transfers and admissions shall be subject to the general rules and regulations of the respective institutions for transfer and admission of patients. Requests for transfer of patients will be submitted to a member of the attending medical staff of the receiving institution with the understanding that medical care will be rendered the patient in the receiving Hospital by a member of Hospital's medical staff. Transfer to Hospital can be for inpatient or outpatient services, diagnostic and/or x-ray services, and emergency room services. All patients age 15 and older needing Level I Trauma Center services will be transferred to IU Health Methodist Hospital. All patients younger than 15 needing Level I Trauma Center services will be transferred to IU Health Riley Hospital.

2. Neither party is required hereby to give priority of admission to patients to be transferred from the other party's institution. Admissions shall be in accordance with the general admission policies and procedures of each party.

3. The transferring institution shall forward with each patient, at the time of transfer or, in case of emergency, as promptly as possible following the transfer, continuity of care information about the patient including the following:

   a. Patient Information. This includes patient name, address, date of birth, name and address of patient's relatives and legal guardian, if applicable, whether insurance, a third-party payer, or the patient will assume responsibility for the cost of services rendered, and any other pertinent social information concerning the patient.

b. Medical Information. This includes medical diagnosis, summary of treatment including medications, specific limitations on patient activities, test results, the presence of decubitus ulcers, the date of Mantoux skin test for tuberculosis and all other pertinent medical information.

c. Nursing Information. This includes a description of patient's condition, required nursing care, and dietary requirements.

The original medical record will be retained by the transferring institution.

4. The institution intending to transfer one of its patients shall have the responsibility of notifying the other institution promptly of the impending transfer, arranging for appropriate and safe transportation and care of the patient during transfer, and arranging for the transfer of the patient's personal effects, such as money and valuables, and information related to these items. The transferring institution's clinical record shall contain evidence that the patient was transferred promptly and safely. Transfer procedures shall be made known to the patient and personnel of each of the parties to this agreement.

If the patient is to be transferred for medical treatment for which informed consent is required, the transferring institution shall provide, whenever possible, the following:

a. If the patient is believed to be competent to provide informed consent, a statement to that effect from the patient's physician;

b. If the patient has a legal guardian, a copy of the guardianship appointment papers and information as to how the guardian can be contacted; or

c. Except in emergency situations, if the patient is not competent to provide informed consent and there is no legal guardian, the transferring institution shall be responsible for obtaining the appointment of a guardian for the purpose of providing informed consent.

5. Each party shall have exclusive control of the management, assets, and affairs of their respective institutions. Neither party by virtue of this Agreement assumes any liability for any debts or obligations of either a financial or legal nature incurred by the other party to the Agreement. Both institutions agree to share pertinent information relating to the patient's assumption of financial responsibilities prior to the transfer from one institution to the other. The sole responsibility for billing and collecting for services rendered rests with the institution that provides the services, except as affected by any other agreements between the two parties. The parties agree to comply with all state and federal laws and rules including but not limited to those concerning the provision of emergency care, billing for services, referral of patients, and confidentiality of patient information.

6. This Agreement shall be effective the 1st day of April, 2012, and shall continue in effect for a period of one (1) year and then shall be automatically renewed for successive one-year terms, unless either party, within at least thirty (30) days prior to the termination date, gives the other party notice in writing of its intention not to renew this Agreement. Additionally either party at any time may terminate this Agreement by delivering to the other party a thirty (30) day notice of termination. Such termination shall be effective at the expiration of the thirty (30) day period. This agreement shall be automatically terminated if either Hospital fails to retain its accreditation by the Joint Commission on Accreditation of Hospitals, or either Hospital shall lose its licensure from the Indiana State Board of Health.

7. Notice pursuant to this Agreement shall be sent as follows:

IU Health: President
Indiana University Health, Inc.
340 West 10th Street
Indianapolis, Indiana 46202

Hospital: President
Indiana University Health Arnett, Inc.
_____
_____

8. Nothing in this Agreement shall be construed as limiting the rights of either party to affiliate or contract with any other hospital or facility on either a limited or general basis while this Agreement is in effect.

9. Neither party shall use the name of the other party in any promotional or advertising material without the prior written approval of the other party.

10. This Agreement may be modified or amended from time to time on mutual agreement of the parties and such modification or amendments shall be attached to, and become a part of, this Agreement when properly authorized by signature of authorized officials of both parties.

INDIANA UNIVERSITY HEALTH, INC.

By: _____ Date: _____
Jim Terwilliger, Executive Vice President

INDIANA UNIVERSITY HEALTH ARNETT, INC.

By: _____ Date: 2/25/2013
Al Gatmaitan, Chief Executive Officer

HOSPITAL TRANSFER AGREEMENT

This Agreement is entered into by and between Health and Hospital Corporation of Marion County d/b/a/ Wishard Health Services ("Hospital") and Indiana University Health Arnett, Inc. ("IU Health Arnett").

WITNESSETH:

WHEREAS, Hospital and IU Health Arnett are fully accredited by the Joint Commission on Accreditation of Hospitals and licensed by the Indiana State Board of Health; and

WHEREAS, it is in the public interest that hospitals make transfer agreements available to other hospitals so as to encourage continuity of quality care to patients; and

WHEREAS, Hospital operates a burn center; and

WHEREAS, Hospital and IU Health Arnett both desire to enter into this Transfer Agreement for the transfer of patients, including burn patients, between their facilities;

NOW, THEREFORE, IT IS AGREED:

1. The parties may transfer patients between their respective institutions whenever such transfer is medically appropriate, as determined by the patient's attending physician and by a member of the Medical Staff of the receiving institution who shall be the admitting physician. All transfers and admissions shall be subject to the general rules and regulations of the respective institutions for transfer and admission of patients. Requests for transfer of patients will be submitted to a member of the attending medical staff of the receiving institution with the understanding that medical care will be rendered the patient by a member of Hospital's medical staff. Transfer to Hospital can be for inpatient or outpatient services, diagnostic and/or x-ray services, and emergency room services.

2. Neither party is required hereby to give priority of admission to patients to be transferred from the other party's institution. Admissions shall be in accordance with the general admission policies and procedures of each party.

3. The transferring institution shall forward with each patient, at the time of transfer or, in case of emergency, as promptly as possible following the transfer, continuity of care information about the patient including the following:

   a. Patient Information. This includes patient name, address, date of birth, name and address of patient's relatives and legal guardian, if applicable, whether insurance, a third-party payer, or the patient will assume responsibility for the cost of services rendered, and any other pertinent social information concerning the patient.

   b. Medical Information. This includes medical diagnosis, summary of treatment

including medications, specific limitations on patient activities, test results, the presence of decubitus ulcers, the date of Mantoux skin test for tuberculosis and all other pertinent medical information.

c. Nursing Information. This includes a description of patient's condition, required nursing care, and dietary requirements.

The original medical record will be retained by the transferring institution.

4. The institution intending to transfer one of its patients shall have the responsibility of notifying the other institution promptly of the impending transfer, arranging for appropriate and safe transportation and care of the patient during transfer, and arranging for the transfer of the patient's personal effects, such as money and valuables, and information related to these items. The transferring institution's clinical record shall contain evidence that the patient was transferred promptly and safely. Transfer procedures shall be made known to the patient and personnel of each of the parties to this agreement.

If the patient is to be transferred for medical treatment for which informed consent is required, the transferring institution shall provide, whenever possible, the following:

a. If the patient is believed to be competent to provide informed consent, a statement to that effect from the patient's physician;

b. If the patient has a legal guardian, a copy of the guardianship appointment papers and information as to how the guardian can be contacted; or

c. Except in emergency situations, if the patient is not competent to provide informed consent and there is no legal guardian, the transferring institution shall be responsible for obtaining the appointment of a guardian for the purpose of providing informed consent.

5. Each party shall have exclusive control of the management, assets, and affairs of their respective institutions. Neither party by virtue of this Agreement assumes any liability for any debts or obligations of either a financial or legal nature incurred by the other party to the Agreement. Both institutions agree to share pertinent information relating to the patient's assumption of financial responsibilities prior to the transfer from one institution to the other. The sole responsibility for billing and collecting for services rendered rests with the institution that provides the services, except as affected by any other agreements between the two parties. The parties agree to comply with all state and federal laws and rules including but not limited to those concerning the provision of emergency care, billing for services, referral of patients, and confidentiality of patient information.

6. This Agreement shall be effective the 1st day of April, 2012, and shall continue in effect for a period of one (1) year and then shall be automatically renewed for successive one-year terms,

unless either party, within at least thirty (30) days prior to the termination date, gives the other party notice in writing of its intention not to renew this Agreement. Additionally either party at any time may terminate this Agreement by delivering to the other party a thirty (30) day notice of termination. Such termination shall be effective at the expiration of the thirty (30) day period. This agreement shall be automatically terminated if either Hospital fails to retain its accreditation by the Joint Commission on Accreditation of Hospitals, or either Hospital shall lose its licensure from the Indiana State Board of Health.

7. Notice pursuant to this Agreement shall be sent as follows:

Hospital: CEO
Wishard Health Services
1001 W. 10th Street
Indianapolis, IN 46202

IU Health: President
Indiana University Health Arnett, Inc.
5165 McCarty Lane
Lafayette, IN 47905

8. Nothing in this Agreement shall be construed as limiting the rights of either party to affiliate or contract with any other hospital or facility on either a limited or general basis while this Agreement is in effect.

9. Neither party shall use the name of the other party in any promotional or advertising material without the prior written approval of the other party.

10. This Agreement may be modified or amended from time to time on mutual agreement of the parties and such modification or amendments shall be attached to, and become a part of, this Agreement when properly authorized by signature of authorized officials of both parties.

HEALTH AND HOSPITAL CORPORATION OF MARION COUNTY D/B/A/ WISHARD HEALTH SERVICES

By: Lawrence Lossman Date: 4/2/13
AVP Supply Chain & Other Services

INDIANA UNIVERSITY HEALTH ARNETT, INC.

By: Al Gatmaitan Date: 4/4/2013
Al Gatmaitan, Chief Executive Officer

Indiana University Health	Section: SSAN Policy #: 1.00	Effective Date: October 2011
	Author/Responsibility: Stanley Weber, M.D. Title: Medical Director of Anesthesiology Services	Next Review Date: October 2014

DEPARTMENT OF ANESTHESIOLOGY SERVICES SCOPE OF CARE

APPLIES TO: ☐ **Organization (Arnett)** ☒ **Departmental (Arnett)**

Anesthesia Services	Scope of Service
Purpose:	The purpose is to identify the scope of service for IU Health Arnett Anesthesia.
Scope:	The Department of Anesthesiology is full service under the direction of a Board Certified Anesthesiologist appointed and under contract by the Administration of Clarian Arnett Hospital. The model used within the Division of Anesthesiology is based upon a team approach, whereby anesthesia services may be provided solely by an anesthesiologist or by a Certified Registered Nurse Anesthetist, Student Registered Nurse Anesthetist, or Anesthesia Resident under the medical direction of an anesthesiologist. In some cases, as determined by the Medical Director of Anesthesiology services, a CRNA may provide anesthesia care under the direction of a physician with specialization other than Anesthesiology. All of the anesthesiologists within the department are either Board Certified or Board Eligible. The Division of Anesthesiology also receives support from anesthesia technicians, surgical nurses, respiratory therapists and clerical staff. Any information required concerning the Division of Anesthesiology can be obtained by contacting the Medical Director of Anesthesiology Services through the Medical Staff Office.
Definitions of Providers:	**Anesthesiologist:** A board certified or board eligible physician with specialized training or experience in the administration of anesthetics. **Certified Registered Nurse Anesthetist (CRNA):** Must be a registered nurse who has successfully completed a master's degree from an accredited nurse anesthesia training program, and passed a national certification examination. **Student Registered Nurse Anesthetist (SRNA):** A registered nurse currently enrolled in an accredited nurse anesthetist training program. **Anesthesia Resident:** A licensed physician currently enrolled in an accredited anesthesiology residency program
Definitions of Types of Anesthesia:	**General Anesthesia:** A reversible, unconscious state characterized by amnesia (sleep, hypnosis, or basal narcosis), analgesia (freedom from pain), depression of reflexes, muscle relaxation, and homeostasis, or specific manipulation of physiologic systems and functions. **Regional Anesthesia Block:** A reversible loss of sensation in a specific area or region of the body when a local anesthetic is injected to purposefully block or anesthetize nerve fibers in and around the operative site. **Monitored Anesthesia Care:** The anesthesia provider supplements a local anesthetic, which is performed by the surgeon, with IV drugs that provide sedation and systemic analgesia. The anesthesia provider also monitors the patient's vital functions and may use additional medication to optimize the patient's physiologic status. **Local Anesthesia:** Placement of an anesthetic agent in the surgical area, which is not directed to

	named nerves, for the purpose of local or regional nerve blockage.
Methods of Anesthesia Administration:	**Inhalation:** The production of unconsciousness by means of volatile or gaseous drugs, which are inhaled. **Intravenous:** Production of unconsciousness by drugs, which are administered intravenously. **Rectal:** Production of unconsciousness by drugs, which are administered rectally. **Regional:** The application of a drug along the course of a nerve to abolish different and efferent impulses to segments of the body. **Spinal:** A nerve block at anterior and posterior roots in the subarachnoid space. **Epidural:** Nerves blocked in the epidural space where the nerves have a dural sheath. **Field:** Large terminal branches are blocked by injecting a wall of local anesthetic drug at the border of the area which they supply just as they branch. **Infiltration:** Nerve endings are anesthetized by injecting a drug into the area they supply. **Topical:** Nerve endings are anesthetized by spreading the drug on the area they supply.
Services:	IU Arnett Hospital's Department of Anesthesiology provides the following methods of anesthesia: 1. General anesthesia of all types 2. Regional anesthesia of all types 3. Monitored anesthesia care 4. Acute perioperative pain management The type of anesthesia utilized for a particular patient is determined by the anesthesiologist or by the anesthesiologist in conjunction with the patient's surgeon or physician. The type of anesthesia selected is based upon the patient's underlying medical conditions(s), the type of surgery, and patient's preference when possible. Any type of anesthesia may be provided by an anesthesiologist or anesthesiologist/CRNA/SRNA/ Anesthesia Resident team in any location provided that the standard of care for providing anesthesia services is met. The standard of care refers to the appropriate anesthesia delivery and monitoring equipment and appropriate personnel. The appropriate communication system must be active in order to elicit emergency assistance. This standard of care is above and beyond and not related to that which is provided in the hospital sedation/analgesia policy for non-anesthesiologists. Locations outside the general operating rooms where anesthesia services may be provided include, but are not limited to: 1. Labor and delivery 2. Radiology 3. CT/MRI 4. Cardiac Catheterization laboratory 5. EPS laboratory 6. GI lab Anesthesia services are provided 24 hours/day and seven days per week for patients in labor and delivery. The CRNAs are supervised by the attending surgeon. Services provided include the labor epidural service and anesthesia for Cesarean Sections either emergent or elective. The Division of Anesthesiology provides consultative services for acute perioperative pain

	management.
Availability of Services provided:	Anesthesia services are provided for in-patients and out-patients of all ages. Coverage by the Department of Anesthesiology is 24 hours per day, 7 days per week. Anesthesia care is provided for both elective and emergent surgical cases on a continuous basis. An anesthesiologist is "on call" on a nightly basis and is available by contacting the operating room and obtaining the anesthesiology on call pager number or the specific name, pager number, or cell phone number of the "on call" anesthesiologist. All anesthesiologists on-call are to be available for anesthesia requirements within 30 minute (thirty) minutes of notification.
Types of Patients:	Inpatients: Surgical patients with varying acuity. Outpatients: Health patients requiring surgical services.
Ages of Patients:	All ages of patients.
Goals of the Department:	The overall goal is to provide safe, comprehensive care for each patient. • Provide safe and healing environment for patients and staff, supporting error free delivery of care and quality patient outcomes. • Optimize cost performance by delivering excellent care through operational efficiency. • Seamless integration and communication across the healthcare continuum. • Provide opportunities for professional growth and knowledge advancement • Integration of evidence based practice.
Interdisciplinary Collaboration and Patient Care Planning	Effective interdisciplinary collaboration of medical disciplines is required for providing comprehensive care which includes but not limited to the following: • Anesthesia Providers • Surgeons • Endoscopy Physicians • Hospitalists • Intensivists • Pulmonologists • Cardiologists • Nursing • Anesthesia Techs
Management and Staff Mix:	The primary management and staff mix for anesthesia services include: • Medical Director of Anesthesiology Services • Medical Directors of Surgery • Director of Surgical Services • Managers for designated areas (Endoscopy, main surgery, and outpatient surgery) • Staff Nurses • Anesthesia Technologists • Ancillary Staff
Intra-departmental Communication	Communication within the department includes, but not limited to the following: • Anesthesia Section Staff Meetings • Cisco Phones • Written Memos/Emails • Person to Person
Plan for Orientation and Continuing Education	Each employee will complete hospital general orientation. Continuing educational will be completed by all providers.
Quality Care and Standards of Practice	Policies and procedures are formulated by using information and data obtained from the American Society of Anesthesiologists, governmental and accrediting agencies, as well as information submitted by anesthesiologists and CRNAs to allow for the formulation of policies appropriate to

	the resources and needs of IU Arnett Health. All policies are reviewed and approved by the Medical Director of Anesthesiology Services/Chief of the Department of Anesthesiology and are subject to medical staff approval where applicable.
Quality Assessment and Performance Improvement	Anesthesia services and IUHA system level involvement in specific quality and performance improvement initiatives include, but not limited to the following: • SCIP Measures (Timing of appropriate antibiotic selection, Beta Blocker Therapy; VTE Prevention; and Perioperative Temperature Management.) • Evaluation of anesthesia complications Quality data is reviewed at quarterly Anesthesia Standard meetings.
General Operational Principles	All employees are responsible for reading and reviewing hospital and departmental policies as needed.

APPROVAL BODY
Anesthesia

APPROVAL SIGNATURES
Medical Director of Anesthesiology Services
Chief Nursing Executive/VP Patient Care Services

DATES:
Effective Date: August 2008
Revision Dates: October 2011

Indiana University Health

Trauma Operating Room, Staff and Equipment

Indiana University Health Arnett Hospital's Operating Room is committed to providing care to the injured patient twenty-four (24) hours a day. A call team is available with a 30 minute maximum response time (outside of normal operating room hours). Anesthesiologists are promptly available with a30 minute maximum response time (outside of normal operating room hours). Below is a list of available equipment in the OR:

- Hotline Fluid Warmers
- Level 1 Rapid Infuser
- Bair Hugger
- Dornoch Suction System that holds over 20 liters of fluid
- 3 neurosurgery sets
- 3 Midas Rex Drills
- 1 Mayfield head positioning device for craniotomy
- 1 burr hole set and disposable cranial access kits
- Set up for craniotomy surgeries in OR Room 3
- 1 stat craniotomy cart with all supplies located in surgical area
- Emergency case carts in surgical area for: exploratory laparotomy, AAA and open heart cases
- Rolling carts with chest instrumentation, invasive lines and additional instruments and supplies
- Set up for open heart surgeries in OR Room 2
- Set up for general emergency surgeries in OR Room 1

Ann Keyes, RN

Ann Keyes, RN
Director of Perioperative Services
Indiana University Health Arnett

9/16/13
Date

IU Health Arnett
P.O. Box 5545
Lafayette, IN 47903-5545

T 765.448.8000 800.899.8448
iuhealth.org

LETTER OF COMMITMENT FOR TRAUMA SERVICE

WITNESSETH:

THIS LETTER OF COMMITMENT entered into this 1st day of July, 2013, by and between Indiana University Health Arnett, Inc. (IUHA) and each of the Critical Care Services physicians signing below as part of the Trauma Program ("Physician").

DEFINITIONS:

QUALIFIED PARTICIPANT: A "Qualified Participant" shall mean a practicing physician with full medical staff privileges at I.U. Health Arnett that takes call as part of the Medical Staff requirements and the Level III Trauma Program and meets the requirements of the American College of Surgeons for twenty-four (24) hours per day Critical Care coverage, response, and care of patients.

RECITALS:

WHEREAS, IUHA and the Physician desire to achieve and maintain Level III trauma certification in the Emergency Department, thereby meeting the American College of Surgeons Trauma response requirements for documentation, attendance at meetings and response time.

NOW, THEREFORE, in consideration of the terms contained herein, the parties agree as follows:

I. TERM

This initial term (the "Initial Term") of this Letter of Agreement shall begin July 1, 2013 and continue for a twelve (12) month period ending on June 30, 2014. At the end of the Initial Term, and each Renewal Term, this Agreement shall be automatically renewed for an additional term of one year ("Renewal Term"). Either party may terminate this Agreement following sixty (60) days' advance written notice to the other party.

II. TRAUMA RESPONSE

During the time of this Letter of Agreement, the Physician shall at all times maintain status as a Qualified Participant and agrees to abide by the American College of Surgeons accreditation program requirements as the standard for performance for ensuring twenty-four (24) hours per day prompt availability of critical care physician coverage, response times, proper documentation, and attendance at meetings for the Trauma program as required.

II. EXECUTION

IN WITNESS WHEREOF, the duly authorized officer and representative of the IUHA and the Physician have executed this Agreement the 1 day of ~~June~~ Aug, 2013.

"IUHA"

By: Alfonso W. Galmaitan

Printed: Alfonso W. Galmaitan, FACHE
Chief Executive Officer
Indiana University Health Arnett, Inc.

"TRAUMA MEDICAL DIRECTOR"

By: Ruban Nirmalan

Printed: Ruban Nirmalan, MD

[Signature page of Letter of Agreement for Trauma Service]

"PHYSICIAN"

By: Muhammad Ali
Printed: Muhammad Ali, M.D.

"PHYSICIAN"

By: _____
Printed: Mazen Alakhras, M.D.

"PHYSICIAN"

By: _____
Printed: Adil Keskin, M.D.

"PHYSICIAN"

By: Retired - N/A
Printed: John Scanlon, M.D.

"PHYSICIAN"

By: _____
Printed: Tasbrul Islam, M.D

Indiana University Health	Section: PC Policy #: 4.14	Effective Date: May 2012
	Author/Responsibility: Laurie Spencer, RN Title: Manager ICU	Next Review Date: May 2015

INTENSIVE CARE UNIT (ICU) PROGRAM AND DESIGN FOR PLAN OF CARE

APPLIES TO: ☐ **Organization (Arnett)** ☒ **Departmental (Arnett)**

I. PURPOSE

A. To describe the ICU organization, the focused use of resources and policies that reflect the special needs of the Intensive Care Patient. ICU is a closed ICU for admission by Intensivists only unless otherwise specified within this policy.

II. SCOPE

A. All providers and staff providing care and support functions to the Intensive Care Unit and the Intensive Care Patient.

III. DEFINITIONS

Intensive Care Unit (ICU): unit designated to care for critically ill patients who required the care of a critical care physician and/or intensive nursing care.

ICU Medical Director: responsible for supervising and evaluating the care given in the ICU. Works in collaboration with nursing and other disciplines to develop and maintain evidence based practice, policies and procedures.

ICU Nursing Manager: responsible for the daily management of the ICU. Works in collaboration with the medical staff and other disciplines to develop and maintain evidence based practice, policies and procedures.

IV. POLICY STATEMENT(S)

A. A board certified or board eligible Critical Care Physician will be available, generally within thirty (30) minutes.

B. Appropriate physiologic monitoring and life support equipment will be immediately available to be utilized by trained staff

C. Recognizing the values, wishes and beliefs of the patient and family, decisions regarding treatment and life support will be made by the provider in collaboration with the multidisciplinary team and the patient/family.

V. PROCEDURE

A. Admission into ICU

1. ICU Admission may be ordered by the Intensivist, Cardiology, Cardiovascular Surgery or Neurosurgery.
2. Trauma Surgeon has admitting privileges only for trauma patients and must have an Intensivist consult ordered.

a. Trauma Surgeon must have a physician to physician conversation/report before admitting patient to ICU.

3. Admission Triaging of Patients
   a. Will be triaged for admission onto the Intensivist service by the staff Intensivist or designee (ICU Manager or ICU Charge nurse)
4. General Admission Criteria
   a. Life threatening illness, or a high potential of deterioration to a life threatening illness AND need for intervention by an intensivist (or previously specified specialist) to treat or prevent further deterioration OR need for intensive monitoring and care.

B. ICU Triage and Discharge Criteria/Guidelines
1. Class 1 (Acute Phase of Illness)-critically ill patients who require continuous assessment and management and/or has rapidly changing vital signs
2. Class II (Transitional Phase of Illness)-critically ill patient after the acute phase has passed. Patient has decreasing level of need for monitoring and support
3. Class III (Stable Phase of Illness)-patient who has maintained stable vital signs for at least 24 hours. Specific monitors or observation parameters may be required. Minimal ventilator manipulations are required. Considerations such as transfer to lower level of care area should be considered.

C. Discharging out of ICU
1. The Intensivist service will discharge patients from the ICU to other care areas, including but not limited to Progressive Care Unit (PCU) when they no longer meet the admission criteria. This will be done in collaboration with the hospitalist service or other accepting service.
2. Capacity Management Plan: When the capacity of the ICU has reached maximum census designated beds in the PCU may be utilized for ICU care. All policies and procedures applicable to the ICU will apply to the ICU overflow beds as long as the patient retains critical care status as outlined in the admission criteria.

D. Collaborative Practice Principles
1. Multidisciplinary Team Approach including, but not limited to:
   a. Critical Care Provider
   b. Provider (other)
   c. Nurses
   d. Respiratory Therapist
   e. Pharmacist
   f. Clinical Nurse Specialist
   g. Rehabilitation (PT, OT, Speech)
   h. Wound Care
   i. Care Management/Social Work
   j. Nutritionist
   k. Clergy

E. Circumstances leading to required Critical Care Provider (Intensivist) consultations for ICU patients
1. Multi-system organ failure

F. Nurse staffing adjustment plan based upon patient acuity
   1. Synergistic Staffing model is used.
      a. Based on acuity tool and amount of care patients are requiring
      b. Should be 1 RN to 2 ICU patients
      c. Overflow patients will be 1 RN to 3 overflow patients regardless of status.
   2. Adjust the staffing from our core staffing prn
      a. Suicide patients are 1 RN to 1 patient unless we have sitter available
      b. Unstable CRRT patients are 1 RN to 1 patient
      c. Open heart patients for the first 24 hours post operation or until extubated and stable are 1 RN to 1 patient.
      d. Patients that are on multiple drips and unstable requiring excessive care may become 1 RN to 1 patient when needed.

G. Patient Care-Nursing
   1. Circumstances requiring immediate notification of the provider (examples)
      a. Deteriorating patient condition
      b. Patient not responding as expected to prescribed interventions, when immediate intervention is indicated
   2. Managing patient care emergencies via protocol until the provider is notified and/or arrives
      a. Refer to ADMCL 7.00 (Rapid Response Team)
      b. Refer to PC 1.26 (Code Blue: Cardiopulmonary or Respiratory Arrest)
   3. Emergency Care within the ICU
      a. Code Blue will be called and protocols from the American Heart Association's Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) will be utilized.
      b. If a patient requires endotracheal intubation, the physician and/or qualified designee will perform the procedure.

H. Managing ICU patients during facility and/or natural disaster
   1. The ICU Manager and the Intensive Care Unit Medical Director will take primary responsibility for coordinating the care during the disaster and leading the intervention strategy development and implementation, based upon specifics of the disaster and of the patient needs in the ICU at the time. Respiratory Therapy Manager will collaborate on airway management needs.
   2. The ICU plan is consistent with the facility wide disaster plan and includes, but is not limited to equipment or utility, fire, and natural disaster. Emergency plans are listed in emergency book on each unit of hospital.
      a. Clinical Engineering to be notified to assist with equipment issues
      b. Respiratory therapists will assist with airway management needs
      c. Additional nurse and respiratory resources may be obtained by off-duty staff, internal resource team, and IU Health resource team.
   3. Multidisciplinary team approach will be utilized to meet the specific needs of the patients during the disaster, as appropriate to the situation.
   4. Additional staff resources may be met through our system wide Resource Team, as needed.

I. Infection Control related to ICU specifically
   1. ICU follows the infection control policies for IU Health Arnett (IC 1.01, 1.02, 1.03, 1.04, 1.05,1.08, 1.09, 1.11, 1.12, 1.15 and appendix IC 1 – 8).
   2. All patients with resistant organisms, including but not limited to MRSA and VRE will be placed in isolation immediately upon diagnosis
   3. All patients suspected of/or diagnosed with clostridium Difficile will immediately be placed in contact isolation
   4. Patients with ICU status requiring negative air flow management will be place in rooms 219 or 220.
   5. Nurses will follow use all required Personal Protective Equipment needed per IU Health Arnett Infectious Disease Guidelines
      a. Gloves
      b. Gown
      c. Mask
      d. Eye shield

J. ICU specific policies/procedures, quality control and Quality Improvement mechanisms
   1. Nursing Clinical Practice Council
      a. Governed by ICU floor nurses
      b. Manager will attend meetings as needed
      c. To discuss process improvement and development.
   2. Intensivist Committee
      a. Governed by Director of ICU
      b. Attended by Intensivists, ICU Manager, ICU CNS, Director of Nursing, and outpatient pulmonary staff as able to attend.
      c. To discuss process improvement and development.
   3. ICU Medical Staff Subsection
      a. Ultimately responsible for the quality of care in the ICU
      b. Chaired by ICU Medical Director
      c. Co-chaired by Trauma Surgeon

K. Traffic control in the ICU
   1. Doors at both ends of the ICU remain closed at all times
   2. Family and/or significant others are encouraged to visit and are key to maintaining a healing environment for the patient
   3. The number, frequency and/or duration of the visits may be limited at the discretion of the patient's nurse based upon specific patient need for rest and for high intensity and focused nursing care.
   4. Upon recommendation of Infection Control, there may be necessity to limit visitation, based upon community illness trends, unit clusters, etc.
   5. During an emergency event (i.e., Code Blue), immediate family and/or significant others may be permitted to remain in attendance. This is discretion of the nurses and/or provider in attendance during the event.

L. Pharmaceuticals, Equipment and Supplies
   1. Pharmaceuticals
      a. Patient specific medications are managed and reviewed by pharmacy. If medications are not available in Pyxis, pharmacy will be notified to deliver the medication to the unit. Pharmacy is open 24 hours/day-7 days/week.

b. Commonly used emergency drugs are available within the ICU. The Director of Pharmacy (or designee) is responsible for assuring the integrity of the emergency drug system and process.
c. Controlled substances are managed and monitored by the pharmacy, per policy.
d. Pharmacy and Nurse provide periodic independent audits. All discrepancies are monitored and appropriate interventions completed.

2. Equipment
   a. ICU will follow all of the Environment of care and Maintenance policies and procedures
3. Supplies
   a. Unit specific supplies will be maintained at the appropriate par level by materials management in order to assure appropriate access and availability
   b. Periodic adjusts to par will be made as needed in coordination between nursing and materials management.

VI. CROSS REFERENCES

Policy ADMCL7.00: Rapid Response Team (RRT)
Policy PC1.26: Code Blue: Cardiopulmonary or Respiratory Arrest
Policy IC1.01: Infection Control Program Policy Statement
Policy IC1.02: Infection Control Authority Statement
Policy IC1.03: Bloodborne Pathogens Exposure Control Plan
Policy IC1.04: Standard and Transmission-Based Isolation Precautions
Policy IC1.05: Tuberculosis (TB) Exposure Control Plan
Policy IC1.08: Comprehensive Infection Control Policy for Environmental Controls Related to Construction, Renovation, and Maintenance
Policy IC1.09: Hand Hygiene
Policy IC1.11: Management of Patients with Suspected or Confirmed Prion Disease
Policy IC1.12: Reporting Communicable Diseases
Policy IC1.15: Bedbugs, Prevention and Control
Appendix IC 1 – 8.Infection Control

VII. REFERENCES

HFAP Chapter 29-Special Care Units

VIII. APPROVAL BODY

ICU CPC
ICU Medical Staff Subcommittee

IX. APPROVAL SIGNATURES

Chief Nursing Executive/VP Patient Care Services

X. DATES

Effective Date: May 2012

ICU Call Schedule

September 2013							
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
							1
Day (7a-5p)							Ali
Night (5p-7a)							Ali
Pulm. Call							
	2	3	4	5	6	7	8
Day (7a-5p)	Keskin	Keskin	Keskin	Keskin	Keskin	Alakhras	Alakhras
Night (5p-7a)	Alakhras	Alakhras	Alakhras	Alakhras	Keskin	Alakhras	Alakhras
Pulm. Call	Islam	Islam	Islam	Islam	Islam		
	9	10	11	12	13	14	15
Day (7a-5p)	Islam	Islam	Islam	Islam	Islam	Ali	Ali
Night (5p-7a)	Ali	Ali	Ali	Ali	Islam	Ali	Ali
Pulm. Call	Keskin	Keskin	Keskin	Keskin	Keskin		
	16	17	18	19	20	21	22
Day (7a-5p)	Keskin	Keskin	Keskin	Keskin	Keskin	ISLAM	ISLAM
Night (5p-7a)	Islam	Islam	Islam	Islam	Keskin	ISLAM	ISLAM
Pulm. Call	Alakhras	Alakhras	Alakhras	Alakhras	Alakhras		
	23	24	25	26-Jan	27	28	29
Day (7a-5p)	Alakhras	Alakhras	Alakhras	Alakhras	Alakhras	Keskin	Keskin
Night (5p-7a)	Keskin	Keskin	Keskin	Keskin	Alakhras	Keskin	Keskin
Pulm. Call							
	30						
Day (7a - 5p)	Ali						
Night (5p - 7a)	Alakhras						

LETTER OF COMMITMENT FOR
TRAUMA SERVICE

WITNESSETH:

THIS LETTER OF COMMITMENT entered into this 1st day of July, 2013, by and between Indiana University Health Arnett, Inc. (IUHA) and the physicians of Imaging Services as part of the Trauma Program.

DEFINITIONS:

QUALIFIED PARTICIPANT: A "Qualified Participant" shall mean a practicing physician with full medical staff privileges at I.U. Health Arnett that takes call as part of the Medical Staff requirements and the Level III Trauma Program and meets the requirements of the American College of Surgeons for twenty-four (24) hours per day Computed Tomography (CT) coverage, response, and care of patients.

RECITALS:

WHEREAS, IUHA and the physicians of Imaging Services desire to achieve and maintain Level III trauma certification in the Emergency Department, thereby meeting the American College of Surgeons Trauma response requirements for documentation, attendance at meetings and response time.

NOW, THEREFORE, in consideration of the terms contained herein, the parties agree as follows:

I. TERM

This initial term (the "Initial Term") of this Letter of Agreement shall begin July 1, 2013 and continue for a twelve (12) month period ending on June 30, 2014. At the end of the Initial Term, and each Renewal Term, this Agreement shall be automatically renewed for an additional term of one year ("Renewal Term"). Either party may terminate this Agreement following sixty (60) days' advance written notice to the other party.

II. TRAUMA RESPONSE

During the term of this Letter of Agreement, the physicians of Imaging Services shall maintain status as Qualified Participants and agree to abide by the American College of Surgeons accreditation program requirements as the standard for performance for ensuring twenty-four (24) hours per day prompt availability of CT coverage, response times, proper documentation, and attendance at meetings for the Trauma program as required.

II. EXECUTION

IN WITNESS WHEREOF, the duly authorized officer and representative of the IUHA and the Division Chief of Radiology on behalf of the physicians of Imaging Services have executed this Agreement the 24 day of ~~June~~ July, 2013.

"IUHA"

By: Alfonso W. Gatmaitan

Printed: Alfonso W. Gatmaitan, FACHE
Chief Executive Officer
Indiana University Health Arnett, Inc.

"TRAUMA MEDICAL DIRECTOR"

By: _____

Printed: Ruban Nirmalan, MD

"DIVISION CHIEF OF RADIOLOGY"

By: Kenneth Marnocha MD

Printed: Kenneth Marnocha, M.D.

Indiana University Health	Section: RAD Policy #: 3.00	Effective Date: November 2011
	Author/Responsibility: Douglas Jackson Title: Imaging Manager	Next Review Date: November 2014
STAT EXAMS		
APPLIES TO: ☐ **Organizational (Arnett)**	☒ **Departmental (Arnett)**	

PURPOSE
The purpose of this policy is to establish criteria for the treatment of critically ill or STAT patients.

DEFINITIONS
HIS-Hospital Information System
RIS-Radiology Information System
Diagnostic Radiology-X-ray

POLICY STATEMENT(S)
This policy is to be a guide as to the meaning of the word "STAT" as it used with "STAT" imaging exams. The procedure and steps to handle exams that are ordered for the Imaging Department as "STAT".

PROCEDURE

A. **STAT** will be done **immediately**, which may include suspending the study of any patient in progress. (Exceptions: Invasive exams). STAT should be used only in real emergencies.

B. **ASAP** (as soon as possible). Response time will be within **30 minutes**. Study in progress will be completed but no new studies begun. This also includes emergency room patients who are given priority. Lower priority patients will wait.

C. **Routine**- Priority response time within **2-6 hours**. Work on patients already waiting will be done first, but this study will be completed as soon as current waiting patients are dealt with.

D. **Critically Ill patients** must be accompanied by nursing personnel or a physician and remain with the patient during the examination to provide continued care.

STAT exams should be handled in the following manner:

A. Requests for STATS are to be called directly to Diagnostic Radiology, Ultrasound, MR, CT, or Nuclear Medicine. A completed HIS/RIS order must be available at the time that Imaging is notified of the study.

B. Specific information must be given such as patient location, type of exam, condition and age of patient, etc.

C. The order is to state the purpose of the examination in each instance. Be specific as possible, e.g., "possible pneumothorax" or position of endotracheal tube". Do not use admitting diagnosis. This information is necessary to determine the adequacy of the study.

D. Note any special precautions in handling the patient with emphasis on patient isolation precautions. State if the study is to be done upright or supine.

E. Any problems should be brought to the attention of the Area Supervisor/Lead or Imaging Manager.

RESPONSIBILITY
Ordering personnel

APPROVAL BODY
Radiology Department

APPROVAL SIGNATURES
Chief Operations Officer

DATE
Effective Date: May 2008
Revision Dates: November 2011

Indiana University Health	Section: RAD Policy #: 3.01	Effective Date: November 2011
	Author/Responsibility: Douglas Jackson Title: Imaging Manager	Next Review Date: November 2014

RADIOLOGIST CALL COVERAGE

APPLIES TO: ☐ **Organizational (Arnett)** ☒ **Departmental (Arnett)**

PURPOSE
The purpose of this policy is to define the call coverage for the radiologists who support IU Health Arnett.

DEFINITIONS
Nighthawk-used as a generic term in this policy for teleradiology services that provide diagnostic radiology services for preliminary reads.

PACS-Picture Archiving Communication System

POLICY STATEMENT(S)
It is the policy of IU Health Arnett to provide interpretive physician coverage 24 hours per day, 7 days per week, 365 days a year, for diagnostic imaging procedures.

PROCEDURE
Call coverage after normal business hours will be threefold:

1. The ED physician will provide the wet readings for general X-ray. Nighthawk remote coverage will be provided for Ultrasound, Magnetic Resonance Imaging (MRI), Computerized Tomography (CT) and Nuclear Medicine wet readings.
    a. Studies are sent to the *Nighthawk* provider who will make an interpretation then simultaneously fax, via a secured connection to ensure patient privacy, a typewritten report to the emergency and imaging departments. If a case requires immediate medical attention, a call will be made to the ER physician to discuss the findings.
2. A Call schedule will be provided for the IU Health Arnett diagnostic radiologist to be contacted for questions, problems or diagnostic procedures, for example, the PACS goes down, a disaster, or a diagnostic procedure that requires the presence of a radiologist.
3. A separate IR Call schedule will be provided for interventional cases that are emergent in nature that would require immediate action.

The Emergency Department or Hospitalist will contact "Houston" to contact the radiologist or will use the same mechanism as other "on call" physicians within IU Health Arnett. "Houston" would patch the call through to the ordering physician. If it is in the best interest of patient care, the ED or Radiologic Technologist may call or page the radiologist as an alternative method of contact.

RESPONSIBILITY
Radiologist; Houston; Emergency Department (ED) Staff; Hospitalist; Imaging Staff

APPROVAL BODY
Radiology Department

APPROVAL SIGNATURES
Chief Operations Officer

DATES
Effective Date: October 2008
Revision Dates: November 2011

Indiana University Health	Section: RAD Policy #: 3.21	Effective Date: October 2011
	Author/Responsibility: Doug Jackson Title: Imaging Manager	Next Review Date: October 2014

SCOPE OF SERVICE

APPLIES TO: ☐ **Organizational (Arnett)** ☒ **Departmental (Arnett)**

POLICY STATEMENT
It is the policy of IU Health-Arnett is to ensure this guide for the staff of the hospital of the services and hours of service provided by the Department of Imaging.

OBJECTIVE
The purpose of this policy is to provide guidelines for the services and hours of service provided by the Department of Imaging.

RESPONSIBILITY
All imaging staff of IU Health-Arnett is covered by this policy.

EXCEPTIONS
Exceptions are possible only through consultation with approval of a radiologist.

DEFINITIONS

HIS-Hospital Information System
RIS-Radiology information System
IRP- Indiana Radiology Partners – After-hours reading service

PROCEDURE:

SCOPE OF SERVICE

The Medical Imaging Department offers imaging services to infant, pediatric, adolescent, adult and geriatric inpatients and outpatients in accordance with the standards of the regulating and accrediting bodies.

A. All diagnostic imaging and therapeutic procedures are performed by or under the supervision of board certified or board-eligible radiologists. Radiography Technologists are registered by the American Registry of Radiology Technologists (ARRT) or are registry-eligible and have graduated from an accredited radiologic technology program. All technologists are licensed by the state. Nuclear medicine procedures including PET CT are performed or supervised by technologists certified by the Nuclear Medicine Technology Certification Board (NMTCB) or the American Registry of Radiologic Technologists. Ultrasound procedures are performed or supervised by sonographers registered by the American Registry of Diagnostic Medical Sonographers (ARDMS) or are registry-eligible.

B. Radiologists are on-site between the hours of 7:00 a.m. and 5:00 p.m. then available from 5:00 p.m. to 9:00 p.m. via electronic communication Monday through Friday. The Radiologist working weekends and holidays will be available between 8:00 a.m. and 5:00 p.m. for interpretative and consultative purposes. After the normal hours above, emergency radiologist coverage is available on an on-call basis. IRP coverage is from 9 PM—7 AM, Monday through Friday and 5 PM –8 AM Saturday, Sunday and holidays.

C. For the expeditious interpretation of emergency scans performed after normal hours, the imaging department utilizes a Teleradiology system to transmit images from its digital modalities of Nuclear Medicine, CAT Scan, Digital Radiography, Ultrasound and MRI.

D. Within the hospital environment, radiological procedures are performed in the imaging department, specialized technical suites, surgical suites, emergency department, outpatient areas, mobile service and portably where required. Radiologic procedures are also performed in the outpatient environment as free standing clinics at the following locations:

1. South Side on 240 South (X-ray only)
    a. Sunday through Saturday 8 AM—8 PM
2. West Side on Salisbury Street (X-ray only)
    a. Sunday through Saturday 8 AM—8 PM
3. 2600 Greenbush (X-ray only)
    a. X-ray Monday through Friday
        i. Urgent Care patients 8 AM—8 PM
        ii. Outpatients 7 AM—6 PM
    b. X-ray Saturday, Sunday and Holidays
        i. Urgent Care Patients 8 AM—8 PM
        ii. Outpatients until noon on Saturday; none on Sunday or Holidays
4. 2600 Ferry Street (x-ray, dexa and C-arm)
    a. Monday through Friday 7 AM—5 PM
5. Outpatient Imaging Center on 2403 Loy Dr. (Mammography, CT, MR, Vein Clinic, Ultrasound and PET/CT.)
    a. Monday through Friday 8:00 AM—5:00 PM
6. Ambulatory Surgery Center on1327 S #500 E County Road (C-arm)
    a. Monday through Friday 8 AM- 5 PM

7. Occupational Medicine on Rome Dr. (X-ray only)

    a. Monday through Friday 9 AM-5:30 PM

8. Hoke Avenue in Frankfort (X-ray only)

    a. Monday through Friday 8 AM—4 PM

9. IU Health Arnett Hospital (CT, MRI, X-ray, Nuclear Medicine, Interventional, Ultrasound)

    a. Open 24/7

    b. On Call after hour coverage for MRI, Nuclear Medicine, Interventional and Ultrasound

HOURS OF OPERATION/STAFFING IN THE HOSPITAL SETTING

The staffing of the Medical Imaging Department is adjusted based on procedure volume. The department maintains a pool of personnel who are utilized to supplement normal staff during periods of increased procedure volumes. Standard staffing requirements for the Medical Imaging Department are as follows:

A. Diagnostic Radiology: Staffed 24 hours a day, every day, with a minimum of two registered technologists on duty, in-house, at all times. Additionally, one technologist is on-call after the first shift each day.

B. Specialty Areas: Monday through Friday the specialty areas, including, US, Interventional Radiology, and MRI are staffed an extended first shift (7:00 a.m. to 5:00 p.m.). After closing, weekends and holidays, on-call coverage is available. CT will be available 24/7. Nuclear Medicine is open Monday through Friday from 7:00 a.m. to 4:00 p.m.

Individual Department Plan

A. The imaging department utilizes a network teleradiology system for the digital modalities of Nuclear Medicine, Computerized Tomography (CT), Digital Radiography (DR), Computerized Radiography (CR), Ultrasound (US) and Magnetic Resonance (MR) for consultative purposes among the radiologists and also for the expeditious interpretation of emergency scans performed after normal hours.

B. Radiological procedures are performed in the Imaging Department, surgical suites, emergency department, outpatient departments, outpatient centers, and inpatient rooms. Services offered by Medical Imaging range from general radiography and fluoroscopy to advanced interventional procedures, contrast imaging, which includes CT, MRI, IVP, etc., in which contrast agents are administered by IV certified radiology technologists, nuclear technologists or registered imaging nurses. The ambulatory CT, MRI, Vascular Ultrasound and Mammography departments are accredited by the American College of Radiology.

D. The imaging department is available for services 24 hours a day, seven days a week. It is staffed by fully trained technologists who are licensed and registered/registry eligible in their various specialty fields as required by the state. Radiologists are fully credentialed appointees of the medical staff with delineated privileges.

E. Registered imaging nurses are available to provide comprehensive care to patients in the imaging department Monday through Friday, from 7:00 a.m. to 5:00 p.m. After normal business hours they are on call. In addition, the nurse provides follow-up on patients after interventional exams and for contrast media reactions.

TYPES OF SERVICE

Routine Radiography: Head and Neck, Musculoskeletal, Neuro, Thoracic, Cardiovascular

Mobile (Portable) radiography and fluoroscopy (bronchoscopies, line placements, etc.),

GastroIntestinal fluoroscopy and GenitoUrinary imaging (IVP, Cystograms, etc.)

Breast imaging: Outpatient only (ACR/FDA accredited) Screening, Diagnostic, breast ultrasound

Breast interventional: small and large core biopsies, pre-operative localizing procedures, stereotactic biopsies

Interventional Radiography: Angioplasty, Angiography, Myelography, Venous Procedures, Arthrography, Venography, Biopsies, Drainages, Ablations, Chemoembolizations, etc.

Ultrasound Grey scale, Color and Doppler, visceral, obstetrics, vascular, and interventional, etc.

Computerized Axial Tomography (ambulatory site is ACR accredited): diagnostic and interventional, 3D imaging, Spiral, etc.

Magnetic Resonance Imaging (ambulatory site is ACR accredited): conventional (routine, cardiac, MR angio, breast).

Nuclear Medicine Imaging: Diagnostic (ambulatory site is ACR accredited) (including Bone, Cardiac SPECT, PET/CT, Spect/CT etc.) Therapeutic Nuclear including, Thyroid, and Bone.

Other: Services related or pertaining to imaging including: Quality assessment monitoring and evaluation, quality control, infection control, image interpretation, voice recognition dictation, backend transcription, and management, PACS, equipment purchasing, marketing, and education.

Ages of Patients Served

Neonate/Infant		Pediatrics			Adolescents	Adults	Geriatric
Newborn Neonate 0 to 28 days	Infant 29 days up to one year	Toddler One to three years	Pre-School Three to five years	School-Age Five to 12 years	Adolescent 13 to 18 years	Adult/ Over 18 up to 70 years	Elderly / Geriatric 70 + years

A. All imaging procedures, except for a screening breast imaging study, must have an associated physician order. This order may be written or submitted electronically through a Hospital Information System(Cerner) or Radiology Information System(EPIC).

B. All patients that cannot stand upright must be brought to imaging on a stretcher. All patients scheduled for sedation cases must also be sent on a cart.

C. All patients referred by extended care facilities to include, but not limited to: nursing homes, long term acute care settings, and rehabilitation facilities must have an attendant from that facility present with them at all times if they are not physically and/ or mentally able to care for themselves. All ventilator dependent patients must be accompanied by a Respiratory Therapist (from their facility) and have their own ventilator with them.
   1. It is the responsibility of the referring facility to provide an attendant to accompany the patient before and after the procedure.
   2. The attendant may be a family member of the patient so long as they can provide a continuity of patient care.
   3. It is the responsibility of the referring facility to alert imaging of any isolation requirements.
   4. If a patient is to be admitted to the hospital as an in-patient after their exam, the attendant must stay with the patient until they are transported to their room.

D. Invasive Procedures - Special Procedures
   1. The physician orders a procedure then patient is scheduled by the IR staff. The patient will be called with the date and time then the IR nurse will contact the patient for a pre-procedure assessment.
   2. Interventional Procedures will be scheduled by the IR staff; these include, but are not limited to:
      a. Arteriogram Studies
      b. Biopsy Procedures
      c. Central venous studies
      d. Vertebroplasties
      e. Angioplasties/Stents
      f. Ablations
      g. Myelograms

h. Upper extremity venograms (Lower extremity venograms will be performed in the Radiology & Fluoroscopy room)

E. Surgery Imaging Exams

1. All patients needing imaging in surgery should be scheduled and an electronic order entered in advance.

F. Department Service:

1. An electronic order must be received before a patient is transported to Imaging.
2. The reason for the exam (diagnosis) must be included with the order
3. Stats must be called to the department. An Order Entry request alone may cause a delay in receiving the exam.
4. All critical care patients brought down to the Imaging Department will be accompanied by a critical care nurse.

G. Examinations Requiring Patient Prep

1. Preps are available within the HIS/RIS

REFERENCES

None

ATTACHMENTS/FORMS/APPENDICES

None

APPROVAL BODY

Radiology Department

APPROVAL SIGNATURES

Chief Operations Officer

DATES

Effective Date: May 2008
Revision Dates: September 2008
October 2011

Indiana University Health	Section: Lab Administration Policy #: 1.35	Effective Date: 11-08-2011
	Author: Roxie McKee, MT(AMT) Title: Laboratory Manager	Revised:
		Next Review Date: Yearly

POLICY NAME:	SCOPE OF SERVICE	
APPLIES TO:	☐ Arnett All ☑ Arnett Medical Offices	☑ Arnett Hospital Laboratory ☑ Arnett Department of Pathology

I. PURPOSE

II. SCOPE

This policy applies to all departments of Indiana University Health Arnett laboratories.

III. POLICY STATEMENT:

A. It is the policy of IU Health Arnett to provide in writing the scope of services offered by IU Health Arnett laboratories.

IV. DEFINITIONS

CAP College of American Pathologists
CLIA: Indiana State Department of Health Laboratory Program
HFAP

V. EXCEPTIONS

VI. PROCEDURE

A. Introduction:

1. The purpose of IU Health Arnett laboratory is to support IU Health Arnett and its mission.
2. The goal of the IU Arnett laboratory is to provide quality, cost effective laboratory services that are safe, efficient, and caring.
3. The intent of the department is that each patient who has been served will leave the department feeling their customer service needs were achieved.
4. If the expectations of the patient are not met, details of issues should be shared with Lab leadership so that steps may be taken to avoid future dissatisfaction.

5. Functional and patient satisfaction outcomes are collected to improve the department efficiency, treatment rendered by providers, and hold staff accountable for IU Health Arnett service excellence standards.
6. The Laboratory will work together as a team to increase independent function of patients.
7. The Laboratory will participate in organization-wide quality assessment and performance improvement plan.

B. Hours of Operation:

Hospital:
IUH Arnett Lab: Sunday thru Saturday 24 hours per day (3 shifts).
IUH Arnett Anatomical Pathology: Monday thru Friday 7 a.m. to 5:30 p.m.

Other Sites:

Greenbush:	7:00-6:00 (Mon-Fri); 7-12 (Sat)
Southside:	8:00-5:00 (Mon-Fri)
Westside:	7:30-5:00 (Mon-Fri)
Oncology:	7:30-3:30 (Mon-Fri)
Horizon:	7:30-5:00 (Mon-Fri)
2600 Ferry:	8:00-5:30 (Mon-Fri)
2800 Ferry:	8:00-noon; 1:30-4:30 (Mon-Fri)
Delphi:	8:00-noon; 1:00-5:00 (Mon-Fri)
Flora:	8:00-5:00 (Mon-Fri)
Frankfort:	8:00-5:00 (Mon-Fri)
Monticello:	8:00-noon; 1:00-5:00 (Mon-Fri)
Otterbein:	8:30-5:00 (Mon-Fri)
Rossville:	8:00-5:00 (Mon-Fri)

C. Laboratory Staff consists of:

Lab Director
Lab Manager
Lab Administrative Assistant
Technical Coordinator
Technical Specialist
Lead Tech
Med Tech II
Med Tech I
Lab Assistant
Phlebotomist

D. **Services**:
1. The range of services provided includes, but may not be limited to those listed below. Services may be added or removed based on identification of community need, available staff and equipment. Should our

identification of community need, available staff and equipment. Should our patients require services that we are unable to supply, we will actively assist the patient in finding necessary services within or outside of our organization in a timely manner. Services will be offered under the direction of a qualified physician approved by medical staff.

2. **Anatomic Pathology:**
   - FNA processed in Surgical Pathology
   - Routine processing, Surgical Pathology
   - Tissue processing, Autopsy Pathology
   - Intraoperative consultation (e.g. frozen sections)
   - Mohs procedures (dermatopathology)
   - Bone marrow surgical pathology interpretation
   - Gross evaluation, non-pathologist
   - Gross evaluation, pathologist
   - Microscopic evaluation, Surgical pathology
   - Pathologist interpretation, FNA
   - Tzanck smears, Surgical Pathology

3. **Cytology:**
   - FNA process in Cytology
   - Liquid based preparation
   - Specimen staining, cytology
   - Screening by cytotech, non-gynecologic cytology
   - Screening by pathologist, non-gynecologic cytology
   - Pathologist interpretation, FNA
   - Pathologist interpretation, non-gyn cytology
   - Tzanck smears, Cytopathology

4. **Blood Gases:**
   - Calcium, ionized, whole blood, non-waived
   - Carboxyhemoglobin
   - Chloride, whole blood, non-waived
   - CO2, whole blood, non-waived
   - Glucose, whole blood, non-waived
   - Hematocrit (calculated), non-waived
   - Hemoglobin, total, non-waived
   - Lactate, whole blood, non-waived
   - O2 saturation
   - Oxyhemoglobin
   - PCO2
   - pH, venous/arterial
   - PO2
   - Potassium, whole blood, non-waived
   - Sodium, whole blood, non-waived

5. **Body Fluid Analysis:**
   - Body fluid cell count, automated
   - Body fluid cell count, manual
   - Body fluid differential/cell identification
   - Crystal identification, body fluid
   - Eosinophils, urine
   - Sperm count, manual
   - Sperm morphology (differential), manual
   - Sperm motility, manual
   - Sperm stain for WBC
   - Sperm, presence or absence (post vasectomy)

6. **Chemistry:**
   - Albumin, body fluid/urine
   - Albumin, serum/plasma
   - Alkaline phosphatase, serum/plasma
   - ALT, serum/plasma
   - Ammonia
   - Amylase, body fluid
   - Amylase, serum/plasma
   - AST, serum/plasma
   - Bilirubin, direct, diazo (neonatal), serum/plasma
   - Bilirubin, direct, serum/plasma
   - Bilirubin, Total, neonatal, serum/plasma
   - Bilirubin, total, serum/plasma
   - Calcium, serum/plasma
   - Calcium, urine
   - Chloride, serum/plasma
   - Chloride, urine
   - Cholesterol, body fluid
   - Cholesterol, serum/plasma
   - CK-MB, serum/plasma
   - CO2, serum/plasma
   - C-reactive protein, qual and/or quant
   - Creatine kinase (CK), serum/plasma
   - Creatinine, body fluid
   - Creatinine, semi-quant, urine, non-waived
   - Creatinine, serum/plasma
   - Creatinine, urine, quantitative
   - GGT, serum/plasma
   - Glucose, body fluid
   - Glucose, CSF
   - Glucose, serum/plasma
   - hCG, qualitative, serum

- HDL, cholesterol, serum/plasma
- Iron
- LD, body fluid
- LD, CSF
- LD, serum
- LDL, cholesterol, serum/plasma, measured
- Lipase, serum
- Lithium, serum/plasma
- Magnesium, serum/plasma
- Microalbumin (urine albumin), quantitative
- Osmolality, serum/plasma/whole blood, measured
- Osmolality, urine
- Phosphorus, serum/plasma
- Potassium, serum/plasma
- Potassium, urine
- Protein, body fluid
- Protein, total, CSF
- Protein, total, quantitative, urine
- Protein, total, serum
- Sodium, CSF
- Sodium, serum/plasma
- Sodium, urine
- TIBC, calculated
- Triglycerides, body fluid
- Triglycerides, serum/plasma
- Troponin I
- Urea, serum/plasma
- Uric acid, body fluid
- Uric acid, serum
- Uric acid, urine

7. **Coagulation:**
   - D-dimer, quantitative
   - Fibrinogen
   - Fondaparinux anti-Xa
   - Heparin anti-Xa
   - INR, plasma, non-waived
   - Platelet function assay (PFA)
   - PT, plasma
   - PTT, plasma
   - Thrombin time

8. **Hematology:**
   - Eosinophil count
   - Eosinophils, nasal smear

- ESR, automated, non-waived
- Fecal leukocytes, giemsa stain
- Hematocrit,non-waived
- Hemoglobin, non-waived
- Lamellar body count
- nRBC count, automated
- Platelet count, automated
- Platelet count, manual
- RBC count
- RBC indices (e.g. MCV, RDW)
- Reticulocyte count, automated
- Reticulocyte count, manual
- WBC count, automated
- WBC count, manual
- WBC differential, automated
- WBC differential, manual
- Bone marrow collection (assist)

9. **Immunology:**
   - Automated blood banking test system
   - Gel techniques
   - ABO blood grouping
   - Antibody screen
   - ASO, qual and/or quant
   - C. difficile detection (non-molecular)
   - H. pylori antibody, serum/plasma
   - hCG, urine, waived
   - HIV-1/2 antibody rapid test, non-waived
   - HIV-1/2 antibody rapid test, waived
   - Infectious mononucleosis, non-waived
   - Influenza antigen, non-IF method, waived
   - Microalbumin (urine albumin), qualitative, waived
   - Occult blood, fecal, waived
   - Occult blood, gastric, waived
   - Rh type (includes weak D)
   - RSV antigen, non-IF method, waived
   - Strep A rapid antigen, waived
   - Blood/component storage
   - Transfusion reaction evaluation

10. **Microbiology- Bacteriology:**
    - Eosinophils, nasal smear
    - Fecal leukocytes, giemsa stain
    - Gram stain, other
    - H. pylori detection, urease, non-waived

- Occult blood, fecal, waived
- Occult blood, gastric, waived
- pH, gastric, waived
- Sperm, presence or absence (post vasectomy)
- Strep A rapid antigen, waived
- Trichomonas antigen, non-waived
- Vaginal wet mount
- Wet mount for yeast
- Antimicrobial susceptibility, aerobes
- Antimicrobial susceptibility, urine
- Bacterial identification, complete/partial, other
- Bacterial identification/presumptive ID gonococcus
- Bacterial identification/presumptive ID, throat
- Bacterial identification/presumptive ID, urine
- Blood culture, growth/no growth only
- MRSA screen, culture
- Urine colony count
- Cryptosporidium antigen, non-preserved specimen
- Cryhptosporidium antigen, preserved specimen
- Giardia antigen, non-preserved specimen
- Giardia antigen, prerved specimen
- Pinworm prep
- Mold and/or yeast culture, screen for growth only

11. **Microbiology-Virology:**
    - Influenza antigen, non-IF method, waived
    - Influenza antigen, non-waived
    - RSV antigen, non-IF method, non-waived
    - RSV antigen, non-IF method, waived

12. **Point-of-Care Testing:**
    - ACT, POCT
    - Calcium, ionized, whole blood, waived, POCT
    - Chloride, whole blood, waived, POCT
    - CO2, whole blood, waived, POCT
    - Fern test, provider performed
    - Glucose, whole blood, waived, POCT
    - hCG, urine, waived, POCT
    - Hematocrit, waived, POCT
    - Hemoglobin, estimated, POCT
    - INR, whole blood, non-waived, POCT
    - Occult blood, fecal, waived, POCT
    - Occult blood, gastric waived, POCT
    - Oximetry, POCT
    - pH, vaginal, waived, POCT

- pH, whole blood, POCT
- Potassium, whole blood, waived, POCT
- Sodim, whole blood, waived, POCT
- Urinalysis dipstick, manual, waived, POCT

13. **Special Chemistry:**
    - High performance liquid chromatography (HgbA1C)
    - Immunoassay
    - Nephelometry
    - Therapeutic drug monitoring
    - Cortisol, total, urine
    - Alcohol/volatiles, serum, medical
    - BNP, non-waived
    - Carbamazepine
    - CEA
    - CK-MB, serum/plasma
    - Complement C3
    - Complement C4
    - Cortisol, serum/plasma
    - C-reactive protein, high sensitivity (hsCRP)
    - Digoxin
    - Estradiol
    - Ferritin
    - Folate, serum
    - Follicle stimulating hormone (FSH)
    - Gentamicin
    - hCG, quantitative, serum
    - Hemoglobin A1C, non-waived
    - Lithium, serum/plasma
    - Luteinizing hormone (LH)
    - Parathyroid hormone (PTH), intact
    - Phenobarbital
    - Phenytoin
    - Progesterone
    - Prolactin
    - Prostate specific antigen (PSA)
    - Rheumatoid factor, qual and/or quant
    - Rubella antibody, qual and/or quant
    - Salicylate
    - T4, free
    - Testosterone, total
    - Theophylline
    - Tobramycin
    - Transferrin

- TSH, serum
- Valproic acid
- Vancomycin
- Vitamin B12

14. **Toxicology:**
    - Urine toxicology, qual, automated immunoassay (Drug of Abuse)
    - Amphetamine
    - Barbiturate
    - Benzodiazepine
    - Cocaine
    - Marijuana
    - Methadone
    - Opiate
    - phencyclidine

15. **Transfusion Medicine/Blood Bank-Immunohematology:**
    - Automated blood bank banking test system
    - Computer crossmatch
    - Donor unit retyping
    - Gel tecniques
    - Perinatal testing
    - Rh immune globulin work-up
    - Solid phase techniques
    - Antibody elutions
    - Antibody identification
    - Antibody titers
    - Compatibility testing
    - Fetal-maternal bleed screen (rosette)
    - Kleihauer-Betke stain (fetal cell quantitation)
    - RBC antigen typing
    - ABO blood grouping
    - Antibody screen
    - Direct antiglobulin test (DAT)
    - Rh type (includes weak D)

16. **Transfusion Medicine/Blood Bank-Transfusion Services:**
    - Blood/component issuance for transfusion
    - Blood/component processing (pool, thaw, aliquot)

17. **Urinalysis:**
    - Urinalysis confirmatory testing
    - Acetone
    - Crystal identification, body fluid
    - Eosinophils, urine

- hCG urine, waived
- Ketone, serum,
- KOH prep
- Microalbumin (urine albumin), qualitative, waived
- Occult blood, fecal, waived
- Occult blood, gastric, waived
- Osmolality, urine
- pH, gastric, waived
- Reducing substances, urine
- Specific gravity, body fluid
- Sperm, presence or absence (post-vasectomy)
- Urinalysis dipstick, automated, non-waived
- Urinalysis dipstick, manual, waived
- Urinalysis microscopic, manual (inc. crystal ID)
- Vaginal wet mount
- Wet mount for yeast

E. Consultation.

1. We will answer questions regarding appropriateness of referral, offer recommendations for treatment, answer questions, or offer recommendations for appropriate adaptive and/or assistive devices or equipment.

2. Pathologist, Medical Director.
   Pathologist

VII. CROSS REFERENCE

VIII. REFERENCES

RESPONSIBILITY

Roxie McKee, MT(AMT)
Laboratory Manager

APPROVAL BODY:

Roxie McKee — 11-08-2011
Roxie McKee, MT(AMT) — Date
Laboratory Manager

Kurt B. Hodges — 11.8.11
Kurt B. Hodges, MD — Date
Laboratory Medical Director

REVIEWED:

Reviewed by: Roxie McKee Date: 10-1-2012

Reviewed by: Kurt B. Hodges Date: 10.1.12

Reviewed by: _____ Date: _____

Reviewed by: _____ Date: _____

Reviewed by: _____ Date: _____

Reviewed by: _____ Date: _____

Reviewed by: _____ Date: _____

Reviewed by: _____ Date: _____

Reviewed by: _____ Date: _____

Reviewed by: _____ Date: _____

Reviewed by: _____ Date: _____

Reviewed by: _____ Date: _____

Date Policy/Procedure Retired: _____

Indiana University Health

BB Inventory/Order Form

Date: _____ **Tech:** _____

IBC Distribution: 317-927-1719 **Order Received By** _____

	Product	Set Up	Available	Total	Min/Max	Ordered	BO	Inv. OK
Red Blood Cells	O Pos				25/35			
	O Neg				15/25			
	A Pos				25/35			
	A Neg				10/20			
	B Pos				2/4			
	B Neg				2/4			
	AB Pos				0/2			
	AB Neg				0/2			
	Pedi Units				1/3			
	Irradiated				2 O neg			
Platelets	O				0/2			
	A				1/4			
	B				0/as needed			
	AB				0/as needed			
	Pedi Units				0/as needed			
FFP	O				20/35			
	A				20/35			
	B				10/20			
	AB				15/20			
	AB pedi				4/8			
CRYO	O				10/15			
(pooled)	A				10/15			

IBC Reference Lab: 317-916-5188

Notes: _____

_____

_____

_____

Applicable Procedure: none

CAHBB-34
December, 2011

Indiana University Health	Section: Pending Approval Policy #:	Effective Date:
	Sponsor: Title: Trauma Medical Director	Supersedes: NEW
	Author: Amanda Rardon RN Title: Trauma Program Manager	Next Review Date:
Massive Blood Transfusion Protocol (MBTP)-Adults		
APPLIES TO: ☐ Arnett All ☒ Arnett Hospital ☐ Arnett Medical Offices		

I. PURPOSE

To provide procedures for activation and management of the massive Blood Transfusion Protocol (MBTP). The MBTP is a protocol designed to provide significant volumes of uncrossmatched red cells, platelets, and plasma in an efficient, effective, and expedited manner in the treatment of hemorrhaging patients.

This document addresses:

- The process for activating and deactivating the MBTP
- Specific steps to insure rapid availability of blood components
- Key issues to insure availability of blood components
- Steps to be followed to limit wastage

II. SCOPE

This protocol is primarily for use by the Emergency Department, Surgery, Labor and Delivery and Intensive Care Unit at Indiana University Health Arnett Hospital.

III. DEFINITIONS

Apheresis Platelet: Also known as a single donor platelet that is equivalent to 6-8 pooled random donor platelets.

Incompatible Blood: Donor blood that has been found incompatible either serologically or electronically with the patient's sample.

Massive Blood Transfusion: Transfusion of 10 or more Red Blood Cell (RBC) components within 24 hours.

Mismatched Blood: Donor blood that is a major mismatch with the patient's blood type: (for example: Group A Rh positive donor RBCs transfused to Group O Rh positive patient)

Transfusionist: Individual(s) transfusing the patient.

Type-compatible Blood: Donor blood that is not identical to the patient's blood type, but is compatible for transfusion (for example: Group O Rh positive donor RBCs transfused to Group A Rh positive patient).

Type-specific Blood: Donor blood that is the identical blood type of the recipient.

Uncrossmatched Blood: Donor blood that has not been crossmatched either serologically or electronically with the patient's sample.

IV. PROTOCOL STATEMENTS

A. The MTBP may be activated by the treating physician or their designee when it is anticipated that the patient will require the **rapid transfusion** of massive volumes (usually greater than 10 units) of blood and blood components.

B. The MBTP must be deactivated by the treating physician or their designee once it has been determined that the urgent need for blood has been managed.

C. The treating physician or their designee shall contact the Indiana University Health Arnett Hospital Blood Bank (IUHABB) to activate the MBTP at **8-5037**.

D. The blood bank shall maintain adequate inventory in house to insure that type-specific and/or type-compatible blood components are made available in a timely manner.

E. The blood bank shall coordinate with blood suppliers to maintain inventory of blood components.

F. Group O **Rh Positive** Leukoreduced Packed Red Cells (LPC) will be issued if the patient's blood type is unknown or when a current blood sample is not available.

G. It is an expectation that a blood sample for type and screen will be sent to the IUHABB at the earliest possible time (usually within 15 minutes) in order to provide type specific rather than universal donor type compatible components. This sample should be drawn BEFORE transfusing any blood.

H. Group AB Plasma will be issued for the first three doses of the MBTP if the patient's blood type is unknown. In order to protect the AB plasma supply, the type and screen blood sample must be received and resulted by the blood bank before the fourth and subsequent doses of plasma are prepared for the patient. Two (2) unites of AB Plasma will be thawed with Trauma One activation.

I. **Uncrossmatched,** type-specific or type-compatible LPCs will be issued to expedite the provision of LPCs.

1. Serologic or electronic crossmatches will be performed retrospectively. The treating physician or their designee will be notified immediately if incompatible units were issued by the Blood Bank.

J. The Lab Medical Director will consult with the treating physician or their designee, when the inventory of compatible (type-specific or type-compatible) blood is in danger of being depleted for use in the system.

1. Discussion must occur between the Lab Medical Director and the treating physician or their designee regarding the use of mismatched blood components.
2. Discussion must occur between the Lab Medical Director and the treating physician or their designee regarding the use of incompatible blood components.

K. Rh negative patients will be issued Rh positive blood components unless inventory permits the exclusive use of Rh negative blood components.

L. To expedite the provision of blood components, special component processing such as CMV negative, Fresh, Washed, HLA matched, Antigen matched and/or Irradiated blood will not be provided.

M. Blood Pick up/distribution

Associate Administrator or designee will respond to blood bank upon activation of MBTP in order to distribute the blood products to the area requesting in a timely manner.

N. Leukoreduced Apheresis Platelets (LAPL) and Cryoprecipitate (CRYO) shall be maintained at ambient temperature. DO NOT refrigerate or place these components in transport coolers.

O. A dose of CRYO will be thawed only when ordered.

V. Protocols

A. The treating physician or their designee calls the IUHABB to activate the MBTP.

B. An order for Massive Blood Transfusion Protocol is entered into the EMR for electronic signature.
   1. If the EMR is down, the order may be entered retrospectively with the dates and time corrected.

C. Send Type and Screen sample to IUHABB as soon as possible (BEFORE any transfusions have taken place.)

D. The Blood Bank Medical Technologist (BBMT) prepares each dose at a 1:1 red cell to plasma ration. Each dose shall contain 8 LPCs, 4 Plasmas, and 1 LAPL.
   1. (distribution)
   2. The BBMT shall complete the following items on form CAHBB-58 (See Example Form 1, 3 part form) to document the units being issued
      a. Dispensing Information
      b. Patient Demographics
      c. Component, ABO type, and donor number or units issued
      d. Ordering MD
   3. Form CAHBB-58 completed with dispensing information as above is sent with the units and will be used to document the transfusions.

E. The treating physician or their designee receives the units and documents the following on CAHBB-58:
   1. Received by
   2. Date
   3. Time received

F. The Transfusionist completes the transfusion section of CAHBB-58.

G. Once the MBTP is activated the Associate Administrator or designee will report to the blood bank to ensure prompt delivery to the requesting area.

H. After a dose is sent, the next anticipated dose will be prepared until the protocol is deactivated.

I. If a Type and Screen specimen has not been received in the blood back, each time that a prepared dose is sent, the BBMT will call to remind the service area that a Type and Screen blood specimen is still needed.

J. AB plasma will not be prepared for the 4th and subsequent doses until a type and screen specimen has been received and tested in the blood bank.

K. Pooled CRYO equivalent to 10 units may be ordered as needed. As a courtesy to the treating physician, the BBMT will inquire as to whether CRYO is needed around the time that the third dose is being prepared.

L. The coolers will be labeled with numbers that correspond with utilization.

M. The treating physician or their designee notifies BBMT to deactivate the protocol when appropriate.

N. After deactivation of the protocol, the BBMT will call the service area the results of the retrospective compatibility testing.

O. IU Health blood bank management will notify the on-call Transfusion Medicine physician within 72 hours if an Rh negative female less than 51 years old has been transfused with Rh positive red cells. The on-call Transfusion Medicine physician will be responsible for discussing possible therapeutic options for preventing Rh alloimmunization with the treating physician.

APPROVED BY

Indiana University Health	Section: POS Policy #: 5.00	Effective Date: October 2011
	Author/Responsibility: Ann Keyes, RN, BSN, MBA Title: Director of Surgical Services	Next Review Date: October 2014

PREOPERATIVE, PACU AND PHASE II NURSING CARE

APPLIES TO: ☐ **Organization (Arnett)** ☒ **Departmental (Arnett)**

I. PURPOSE

To establish nursing care which will be provided in pre-op, PACU and Phase II recovery to promote continuity of quality care to all patients.

II. SCOPE

All staff caring for patients in the perioperative phases will follow these guidelines.

III. POLICY STATEMENT(S)

All perioperative patients will receive care as outlined by the following procedures.

IV. PROCEDURE

Pre-op Care:

A. The nurse will verify the patient's name, date of birth and physician, and check the spelling on ID bracelet.
B. Patient's weight and height will be obtained.
C. The nurse will determine that the patient has someone present and if going home following procedure that patient has a responsible party to accompany him/her home.
D. The patient and family will be provided a private patient room or bay. Curtains will be pulled for privacy.
E. Patient will be provided a gown and slippers for changing clothes. Cotton underwear may be worn if it does not interfere with the operative site. Routinely, cataract patients will not change clothes. A gown will be placed over their clothes and covered with a blanket when lying on the eye cart.
F. All patient clothes will be placed in a patient locker, placed on lower shelf on cart or given to family. Valuables will be given to responsible party who is present with patient.
G. The admission history and review of systems will be documented in medical record.
H. Review and verify operative consent with patient.
I. Complete admission assessment, check vital signs and pre-op checklist. Children up to 5 years of age may have apical pulse taken instead of their blood pressure.
J. Perform pre-op tests (12 lead EKG, HCG, BS or PTT), as ordered
K. Carry out all practitioners' orders and document them.
L. Anesthesia or nurse will start an IV on all adults except local patients. Local patients will have an IV started as indicated per physician's order. IV's on children under the age 10 will be started in the Pre-op unit at the discretion of Anesthesia.

M. All rings will be removed or taped. If removed, given to family or secured in locker. Hairpins, other jewelry, wigs, contact lenses, make-up, glasses, dentures, partials, and prostheses will be removed, unless otherwise ordered.
N. Pre-operative medication will be given as ordered.
O. Side rails are placed in upright position if patient medicated.
P. Patient is NOT allowed to get out off of stretcher unassisted after pre-op medication is administered.

PACU Care:

A. The anesthesia provider will accompany the patient to the PACU area and will give an oral report of the type, duration and extent of the anesthesia and surgery to the PACU nurse, including any specific medical problems in the OR.
    1. The anesthesiology and surgeon will determine if a patient will be transferred to Critical Care and 'bypass' PACU.
    2. If the patient 'bypasses' PACU, a qualified unit RN will be responsible for direct observation and post care.
    3. Open heart patients will be transferred from surgical suite to Critical Care for post-op recovery.
B. A registered nurse will be responsible for patient care of the patient. On admission to PACU, the nurse will complete a thorough assessment of patient's condition including but not limited to level of consciousness, vital signs, respiratory, cardiac, neurological, skin color, surgical site, etc. Vital signs will be measured at least every 10 minutes until dismissal. Children up to 5 years of age may have apical pulse taken instead of their blood pressure. Temperatures will be taken every 10 minutes until greater than 95 degrees F.
C. Oxygen is started on patient's that are sedate, have artificial airway, if oxygen saturation is less than 93% or per nursing assessment. O_2 per nasal cannula 1-5 liters/minute and O per face mask at 6 liters/minute, unless otherwise ordered by anesthesia.
D. Assess all dressings and operative sites and document findings.
E. Observe, record, and report any untoward signs or symptoms per nursing assessment.
F. Check and carry out all surgeon's/anesthesiologist's orders.
J. All charting is done on the post-operative record and include but not limited to the following:
    1. Time patient arrives in unit
    2. Vital signs
    3. Assessment of level of consciousness, skin color, pain, nausea/vomiting, level of activity, etc.
    4. IV fluid type and amount; location; site assessment.
    5. Appearance of dressing and/or operative area.
K. Any unusual situation is to be documented and reported to the surgeon and/or anesthesiologist.
L. The patient will remain in PACU per anesthesia's order or until discharge criteria is met, as indicated by the Aldrete Score.
    1. Level of consciousness
    2. An unassisted airway is maintained by the patient.
    3. Patient is able to swallow oral fluids, cough, or demonstrate a gag reflex.
    4. Vital signs are stable, including temperature.
    5. There is no unusual drainage from operative site.

6. There is minimal or no evidence of vomiting or severe nausea.
7. All patients are observed for at least 30 minutes except: Children having myringotomies may be dismissed after 15 minutes, if they meet all discharge criteria.

Phase II Care:

A. The PACU or surgery nurse will accompany the patient to the phase II recovery area.. The nurse will give the post-operative nurse an oral report on the type, duration, and extent of surgery; including any medication problems in surgery or PACU.
B. The nurse will note the patient's: level of consciousness, adequacy of respirations, pulse, blood pressure, and temperature. These parameters should be measured on admission, prn, and on discharge. Children up to 5 years of age may have apical pulse taken instead of their blood pressure.
C. The nurse will assess the patient on admission, document assessment and complete Aldrete discharge scale: activity, circulation, voiding, nutrition, vomiting, dressings, bleeding, and pain.
D. Observe, record, and report any untoward signs or symptoms to surgeon or anesthesiologist.
E. Check and carry out all surgeons/anesthesiologists orders.
F. Record all prescriptions of medications on the patient chart.
G. Review discharge instructions with patient and responsible party and provide copy of instructions to family.
J. The patient will not be discharged form Phase II until discharge criteria is met.
    1. If a patient does not meet discharge criteria per Aldrete score, an order from the surgeon or anesthesiologist is necessary for discharge.
    2. Patients who have received general anesthesia are to be observed for a minimum of 45-60 minutes (exception: children who received general anesthesia per mask for very short surgical procedures such as BTT's, etc. may be discharged when discharge criteria is met.)
    3. Patients who received local anesthesia without sedation may be discharged immediately after surgery. Vital signs are taken and recorded prior to discharge.
    5. GI patients who receive monitored anesthesia care shall remain in the post-operative area until the patient is stable and meets the criteria for discharge.
    6. The patient may ambulate to the car assisted by a family member/Center staff member or transported via wheelchair as indicated by patient's alertness and mobility.

V. APPROVAL BODY

Nursing

VI. APPROVAL SIGNATURES

Medical Directors of Surgery
Chief Nursing Executive/VP Patient Care Services

VII. DATES

Effective Date: October 2008
Revision Dates: October 2011

Indiana University Health

Post-Anesthesia Care Unit

Our post-anesthesia care unit (PACU) is committed to providing care to the injured patient twenty-four (24) hours a day. Registered nurses are staffed in the PACU area, Monday through Friday from 0730 to 2100. On-call PACU staffing is available with a 30 minute maximum response time (outside of normal operating room hours). The following equipment is available in the PACU:

- Adult and Pediatric Code Carts
- Arterial line equipment Ventilator capability
- Ventilator capability
- Bair Hugger
- Ability to monitor internal temperature via a anchored catheter sensor
- All Basic Equipment (O2, suction, cardiac monitor, etc.)
- Proximity to the operating room makes much of their equipment readily accessible (Level 1 Rapid Infuser and Fluid Warmers).
- Intra Osseous Kit (Pharmacy Stocks)

Ann Keyes, RN

Ann Keyes, RN
Director of Perioperative Services
Indiana University Health Arnett

9/16/13
Date

IU Health Arnett
P.O. Box 5545
Lafayette, IN 47903-5545

T 765.448.8000 800.899.8448
iuhealth.org

HOSPITAL PROCUREMENT AGREEMENT
(ORGAN, TISSUE AND EYE)

This Hospital Procurement Agreement (Organ, Tissue and Eye) ("Agreement") is made this 1st day of March, 2008, between Clarian Arnett Health ("Hospital") and Indiana Organ Procurement Organization, Inc. ("IOPO").

RECITALS

A. IOPO is an Indiana nonprofit corporation and is a freestanding Organ procurement organization (within the meaning of 42 C.F.R. § 413.200 and § 486.302) which is the federally qualified Organ procurement organization designated for the donation service area within the State of Indiana in accordance with Section 371 of the Public Health Service Act (42 U.S.C. § 273) ("Donation Service Area");

B. IOPO is a member of the Organ Procurement and Transplantation Network ("OPTN") established under Section 372 of the Public Health Service Act (42 U.S.C. § 274), the nonprofit corporation composed of transplant centers, organ procurement organizations, and histocompatability laboratories, with the purpose of increasing the availability and access to donor organs;

C. OPTN is administered by the United Network for Organ Sharing ("UNOS"), a nonprofit corporation, which, as the OPTN contractor, manages the national Organ transplant waiting list, manages clinical data in a secure environment, works to improve the quality processes of OPTN, and facilitates the Organ allocation, matching and placement process for human Organ transplants;

D. IOPO conducts Tissue and Eye procurement services and is accredited by the American Association of Tissue Banks ("AATB"), and complies with requirements of the United States Food and Drug Administration ("FDA") in conducting Tissue and Eye procurement activities for transportation, therapy, medical research or educational purposes;

E. The purposes of IOPO are to perform and coordinate the identification of donors, the retrieval, procurement, preservation and transportation of Organs, Tissue and Eye for transplantation, therapy, medical research or educational purposes, to work with the OPTN and UNOS in the allocation and placement of Organs available for transplant, and to educate medical personnel and the general public regarding donation and transplantation issues;

F. Hospital participates in the Medicare and Medicaid program and desires to be in compliance with Section 1138 of the Social Security Act (42 U.S.C. § 1329b-8) and the rules of the Centers For Medicare and Medicaid Services ("CMS") for hospital conditions of participation in Medicare and Medicaid programs (42 CFR Part 482.45);

G. Hospital is located within the Donation Service Area of IOPO;

H. Hospital agrees to cooperate with IOPO in identifying Potential Donors in order to maximize the number of usable Organs donated, providing Timely Referral to IOPO of Imminent Deaths and deaths which occur in Hospital; allowing families of Potential Donors to be informed of the potential for Organ, Tissue, or Eye donation; and maintaining Potential Donors under the direction and guidance of IOPO while necessary determinations of medical suitability, testing and placement of Organs can take place. Hospital agrees to cooperate with IOPO in supporting a patient's right to donate Organs, Tissue and Eyes when an appropriate declaration of gift has been made by the patient, even if that declaration of gift is contrary to the wishes of the next of kin, and, allowing IOPO to appropriately approach all families of medically suitable Potential Donors in order to obtain the consent to donate Organs, Tissue and Eyes, when appropriate, for suitable Potential Donors under eighteen years of age or where no declaration of gift can be found. Hospital hereby requests that IOPO recover all Organs from Donors who die within Hospital that are determined to meet the requirements of medical suitability; and

I. In situations where organs, tissue and eyes are determined not to be medically suitable for purposes of human transplantation, Hospital and IOPO agree that with appropriate consents, procurement may proceed for medical or dental education, research, the advancement of medical or dental science, or therapy.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual covenants contained herein and for other good and valuable consideration, the parties hereby agree as follows:

1. Definitions. For purposes of this Agreement, the following words shall have the meanings indicated herein:

a) "Brain Death" shall mean the condition of death occurring when increased intracranial pressure is sufficient to impede the flow of blood into the brain causing cellular death of the brain tissue and/or herniation; characterized by the absence of electrical activity in the brain, blood flow to the brain, and brain function as determined by the clinical assessment of responses therefor, resulting in complete, irreversible cessation of all functions of the entire brain, including the brain stem.

b) "Clinical Indicators" shall mean the following criteria for a patient with severe, acute brain injury and (i) who requires mechanical ventilation; (ii) is in an intensive care unit, critical care unit or emergency department; (iii) has clinical findings consistent with a Glasgow Coma Score that is less than a threshold of 5, absent central nervous system depressants or an induced coma, or for whom the attending physicians are evaluating a diagnosis of brain death, or for whom a physician has ordered that life-sustaining therapies be withdrawn, pursuant to the family's or guardian's decision.

c) "Conversion Rate" shall mean the number of Potential Donors meeting the medical suitability requirements of IOPO, who actually donate Organs compared to all eligible Organ Donors who die in Hospital, including those for whom consent to donate is not obtained, expressed as a percentage.

d) "Designated Requestor" shall mean an individual designated by the Hospital or IOPO and trained to handle or participate in the donation consent process, who has completed a course offered or approved by IOPO or, in conjunction with a local Tissue and Eye bank, regarding the methodology for approaching the family or person responsible for a Potential Donor and requesting Organ, Tissue or Eye donation.

e) "Donation after Cardiac Death" ("DCD") shall mean an Organ donation process with a patient who has suffered a non-survivable brain injury or cardiac event such that patient death would be imminent subsequent to the removal of mechanical support for circulatory and respiratory functions. A Donor after Cardiac Death means an individual who donates Organs after his or her heart has irreversibly stopped beating and may be termed a non-heart beating systolic Donor.

f) "Donor" or "Potential Donor" shall mean any person who dies in circumstances (causes and conditions of death, and age at death) that are generally acceptable for donation of at least one vascularized Organ, Tissue or Eye; the Potential Donor can be identified in a timely manner; and where proof of the patient's declaration to donate an anatomical gift can be obtained; or, absent such a declaration to donate, permission for donation can be obtained from the family or other legal guardian.

g) "Eye" or "Eyes" shall mean the whole eye or portions of the human eye, including the cornea, corneal tissue, sclera, and vitreous.

h) "Family Services Coordinator" shall mean an employee of IOPO trained in obtaining consent for Organ, Tissue and Eye donations.

i) "Imminent Death" shall mean the time when an individual's death is reasonably expected utilizing the criteria enumerated for Clinical Indicators.

j) "Organ" shall mean a human kidney, heart, lung, pancreas, liver, or intestine (or multivisceral Organs when transplanted at the same time as an intestine).

k) "Procurement Transplant Coordinator" or "PTC" shall mean an employee of IOPO trained in coordinating the process of Organ donation and procurement.

l) "Timely Referral" shall mean a telephone call by Hospital notifying IOPO of an Imminent Death, in sufficient time to give IOPO an adequate opportunity to begin assessment of a Potential Donor prior to the withdrawal of, or discussion with family or guardian regarding, any life-sustaining therapies (i.e., medical or pharmacological support) and as soon as it is anticipated a patient will meet the criteria for Imminent

Death agreed by the OPO and Hospital or as soon as possible after a patient meets the criteria for Imminent Death agreed to by the OPO and Hospital.

m) "Tissue" shall mean other transplantable and non-transplantable tissues of the human body, excluding Organs, and including but not limited to whole heart for heart valves, vascular tissue, connective tissues, skin and bones.

2. Notice of Donor Availability and Consent. Hospital shall, consistent with applicable laws and regulations, cooperate with IOPO in the recovery of Organs, Tissues and Eyes donated from patients who die in the Hospital. Hospital shall cooperate with IOPO to prepare and implement appropriate policies that support the mechanism of the donation of Organs, Tissues and Eyes.

a) Hospital shall provide Timely Referral to IOPO as soon as possible of every individual whose death is imminent or who has died (including calling prior to or at the time Brain Death is declared), in the Hospital. In addition, Hospital shall provide Timely Referral to IOPO or the named donee, if any, when Hospital becomes aware that a person in transit to Hospital is identified as a Potential Donor. IOPO shall preliminarily determine, based upon medical and patient information provided by Hospital, the medical suitability of each Potential Donor for Organ, Tissue and Eye donation according to requirements utilized by IOPO.

b) The determination of death for a Potential Donor shall be made by the Donor's attending physician or by the physician responsible for certifying death at the Hospital. Such physician shall not participate in any procedure relating to removal or transplantation of any Organs, Tissues, or Eyes. IOPO shall not participate in the determination of death of any potential Organ, Tissue or Eye Donor. Notification of a determination of death shall be written into the patient's chart upon pronouncement. IOPO shall verify the determination of death according to applicable State and federal laws prior to proceeding with any anatomical recovery.

c) Hospital shall allow IOPO to determine the medical suitability of any Potential Donor and to use such portable laboratory equipment as may be necessary to facilitate such determination.

d) Hospital shall ensure, in collaboration with IOPO and consistent with federal and state laws, rules and regulations, that a patient's right to donate Organs, Tissues, and Eyes is fulfilled when appropriate declaration of gift is noted, or that the family of each Potential Donor, or person legally responsible for a Potential Donor, is informed of the potential to donate Organs, Tissues, and Eyes, or to decline to donate when the appropriate declaration of gift cannot be found. When a family member or person legally responsible for a Potential Donor is informed about the procedures for making a gift of Organs, Tissue or Eyes, the fact that the family member or representative was so informed shall be noted in the Potential Donor's medical chart. Hospital and IOPO shall encourage discretion and sensitivity with respect to the circumstances, views and beliefs of the families of Potential Donors.

e) IOPO and Hospital shall act in good faith to support a patient's right to donate, and fulfill a patient's wishes to donate anatomical gifts in accordance with the Indiana Uniform Anatomical Gift Act, Indiana Code 29-2-16-2 et seq. (the "Act"). The Act prevents a patient's family from altering a gift declared in writing by an individual under the provisions of the Act. Under the provision of the Act, IOPO shall attempt to obtain any documentation of patient's declared decision to donate, including applicable designations on an individual's driver's license, which may be determined from the Bureau of Motor Vehicles registry or the Donate Life Indiana registry and honor such request in accordance with applicable requirements of law.

f) IOPO shall determine whether a Potential Donor has made a written anatomical gift, and, if so, whether the Potential Donor has subsequently revoked the anatomical gift in writing, in consultation with the family or guardian of the Potential Donor and with any other sources that are reasonably available, and any information received by IOPO shall be provided by IOPO to Hospital, the attending physician, and the physician who certified the Potential Donor's death if there is not an attending physician, and must be documented in the Donor's medical chart.

g) Designated Requestor shall work cooperatively with a Family Services Coordinator in requesting consent for any potential anatomical donation from a Potential Donor's family, when no declared intent by the Potential Donor can be found. If Hospital has actual notice of contrary intent in writing by a Potential Donor, or that the potential donation is opposed by a member of the Potential Donor's family or guardian, which member is of the same or prior class under Indiana law as the family member or guardian granting the consent, Hospital shall notify IOPO of such contrary intent. This shall not prevent IOPO from presenting options for donation to a Potential Donor's family members or guardian.

h) In the event that Organs, Tissue or Eyes are determined not to be medically suitable for purposes of human transplantation, Hospital and IOPO agree that with appropriate consent, procurement and all examinations necessary to assure suitability may proceed for donation for medical or dental research or education, the advancement of medical or dental science, or therapy.

3. Organ, Tissue and Eye Procurement. The procedures undertaken to procure donated Organs, Tissue and Eye shall be supervised by PTC, or other professional procurement personnel, provided by and or contracted by IOPO, with specialized training in transplantation, Donor evaluation and management and Organ, Tissue and Eye preservation, to coordinate Organ, Tissue and Eye procurement activities at Hospital, or, to serve as consultants to the Hospital physicians on the staff of Hospital, or when other qualified Organ, Tissue and Eye procurement personnel perform such activities. Hospital agrees to grant access, on an emergency basis in accordance with its Medical Staff rules and regulations, to physicians and other Organ, Tissue and Eye procurement personnel participating in the procurement procedures, case management, and all ancillary activities. Hospital and IOPO agree to cooperate in complying with reasonable requirements of other health care providers and payors in connection with Organ, Tissue and Eye procurement pursuant to the terms of this Agreement.

4. IOPO Obligations. IOPO, consistent with its purposes of performing and coordinating the retrieval, preservation and transportation of Organs, Tissues and Eyes will follow the system of locating prospective recipients pursuant to the rules of the OPTN for available Organs, and educating medical personnel regarding donation issues, shall:

a) provide twenty-four (24) hour availability of a qualified IOPO staff member or PTC to evaluate and determine the medical suitability for Organs, Tissues and Eyes from Potential Donors; assist in the clinical management of the Donor, coordinate the procurement teams for Organ, Tissue and Eye recovery, provide technical assistance during recovery and initiate Organ, Tissue and Eye preservation and recovery;

b) provide a Family Services Coordinator or other qualified IOPO staff member to appropriately inform the family of a Potential Donor of the right to donate or to decline to donate, to seek to obtain consent for donation from the family or person legally responsible in accordance with applicable law, and with discretion and sensitivity to the family or legal guardian.

c) provide in-service training for Hospital personnel involved in Organ, Tissue and Eye donations;

d) educate Hospital personnel regarding donation and transplantation issues;

e) if requested, approve or provide on at least an annual basis a course in the methodology for approaching Potential Donor families and requesting Organ and Tissue donation for the purposes of training Hospital personnel to become Designated Requestors, which training shall also be designed in conjunction with the tissue and eye bank community, if Hospital chooses to use Hospital personnel to perform such tasks;

f) provide a physician or other qualified and trained personnel to assist in the medical management of the Potential Donor during the time of actual procurement of Organs, Tissues and Eyes and provide assistance to physicians who are members of the Medical Staff of Hospital to provide such services, and IOPO's Medical Director shall provide oversight and assistance in the clinical management of a Potential Donor when the Hospital physician on call is unavailable;

g) ensure that IOPO personnel and IOPO contractors providing services under this Agreement are trained in the proper methods necessary for Donor screening, determining medical suitability, requesting consent for donation, procurement, transportation and preservation of Organs, Tissue and Eyes, efficient placement of Organs, Tissue and Eye, and oversight of Organ, Tissue and Eye recovery;

h) determine whether there are conditions that may influence or affect the medical suitability and acceptance of a Potential Donor;

i) to the extent reasonably practical, obtain the medical and social history of a Potential Donor;

j) review the medical chart of a Potential Donor and perform a physical examination of a Potential Donor;

k) obtain the vital signs of a Potential Donor and perform all pertinent tests, including blood typing using two separate samples from each Potential Donor;

l) document each Potential Donor's medical chart with all test results, including blood type, before beginning Organ or Tissue recovery;

m) if IOPO recovers Organs from a DCD Donor, IOPO shall maintain and follow protocols for evaluating DCD Donors; for withdrawal of support, including the relationship between the time of consent to donation and the withdrawal of support; the use of medications and interventions not related to the withdrawal of support; the involvement of family members prior to Organ recovery; and criteria for the declaration of death and time period that must elapse prior to Organ recovery;

n) provide qualified and trained personnel, materials, certain pharmaceuticals and equipment for recovery and preservation of Organs and Tissues after their procurement;

o) utilize Organs procured at Hospital in accordance with the rules and requirements of OPTN and UNOS, and requirements of law, to recipients deemed suitable in accordance with sound medical practice;

p) utilize Tissues procured at Hospital in accordance with sound medical practice and in accordance with standards recognized by the FDA and AATB;

q) if requested by Hospital, provide Hospital with information as to the eventual disposition of all Organs procured at the Hospital;

r) reimburse Hospital at a rate consistent with national Organ procurement standards that are reasonable and customary for the Indiana region as determined by American Medical Bill Review ("AMBR"), for all costs associated with procurement of Organs from Donors preliminarily approved as medically suitable from and after the time of death of the Donor is determined and proper consent is obtained, in accordance with existing applicable CMS regulations;

s) pay private physicians not otherwise compensated through Hospital for reasonable and customary procurement fees for services related to procurement activities, unless IOPO and a physician have entered into a separately negotiated agreement for charges related to procurement activities;

t) make arrangements for histocompatibility tissue testing and testing for potentially transmittable diseases according to the current standards of practice to determine the medical acceptability of the donated Organs for the purposes intended, which shall be performed by a laboratory that is certified in the appropriate specialty or subspecialty of service and meeting the requirements specified by UNOS, in accordance with the guidelines specified by the Center for Disease Control and other applicable laws and regulations;

u) send complete documentation of Donor information including Donor's blood type and other vital data necessary to determine compatibility for purposes of transportation, the complete record of Donor's management, documentation of consent, documentation of the pronouncement of death, and documentation regarding determining Organ quality to the Transplant Center that will utilize each Organ; and two individuals, one of whom must be an IOPO employee, must verify that the documentation that accompanies an Organ is correct;

v) conduct reviews, on at least a monthly basis, of death records in every Medicare and Medicaid participating hospital in its Donation Services Area that has a Level I or Level II trauma center or 150 or more beds, a ventilator and an intensive care unit (unless the hospital has a waiver to work with an Organ procurement organization other than IOPO), with the exception of psychiatric and rehabilitation hospitals; to make an assessment of the medical charts of deceased patients to evaluate the potential for Organ donation; and in the event that missed opportunities for donation are identified, IOPO, working with Hospital, shall implement actions reasonably necessary to improve performance in identifying such opportunities;

w) establish written policies to address the process for identifying, reporting, thoroughly analyzing and preventing adverse events that may occur during the Organ and Tissue donation process, and use the analysis to affect changes in IOPO's policies and procedures to prevent the repetition of adverse events during Organ and Tissue donation;

x) maintain a toll-free telephone number (800-356-7757) to facilitate the central referral of Organ, Tissue and Eye donations within the IOPO Donation Service Area; and

y) either directly or through a contract with an answering service, shall cause Organ, Tissue and Eye donation referrals to be referred to IOPO and its on-call staff.

5. Additional Hospital Obligations. In addition to those obligations set forth in Section 2 of this Agreement, Hospital shall:

a) comply with the requirements of Section 1138 of the Social Security Act (42 U.S.C. § 1320b-8) and the regulations of the Centers for Medicare and Medicaid Services; all anatomical gift legislation of the State of Indiana; and other legal requirements applicable to Organ, Tissue and Eye donation;

b) allow IOPO to use ancillary laboratory facilities, other than any available at Hospital, for tests of Organ function, blood typing, and other indicated clinical studies of Potential Donors as directed or requested by IOPO;

c) maintain certification of Hospital laboratory testing under the Clinical Laboratory Improvement Amendments of 1988 ("CLIA") and regulations of the Centers for Medicare and Medicaid Services, 42 C.F.R. Part 493.

d) in a timely manner provide intensive care or other clinical support for optimum maintenance of Potential Donors prior to Organ, Tissue and Eye procurement, to follow procedures and protocols as specified by IOPO for Organ, Tissue and Eye procurement; and work cooperatively with IOPO in the optimum maintenance of Potential Donors while necessary testing and placement of potential donated Organs takes place;

e) shall adopt a protocol for DCD Donors, and notify IOPO of Hospital's DCD protocol, and to take all steps required under such protocol for determinations of death as provided in subsection 5. (f) below;

f) in a timely manner provide physicians to determine the death of Potential Donors in compliance with applicable state law and in accordance with standard medical practice;

g) work cooperatively with IOPO on providing access to Potential Donor medical records, in providing appropriate access to Hospital's information system;

h) provide IOPO with wired or wireless secure high-speed internet connection within the Hospital, at no charge to IOPO, for the purpose of facilitating the evaluation, maintenance, recovery, placement, and medical charting of Donors, in order for IOPO to provide Donor information to UNOS, and, if Hospital cannot provide a high speed Internet connection, Hospital agrees to work with IOPO to make the best alternative Internet connection available, which could include wireless Internet access cards or a dial-up connection;

i) provide an operating room with staff if needed (including surgical, anesthesia, and nursing) and materials deemed appropriate by IOPO for performing cadaveric Organ recovery, and assistance in performing all reasonably necessary tests and examinations, and if Hospital does not have appropriate operating room facilities, to follow procedures and protocols as specified by IOPO until such time as a potential Donor can be transported to another medical facility with appropriate facilities;

j) provide an itemized bill of all services for each Organ or Tissue Donor for which Hospital seeks reimbursement, and ensure that the family of an Organ or Tissue Donor, or person financially responsible for payment of the expenses for medical and surgical care for the Donor, is not charged or billed for expenses related to Organ or Tissue donation and to furnish to IOPO, upon request, an itemized statement of expenses billed to the Donor family or other responsible party, relating to the Donor's medical and

surgical care and treatment to confirm that no such charges or bills were remitted, and to limit the total facilities or other charges for the procurement of Tissues and Eyes to an amount not greater than $500;

k) work cooperatively with IOPO in the education of Hospital staff and the community regarding donation issues;

l) enter a notation in a patient's chart when Timely Referral is provided to IOPO;

m) cooperate with IOPO and provide the assistance of at least one qualified Hospital employee to assist in verifying that documentation, including Donor blood type and other vital data necessary to determine compatibility for purposes of transplantation, specified in subsection 4. (u) of this Agreement that accompanies an Organ to a Transplant Center is correct;

n) cooperate with IOPO in performing death record reviews as specified in subsection 4. (v) of this Agreement; and, if required, to cooperate with IOPO in implementing actions deemed reasonably necessary to improve the opportunities for identifying Potential Donors;

o) cooperate with IOPO in identifying, reporting, analyzing and preventing adverse events that may occur during Organ, Tissue or Eye donation at Hospital, as specified in subsection 4(u) of this Agreement, and cooperate with IOPO in taking all steps deemed reasonably necessary to prevent the repetition of adverse events during Organ or Tissue donation at Hospital; and

p) prepare and implement written policies supporting a program for monitoring the effectiveness of its Organ donation and procurement program by collecting and analyzing records regarding Potential Donors and referrals to IOPO, and Hospital's Conversion Rate data, and, where possible, taking steps to improve the Conversion Rate

6. Retention and Access to Records. In accordance with the Omnibus Reconciliation Act of 1980, 42 U.S.C. § 1395x(v)(I) and regulations thereunder, IOPO and Hospital agree that each shall retain and for four years after services are furnished by either hereunder, shall allow the Comptroller General of the United States and the United States Department of Health and Human Services, and their duly authorized representatives, access to this Agreement and to such of the books, documents and records of each as are necessary to verify the costs of services performed hereunder, provided that the said access is required by the cited law and regulations and further provided that the request for access complies with the procedural requirements of those regulations.

7. Independent Contractors. In the performance of all obligations hereunder, the relationship of Hospital and IOPO shall be that of independent contractors, and neither shall be deemed to be the partner or agent of the other, and no party shall withhold or in any way be responsible for the payment of any federal, state, or local income or occupational taxes, F.I.C.A.

taxes, unemployment compensation or workers compensation contributions, or any other payments for or on behalf of any other party or any person on the payroll of any other party.

8. Professional Liability. IOPO and Hospital shall each, at all times, qualify and comply with the procedures to be and remain qualified health care providers pursuant to the Indiana Medical Malpractice Act, as amended, Indiana Code § 34-18-1-1 et seq. and shall maintain professional malpractice liability insurance coverage or other qualifying financial responsibility in accordance with the applicable liability limits or securities as specified therein, and pay the annual surcharges levied by the Indiana Department of Insurance.

9. Indemnification. Hospital and IOPO shall protect, defend, indemnify and hold harmless the other party from and against all claims, losses, demands, damages and causes of action, including reasonable attorney fees arising or in any way resulting from the indemnifying party's willful or negligent acts or omissions or the acts of the indemnifying party's agents or employees, in providing services pursuant to this Agreement. Said indemnification shall be limited to the maximum exposure permitted under Indiana Code § 34-18-1-1 et seq., unless insurance coverage in a greater amount is possessed by the indemnifying party.

10. Governing Law. This Agreement shall be controlled by and construed under, the laws and regulations of the State of Indiana and applicable federal laws and regulations.

11. Compliance with Social Security Act. The parties agree that all provisions of this Agreement shall be interpreted in such a manner as to comply with the requirements of Section 1138 of the Social Security Act, as added by Section 9318 of the Omnibus Budget Reconciliation Act of 1986 (42 U.S.C. § 1320b-8), and rules or regulations adopted pursuant to that law relating to Organ procurement.

12. Confidentiality of Patient Records. The parties agree to maintain the confidentiality of patient records pursuant to state and federal laws and regulations. However, to the extent permissible, the parties agree to cooperate in the exchange of information and records as may be necessary to carry out the terms of this Agreement, including obtaining information for inclusion in any IOPO originated donation chart as required by federal law. IOPO may disclose Donor medical and patient information to physicians providing treatment for Organ, Tissue or Eye recipients to entities that process or distribute Tissue or Eyes, to Transplant Centers receiving Organs, Tissue and Eyes, to the local coroner, and as may otherwise be required by applicable laws or regulations. IOPO may disclose medical and billing information to institutions providing reimbursement of expenses related to Organ donation and procurement.

13. Termination. This Agreement shall remain in effect until terminated by either party. Termination may be made by either party upon 90 days prior written notice to the other.

14. Waiver. The failure of any one party hereto to enforce any breach or to enforce any lack of performance of any covenants or obligations contained herein shall not constitute the waiver of that breach or of any similar subsequent breach of this Agreement.

15. Amendment. This Agreement represents the entire agreement between the parties hereto, and supersedes any prior stipulation, agreement, or understanding of the parties, whether oral or written. Any modification of this Agreement shall be invalid unless stated in writing and signed by both parties hereto.

16. Notice. All communications, notices and demands of any kind which either party may be required or desires to give or serve upon the other party shall be made in writing and sent by registered or certified mail, postage prepaid, return receipt requested, to the following addresses:

Hospital:

Linda Decker, RN, BSN, MHA
Clarian Arnett Health
P.O. Box 5545
Lafayette, IN 47903-5545

IOPO:

Lynn Driver, President/CEO
Indiana Organ Procurement Organization, Inc.
429 N. Pennsylvania St., Suite 201
Indianapolis, IN 46204-1816

Either party hereto may change its address specified for notices herein by designating a new address in accordance with this paragraph.

17. Separable Provisions. If any provisions hereof shall be, or shall be adjudged to be, unlawful or contrary to public policy, then that provision shall be deemed to be null and separable from the remaining provisions hereof, and shall in no way affect the validity of this Agreement.

18. Discrimination. The parties hereby warrant that each party is and shall continue to be in compliance with the Civil Rights Act of 1964 and the Rehabilitation Act of 1973. No person shall, on account of race, color, religious creed, national origin, ancestry, sex, handicap or age be unlawfully excluded from participation in any program sponsored by either of the parties of this Agreement.

19. Debarment. IOPO and Hospital each represents and warrants to the other, that neither it nor any of its affiliates, officers, directors, subcontractors, or employees, is barred from participating in federal or state health care programs, or has been convicted of a criminal offense with respect to health care reimbursement. IOPO and Hospital shall notify the other immediately if the foregoing representation becomes untrue, or if it is notified by the Office of the Inspector General of the Department of Health and Human Services or other enforcement agencies that an investigation of IOPO or Hospital has begun which could lead to a sanction, debarment, or conviction.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year first written above.

CLARIAN ARNETT HEALTH	INDIANA ORGAN PROCUREMENT ORGANIZATION, INC.
By: Linda Decker CNE	By: Lynn Driver
Printed: LINDA Decker	Printed: Lynn Driver
Its: Chief Nurse Executive	Its: President/CEO
Date: 3-11-08	Date: 2.20.08
"HOSPITAL"	"IOPO"

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Indiana University Health	Section: ADMCL Policy #: 4.01	Effective Date: April 2013
	Author/Responsibility: Laurie Inman Title: ICU Manager	Next Review Date: April 2016

ORGAN, TISSUE, AND EYE DONATION

APPLIES TO: ☒ **Organization (Arnett)** ☐ **Departmental (Arnett)**

POLICY STATEMENT

A. IU Health Arnett is committed to facilitating the donation of organs, tissues, and eyes in the broad interest of society and for those awaiting transplantation.

B. Hospital and IOPO shall encourage discretion and sensitivity with respect to the circumstances, views and beliefs of families of Potential Donors

C. IU Health Arnett is committed to ensuring that each family of potential donors is informed by qualified and skilled staff, of the options to donate organs, tissues, or eyes. All donations related approaches to potential donor families will be initiated only by the IOPO staff.

D. IU Health Arnett staff shall provide timely referral to IOPO of every individual whose death is imminent or has died; or when we become aware that a person in transit to hospital is identified as a potential donor.

E. If the patient dies during a transfer from one hospital to another, it is the receiving hospital's responsibility to notify the IOPO.

F. IOPO will determine medical suitability of Potential Donor

OBJECTIVE

To establish the protocols that support an effective organ, tissue, and eye donation and procurement process.

RESPONSIBILITY

All hospital staff, medical staff, and IOPO staff that participate in direct patient care at IU Health Arnett.

DEFINITIONS

Clinical Indicators: The following criteria for a patient with severe, acute brain injury and (i) who requires mechanical ventilation; (ii) is in an intensive care unit, critical care unit or emergency department; (iii) has a Glasgow Coma Score that is less than or equal to 5, absent central nervous system depressants or an induced coma, or for whom the attending physicians are evaluating a diagnosis of brain death, or for whom a physician has ordered that life-sustaining therapies be withdrawn, pursuant to the family's or guardian's decision.

Designated Requestor: Person who is specially trained and certified by IOPO to approach the potential donor families about the option to donate organs, tissues, or eyes. For IU Health Arnett Hospital, IOPO staff (ONLY) serves as the Designated Requestors.

Donor or Potential Donor: Any person who dies in circumstances (causes and conditions of death and age at death) that are generally acceptable for donation of at least one vascularized Organ, Tissue or Eye; the Potential Donor can be identified in a timely manner; and where proof of the patient's declaration to donate an anatomical gift can be obtained; or, absent such a declaration to donate, permission for donation can be obtained from the family or other legal guardian. Suitability and consent is obtained by IOPO Requestors.

Imminent Death Triggers: The time when an individual's death is reasonably expected utilizing the criteria enumerated for Clinical Indicators. This includes, but not limited to:

- Patient in ICU or ED with severe, acute brain injury who requires mechanical ventilation and exhibits clinical findings consistent with a Glascow Coma Score that is less than or equal to 5
- Terminal Wean: Ideally, IOPO will be contacted prior to the physician having the end of life conversation with the family of withdrawal of life sustaining therapies. This includes removal of medications, fluids, etc.
- Physician is evaluating a diagnosis of brain death

IOPO: Indiana Organ Procurement Organization (800-356-7757)

Reportable Deaths: All deaths requiring a death certificate or fetal death certificate (stillborns and newborns more than 20 weeks gestation) as required by the Indiana State Department of Health.

Timely Referral/Notification: A telephone call by Hospital staff notifying IOPO of an Imminent Death, in sufficient time to give IOPO an adequate opportunity to begin assessment of a Potential Donor prior to the withdrawal of, or discussion with family or guardian regarding any life-sustaining therapies (i.e., medical or pharmacological support) and as soon as it is anticipated a patient will met the criteria for Imminent Death. Ideal timeframes for calling is within 1 hour of identification of the clinical trigger (s) and/or within 1 hour of identifying imminent death.

PROCEDURE

A. Education and Collaboration with Organ/Tissue/Eye Bank
   1. All hospital patient care staff and physicians will be educated about the donation process upon their initial orientation, and thereafter as indicated.
   2. IOPO is our designated OPO, tissue bank and eye bank and will participate in the staff and physician training curriculum development.

B. Determining medical suitability for donation/Triggers to refer
   1. Hospital staff will provide timely referral to IOPO of every individual whose death is imminent or who has died (including calling prior to or at time of Brain Death declaration) by calling 1-800-356-7757.
      a. Clinical Triggers for calling imminent deaths include
         i. Call for vented patients with a Glasgow Coma Scale less than or equal to 5
         ii. Call at first mention from a physician or family about considering a terminal wean
         iii. Ideally IOPO will be contacted prior to the physician having end of life conversation with the family related to withdrawal of life sustaining therapies. Must call before initiating the terminal wean process.

iv. Ideally IOPO will be contacted prior to terminally, critically ill patient status being changed to DNR, prior to any fluids and medications, etc being discontinued.

b. Ideal timeframes for calling is within 1 hour of identification of the clinical trigger(s) and/or within 1 hour of identifying imminent death

2. Family will not be approached about the donation option prior to IOPO determining medical suitability. If determined to be medically suitable, only IOPO staff will approach the family.
3. At the time of notification referral, the IOPO or designee will make the initial determination of medical suitability for donation.
4. No mechanical or pharmacological support will be withdrawn from the dying patient prior to this referral call and the IOPO determination of medical suitability for donation.

C. Approaching family and initiating the consent process

1. Discussion of donation with families will not occur until after medical suitability has been determined by IOPO, unless the subject is first initiated by the family. If this happens, the hospital will immediately notify IOPO for follow-up discussions.
2. If the patient is determined to be medically unsuitable for donation by IOPO, the medically unsuitable determination will be documented in the patient's medical record and the family will not be offered the donation option.
3. If the patient is determined to be medically suitable for donation, the patient's family will be approached about donation by the IOPO personnel. This approach may happen in person, or by phone, as appropriate to the particular situation. The hospital staff will obtain family contact number(s); but will not discuss potential donation. If the family brings up the topic, hospital staff will refer to IOPO for further discussion.
4. Under Indiana's Uniform Anatomical Gift Act (UAGA), if a person is medically suitable for donation and knowledge of the donors' legal declaration of an anatomical gift is known, Indiana law considers this declaration authorization to proceed with donation. Evidence of a declaration of gift may include, but not be limited to a government issued driver's license or identification card or, through documentation from an appropriate anatomical gift registry. A driver's license that is suspended, revoked or expired does not change the validity of the declaration of gift. Upon determination by the Organ Procurement Organization that a declaration of gift is valid, no further approval is required from the patient, patient's next of kin, agent or POA in order to proceed with the donation of organs and/or tissue.
5. Documentation of the family acceptance or decline of the opportunity will be documented in the medical record. IOPO documents this on their authorization form to which the hospital receives a copy to scan into the chart.

D. Coroner's cases

1. If it is determined that the case is a Coroner's case, the Coroner must be notified and must approve release of the body. Refer to policy and procedure entitled "Coroner's Cases".

E. Organ/Tissue/Eye Procurement

1. Brain death organ donation procurement is performed in Surgery.
2. Post mortem tissue, bone, non-heart beating organs, and enucleations will be procured in surgery (ideal) or in a pre-approved procedure area (if absolutely necessary). It can also be completed in the OR suites at the IOPO offices if family gives authorization for transport. The area must be compliant with AATB guidelines.

F. Charges: Brain Death, Beating Heart Organ Donation

1. Charge/billing transfer: Once consent is given, and brain death has been declared, and the body is being maintained for organ procurement, the hospital staff notifies Registration of the patient's name, medical record number, account number, and the date and time the patient became a donor.
2. All orders from this point will be written under the IOPO medical direction. All charges from this point will be assigned to and billed to IOPO. Prior to brain death declaration, lab tests may be suggested by the IOPO transplant coordinator to determine donor suitability. These orders must be in writing and signed by the attending physician. The cost of studies done prior to brain death determination is not covered by IOPO.

G. Performance Improvement

1. Records of potential donors will be shared with IOPO. The hospital is not required to perform credentialing reviews for or grant privileges to members of the organ recovery teams. IOPO sends only qualified and trained individuals to perform recovery.
2. Review of death records and conversion rate data will be coordinated by the Quality Department, in collaboration with IOPO, and reported to the Board of Directors. The goal is to continuously improve identification of potential donors, to optimize outcomes of the donor process, and to identify continuing education needs.

FORMS/APPENDICES
ADMCL4.01a: IOPO pathway

REFERENCES
Medicare Conditions of Participation: Organ, tissue, and eye procurement. 482.45(a); 482.45(a)(1)

HFAP 2012-2013 Accreditation Standard for Acute Care Hospitals, Chapter 14

Indiana Organ Procurement Organization

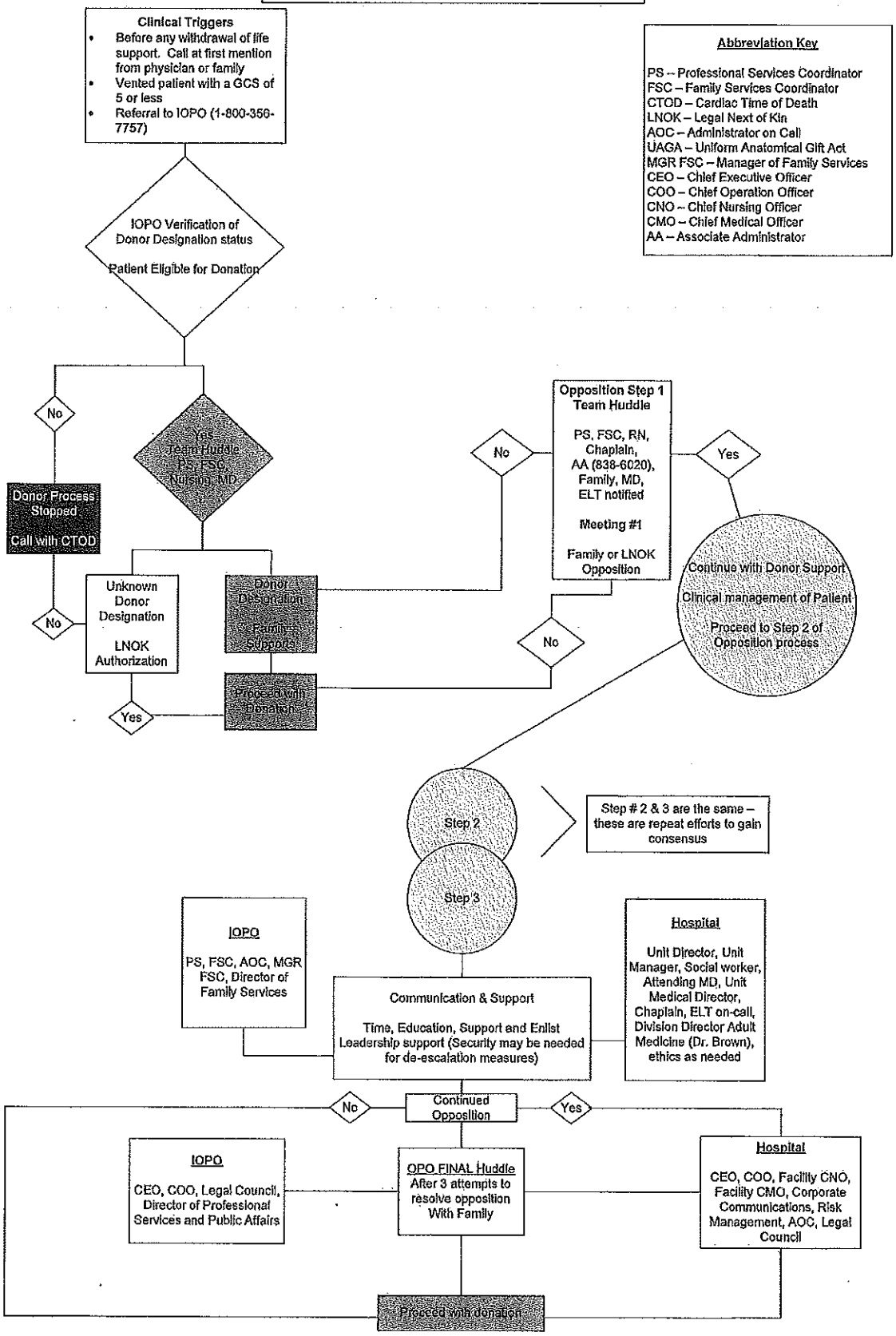
CROSS REFERENCES
Policy ADMCL5.03 Advance Directives
Policy ADMCL4.08 Autopsy and Coroners' Cases
Policy ADMCL4.03 Care at the Time of Patient Death
Policy ADMCL 4.00 Organ Donation After Circulatory Death (DCD)

APPROVAL BODY
Acute Care Quality and Safety
Board of Directors

APPROVAL SIGNATURES
Chief Nursing Executive/VP Patient Care Services

DATES
Effective Date: July 2008
Revision Dates: April 2011
August 2012
April 2013

Organ Donor Pathway for Designation of Brain Dead Donor



8/8/2012 (Collier)

Indiana University Health	Section: ADMCL Policy #: 4.03	Effective Date: October 2011
	Author/Responsibility: Sally Lowrey Title: Nursing Quality Specialist	Next Review Date: October 2014
CARE AT THE TIME OF PATIENT DEATH		
APPLIES TO: ☒ **Organization (Arnett)**	☐ **Departmental (Arnett)**	

I. PURPOSE

A. The purpose of this policy is to provide standards of care at the time of patient death.

II. SCOPE

A. This policy does not address fetal death. Refer to ADM 4.10 Care of Products of Conception/Deceased Fetuses in the OB/ED Area.

III. DEFINITIONS

Designee Registered Nurse in the case of anticipated deaths.

Criteria for Coroner's Case
Criteria for Autopsy
See policy ADMCL 4.08 Autopsy and Coroner's Cases

IV. POLICY STATEMENT(S)

A. It is the policy of IU Health Arnett to provide individualized support to families and loved ones at the time of a patient's death, recognizing that death is not only a physical, but also a spiritual and emotional experience.

V. RESPONSIBILITY

All members of the patient care team are responsible to follow this policy and procedure. Outpatients not assigned an inpatient bed or visitors that expire within the hospital will be transported to the Emergency Department for preparation. Inpatients that expire in an ancillary department will be returned to the nursing care unit for preparation.

VI. PROCEDURE

A. The RN will initiate the Notice of Death checklist.

B. Hospital staff will refer all deaths, including all expected, impending deaths of patients who are mechanically ventilated, to the Indiana Organ Procurement Organization (IOPO-800-356-7757) for determination of medical suitability for donation. Refer to Policy & Procedure entitled Organ, Tissue, and Eye Donation, ADMCL 4.01 and Organ Donation

After Cardiac Death ADMCL 4.00. If medical suitability is determined to be affirmative, IOPO will assume the next-step responsibility for family conversations, education, consent, etc.

C. The attending physician or designee will pronounce the patient's death, determining date and time of death. This person will assume primary responsibility and accountability for timely and appropriate notification of the patient/s family, including discussion regarding autopsy. If a Registered Nurse assesses for cessation of life signs in situations of anticipated death and calls the assessment findings to the attending physician, the attending physician may pronounce the patient dead, based on the RN assessment. The RN will document the verbal MD pronouncement in the patient's chart and the MD will be asked by the mortician to sign the death certificate.

D. See Policy & Procedures entitled Autopsy and Coroner's Cases ADMCL 4.08 for additional information.

E. The nursing staff will notify all physicians involved with the patient's care of their patient's death.

F. The nursing staff will initiate completion of the Provisional Notification of Death-Burial Transit Permit. The form is obtained by calling the Bed Placement Office. The Bed Placement Office maintains the death log, matching the numbered Provisional Notification of Death-Burial Transit Permit forms to the patient, and faxes the completed form to the County Health Department.

1. Nursing will fill out part A, including the name and address of the physician who will be signing the death certificate.
2. Nursing will fill out Part B-write the name of the Funeral Home responsible for transport
3. Bed Placement will fax the form to the Tippecanoe County Health Department, Vital Records at (765) 423-9797 with 24 hours of the death.
4. Bed Placement will retain the fax confirmation sheet and the pink copy of the Burial Transit Permit.
5. Hospital will use the burial transits in chronological order. If a mistake is made on a transit, call the Death Registrar at the Tippecanoe County Health Department to notify of the mistake/disposition of the numbered form.

G. The nursing staff/hospital staff will assess for emotional, spiritual, and physical needs of the family. As feasible, all efforts will be afforded to allow for the unique/individual cultural and religious preferences related to grief and mourning rituals.

H. If the patient had been receiving sealed source radiation therapy or other therapy involving radioactive material, the nursing staff will contact the Radiation Safety Officer or Radiation Therapist

I. Care of the body prior to family viewing:

1. Non-Coroner's case
    1. Remove any O2 devices, IV tubing, NG, or drainage tubes, traction, etc.

2. Remove all surgical dressings. Replace with clean dressing if drainage is present.
3. Provide personal hygiene as needed and place a clean incontinent pad and lifting sheet underneath the patient. Place a clean gown on the patient, and cover with a clean sheet.

2. Coroner's case
   1. The body is not be cleaned and no lines/drain/stubs are removed without the consent of the Coroner; however lines, drains and tubes may be trimmed, leaving a minimum of 6-inches for patient viewing and transport reasons.
3. Standard Precautions should be maintained.

J. Family viewing: Provide appropriate support. If the body needs to be moved prior to the arrival of the family, special arrangements will be made for family to view the body in a supportive atmosphere. Staff should consider the family's cultural preferences. It is generally accepted that the patient's body will be transported to the body holding area within a 2-hour timeframe. There is no appropriate viewing capability in the body holding area.

K. The nurse/designee will determine from the family their choice for funeral home and obtain a primary and secondary telephone number where family members can be reached to discuss arrangements. The mortician generally does not remove the body form the patient care unit unless specifically requested by the family.

L. Whenever possible, the patient's personal belongings will be given to the family members. If no family is available to receive the belongings, they will be sent with the body. Medications will be returned to pharmacy for disposal.

M. Following family viewing:
1. Verify the presence of a hospital armband.
2. Print a copy of the face sheet to accompany the body.
3. In cases of Autopsy, the original consent shall also accompany the body.
4. Obtain the body bag kit. Compete the ID tags, and place one on the patient's big toe or around the ankle (if bilateral amputee, place in a necklace fashion around the patient's neck); place one with any property not taken by the family; place one on the body bag zipper pull. Place the body in a supine position in the body bag. Do not force the mouth or eyes closed.
5. Do not remove. If the patient has dentures but not currently in, send them with the body in a denture cup.

N. Upon completion of the body preparation, family viewing and completion of required documents, the nurse / designee will notify the chosen funeral home, provide the requested information and advise them the body is prepared for removal. Instruct the funeral home to contact Houston when approaching the hospital, requesting Security assistance at the loading dock entrance.

O. In cases of Autopsy, the nurse / designee will notify:

1. The chosen funeral home, advising of the pending autopsy and to expect a call from IUMC Autopsy Services, Indianapolis when the autopsy in complete and the body is ready for removal.
2. IUMC Autopsy Services Triage Pager (317-312-5623) to advise of the autopsy
3. Bell Professional Mortuary Service (317-861-6068) to arrange for transfer of the body to IUMC Autopsy Services
4. Indianapolis IU Health Security (317-962-8000) to advise of pending body arrival per Bell

P. Following notifications, the nurse / designee will contact Houston, who will arrange transportation of the body to the body holding area and will notify Security. The body will be transported to the Body holding area by Transportation Services if available, or Nursing Services if after hours. Small infants may be carried to the body holding area.

Q. Upon arrival of the funeral home, Security will escort the funeral home representative to the body holding area, confirm identification of funeral home representative; identification of body and personal belongings and obtain the representative's signature on the Provisional Notification of Death Burial Permit.

R. Security will return the pink copy of the Provisional Notification of Death Burial Permit to the Bed Placement Office for placement in the Death Log Book.
1. Bed Placement Office will fax a copy of the initiated form to the Tippecanoe County Health Department Vital Records at (765) 423-9797 within 24 hours of the death.

S. Unclaimed Deceased: Chaplain or social services will make an earnest effort to locate family, guardian, or friends of the deceased if no family is present and the patient's body is unclaimed. If the deceased was a resident of an Extended Care Facility (ECF), contact the ECF for funeral home information. If the unclaimed deceased was a Medicaid recipient, contact the Department of Public Welfare for further procedural instructions. If the deceased was not-Medicaid, contact the deceased Township Trustee.

T. Documentation
1. Provisional Notice of Death-Burial Transit Permit Form, section A, including the name of the physician (medical certifier), address and phone number. This will help the Department of Health to know where to send the Death Certificate. Complete Section B, which includes the name of the Funeral Home that is accepting custody. The person picking up the body will then sign the form (per security). The form must accompany the body. The hospital retains the pink copy and retains the fax confirmation record.
2. Personal Property List
3. Printed copy of the Face Sheet
4. Original Autopsy Consent, if applicable.
5. Anatomical Gift Approval/Disapproval Form-IOPO
6. Patient's Medical Record-include date, time of death, and name of physician that pronounced the death; documentation that the family was notified; narrative note; resuscitation if appropriate; description and disposition of property and valuables.
7. Death Log Book is maintained by the Bed Placement Office

VII. FORMS/APPENDICES

ADMCL4.03a: Attachment to ADMCL4.03 Care at the Time of Death

VIII. CROSS REFERENCES

Policy ADMCL4.01: Organ, Tissue, and Eye Donation
Policy ADMCL4.08: Autopsy and Coroner's Cases
Policy ADMCL4.00: Organ Donation After Cardiac Death

IX. APPROVAL BODY

Clinical Practice Council

X. APPROVAL SIGNATURES

Chief Nursing Executive/VP Patient Care Services

XI. DATES

Effective Date: June 2008
Revision Dates: November 2008
January 2009
April 2011
October 2011

Indiana University Health	Section: ADMCL Policy #: 4.00	Effective Date: April 2013
	Author/Responsibility: Laurie Inman, RN Title: ICU Manager	Next Review Date: April 2016

ORGAN DONATION AFTER CIRCULATORY DEATH (DCD)

APPLIES TO: ☒ **Organization (Arnett)** ☐ **Departmental (Arnett)**

PURPOSE

To provide organ donation opportunity to families of patients who have made the decision to withdraw life-sustaining ventilator support.

POLICY STATEMENT

A. IU Health Arnett is committed to facilitating the donation of organs, tissues, and eyes in the broad interest of society and for those awaiting transplantation.

B. Hospital and IOPO shall encourage discretion and sensitivity with respect to the circumstances, views and beliefs of families of Potential Donors

C. IU Health Arnett is committed to ensuring that each family of potential donors is informed by qualified and skilled staff, of the options to donate organs, tissues, or eyes. All donations related approaches to potential donor families will be initiated only by the IOPO staff. A multi-disciplinary patient and family-centered approach is utilized

D. IU Health Arnett staff shall provide timely referral to IOPO of every individual whose death is imminent or has died; or when we become aware that a person in transit to hospital is identified as a potential donor.

E. IOPO will determine medical suitability of Potential Donor

F. The patient's bedside RN will continue to provide care assess the patient, and document per ICU protocols and guidelines until time of death

G. The patient's physician will continue to provide medical orders and treatment plans until the time of death

RESPONSIBILITY

Critical Care Medical and Nursing personnel; Respiratory Therapy; Operating Room personnel; IOPO Family Services and Surgery personnel.

DEFINITIONS

Donation After Circulatory Death (DCD): Organ recovery from patient after death is pronounced.

OR Team: Scrub and two (2) circulators provided by the hospital OR to assist IOPO recovery team

Responsible Physician: Attending physician that will supervise the life support withdrawal process and certify death. This physician cannot be in any way associated with the organ recovery process.

Recovery Team: Transplant recovery team whose only role is to recover the donated organs.

IOPO Coordinators: IOPO staff assigned to coordinate donation process and facilitate communications.

IOPO Family Services Coordinator (FSC): IOPO staff member who stays with the family during the entire donation process solely for emotional support. This representative is not involved in allocation or recovery.

PROCEDURE

A. Appropriate candidates for DCD shall be limited to the patient who:
   1. Is dependent upon artificial ventilation and not expected to maintain a sustainable respiratory effort without the mechanical ventilator support.
   2. The family, in consultation with the attending physician, has made the decision to withdraw life support.
   3. In the opinion of the responsible physician, cardiopulmonary death is expected to occur within 60 minutes following withdrawal of homodynamic and respiratory support.

B. Donation Opportunity Discussion:
   1. The decision to withdraw life support must be made independent of, separate from, and predating any discussion about donation after cardiac death.
   2. The discussion with the family about the opportunity for donation will only take place AFTER the decision to withdraw life support has been made.
   3. If the patient is determined to be medically suitable for donation, the patient's family will be approached about the donation opportunity only by the IOPO personnel. This approach may happen in person, or by phone, as appropriate to the particular situation.
   4. Documentation of the family acceptance or decline of the opportunity will be recorded in the medical record.

C. Referral and review by IOPO:
   1. Refer to policy ADMCL 4.01 entitled: Organ and Tissue Donation as this subset of patients are already patients we are referring to IOPO for suitability determination.
      a. Hospital staff will refer all deaths, including imminent deaths of patients who are mechanically ventilated to the Indiana Organ Procurement Organization by calling 1-800-356-7757.
   2. The IOPO Coordinator will collaborate with the responsible physician:
      a. Review the medical record for medical suitability.
      b. Review the evaluation of the probability of death within 60 minutes of life support withdrawal.
      c. Verify the physician documentation of the family discussion and decision to discontinue life-sustaining procedures.

D. If found to be unsuitable for DCD donation, the physician will be notified and the reason will be documented in the medical record by the IOPO coordinator.

E. Family Communication/Consent:
   1. The IOPO coordinator will approach the family if the patient is determined to be medically suitable for DCD.
   2. If the family chooses to pursue the DCD opportunity, IOPO will obtain the informed consent which includes:
      a. Organs and tissues that can be donated
      b. A complete explanation of the DCD process
      c. That the location of the death is expected to be in the operating room suite
      d. Organ recovery will take place immediately after the responsible physician pronounces the patient dead
      e. There is no cost incurred by the family for organ donation evaluation or recovery
      f. In the event that the patient does not expire within sixty (60) minutes after discontinuation of life support and is not demonstrating significant progression towards death, the DCD organ donation process will cease and terminal patient care will resume. If this occurs, the financial obligations return to the previous status.

F. The IOPO coordinator will contact the Coroner to obtain permission to proceed with DCD.

G. Patient Care:
   1. The responsible physician will retain full responsibility for the patient until the patient's death is pronounced. The responsible physician will have the option to transfer care to another physician who is willing to facilitate the DCD process.
   2. The responsible physician will make a clinical judgment regarding administration of appropriate medications for comfort measures, as they would with any terminal wean process.
   3. The use of paralytics is prohibited.
   4. Interventions to preserve organ function, but which may cause patient discomfort or hasten death are prohibited.

H. Withdrawal of Life Support
   1. Withdrawal of life support for the DCD candidate will occur in the operating room suite, maintaining the same standards of end of life care as if the terminal wean happened in the ICU.
   2. The transplant recovery team will prep and drape the patient appropriately, then leave the operating suite prior to the family arriving.
   3. Family members (2 maximum) will be offered the opportunity to be with their loved one during the terminal wean time. Every effort is made to provide touching/hand holding for family members. They will be appropriately assisted by the IOPO Family Services Coordinator.
   4. An OR team consisting of a scrub and two circulators will be available to assist with the recovery process. They will leave the OR suite during the process of life support withdrawal.
   5. The responsible physician or designee will be present in the operating suite.
   6. The physician or ICU RN will administer Heparin 300 units/kg IV push.
   7. The physician, ICU RN or the RT will withdraw ventilator support

8. The physician or ICU RN will discontinue all intravenous infusions, excluding medications for comfort care. Cardiac monitoring and invasive blood pressure monitoring will be maintained.

I. Certification of Death
   1. The responsible physician will certify death. The physician will be present at the time of death. Under no circumstances will an incision, for the purpose of organ recovery, be made until death is pronounced. Under no circumstances will cold perfusion catheters be inserted until death is pronounced.
   2. For the purposes of pronouncing death prior to organ recovery, the following will be confirmed by the responsible physician:
      a. Correct cardiac electrode placement
      b. Absence of pulse waveform on arterial line and/or absence of palpable pulse by physician exam or Doppler flow
      c. Apnea via auscultation of breath sounds
      d. Completely unresponsive to stimuli
      e. Five (5) minutes of any of the following electrocardiograph rhythms, confirmed in two (2) different leads:
         i. Electrical asystole
         ii. Ventricular fibrillation
         iii. Pulseless electrical activity
      f. Pulselessness via auscultation of heart sounds
      g. Pupils fixed and dilated
   3. The physician declaring death will document the date and time of death in the patient's hospital medical record and will complete the certificate of death. The family will be informed and support will be provided.
   4. The family will be assisted out of the operating suite by the IOPO Family Services Coordinator will notify the OR personnel of the family's decision whether to return to the critical care unit to await further contact with their loved one following donation, or of they choice to leave the premises at this time. If the family decides to leave the premises at this time, the OR charge nurse will notify ICU and Bed Control to release the ICU bed. The ICU nurse will gather the patient's belongings and return them to the family.
   5. After waiting five (5) minutes post-time of death, the Transplant Recovery Team then re-enters the OR for the recovery process to proceed.
   6. If the family does not wish to view their loved one following donation, the donor's body is transported to the morgue. If they wish to view their loved one following donation, the donor's body is transported back to the ICU room.

J. If the patient does not deteriorate to death within the designated time of 60 minutes and does not demonstrate a significant deterioration towards death, the donation process will cease, patient will be transferred to appropriate, predetermined patient care unit, and comfort/end of life care will be maintained.

K. Recovery of Organs:
   1. After death has been certified, the family will be assisted out of the operating suite, and the Transplant Recovery Team, the IOPO Coordinator, and OR team will arrive.

2. The IOPO Coordinator will determine and inform the recovery surgeon of the warm ischemic time. For the purpose of this policy, warm ischemic time will be defined as the time from pulselessness until the organs have been initially cooled and flushed.

L. IOPO may coordinate formal review of donation cases in order to:
   1. Assure compliance with the DCD policy
   2. Identify problems, complications, opportunities to improve the process
   3. Protect the interests of the donor, families, recipients, hospital, health care providers
   4. Assess the effect of the policy on the family's grief process and determine whether changes should be instituted to improve the process for them.

REFERENCES
Medicare Conditions of Participation: Organ, tissue, and eye procurement. 482.45(a); 482.45(a)(1)

HFAP 2012-2013 Accreditation Standard for Acute Care Hospitals, Chapter 14

Indiana Organ Procurement Organization

CROSS REFERENCES
Policy ADMCL4.01: Organ, Tissue, and Eye Donation
Policy ADMCL5.03: Advance Directives
Policy ADMCL4.08: Autopsy and Coroners' Cases
Policy ADMCL4.03: Care at the Time of Patient Death

APPROVAL BODY
Acute Care Quality and Safety
Board of Directors

APPROVAL SIGNATURES
Chief Nursing Executive/VP Patient Care Services

DATES
Effective Date: July 2008
Revision Dates: April 2011
August 2012
April 2013

Indiana University Health	Section: ADMCL Policy #: 4.08	Effective Date: August 2011
	Author/Responsibility: Norma Gilbert Title: Director of Clinical Excellence	Next Review Date: August 2014

AUTOPSY AND CORONER'S CASES

APPLIES TO: ☒ **Organizational Arnett** ☐ **Department Arnett**

I. PURPOSE

A. To provide guidance to the medical staff regarding autopsies and coroner's cases.

II. SCOPE

A. Applies to all deaths occurring at IU Health Arnett. Members of the medical staff are responsible for compliance with this policy.

III. EXCEPTIONS

A. Fetal death will be handled in accordance with related policies and procedures.

IV. POLICY STATEMENT(S)

A. The medical staff may request an autopsy or notify the coroner in any instance of death.

B. Autopsy permission must be obtained from an Authorized Person. Autopsies meeting the selection criteria will be performed by the IU Health Pathology Laboratory. Expenses for the autopsy and transportation of the body to IU Health Pathology Laboratory will be assumed by IU Health Arnett. The selected funeral home will be responsible for transportation of the body from IU Health Pathology Laboratory to location of the family's choice.

C. The coroner's decision to accept a death for investigation will be on a case by case basis; the investigation may or may not include an autopsy.

V. AUTOPSY PROCEDURE

A. Autopsy Criteria: when one or more of the following criteria are present, the physician shall make a concerted effort to secure autopsy permission:

1. Unanticipated death – all sudden deaths or deaths in which the admission diagnosis suggests death was unexpected.
2. Unusual death of medical-legal or educational interest.
3. Intra-operative or intra-procedural death.
4. Deaths occurring within 48 hours after surgery or an invasive diagnostic procedure.

5. Death in the emergency department or outpatient setting.
6. Death associated with a drug reaction or an adverse event.
7. Death occurring while the patient is being treated under an Institutional Review Board (IRB) therapy/procedure.
8. Maternal death incident to pregnancy or within 7 days following delivery.
9. Stillbirth.
10. Deaths in infants / children when congenital malformations and conditions with possible genetic implications.
11. Death where the cause is sufficiently obscure to delay completion of the death certificate.

B. Autopsy Consent:
1. Consent for autopsy must be obtained from an Authorized Person, defined as follows:
   a. Surviving spouse, unless legally separated at date of death
   b. If no surviving spouse, any adult child
   c. If no surviving adult child, a parent
   d. If no surviving parent, the next-of kin residing in the county in which the decedent was a resident
   e. If none of the above, the person assuming custody of the body and financial responsibility for the burial.
   f. Note: Power of Attorney (POA) authority ceases at death, therefore POA consent is not valid for autopsy unless the POA is also an Authorized Person.
   g. Note: If the Authorized Person is unavailable for signature, witnessed telephone consent may be obtained.
2. Complete all parts of the Consent To Autopsy (ADMCL 4.08a)

C. Documentation:
1. Physician / designee shall document that autopsy permission was requested, to whom the request was made and the response.
2. Scan completed consent into Cerner and send the original with the body.

D. Reports and Results:
1. IU Health Pathology Laboratory will provide a written preliminary report of gross pathology diagnosis within 3 working days of the gross autopsy examination. The report will be included the medical record.
2. IU Health Pathology Laboratory will provide final autopsy reports within 60 days, to be included in the medical record.
3. Autopsy findings will be incorporated into the Quality and Safety Program

VI. CORONER'S PROCEDURE

A. Coroner's Criteria: when one or more of the following criteria are present, the death shall be reported to the Coroner's Office:
1. Any death after a trauma, injury, accident, or fall. The coroner will discuss with the attending physician to determine association.

2. Deaths occurring in the Emergency Department, or any situation of Dead-Upon Arrival.
3. Death from any wound, injury, including but not limited to burns, traumas, homicides, suicides, accidents.
4. Death, with a history of a fracture within one year and one day preceding the death.
5. Any sudden, unexplained death of a child under 18 years old.
6. Death related to a disease or injury incurred through the deceased person's employment.
7. Deaths from a disease process that might constitute a threat to public health. This does not include deaths from AIDS.
8. Death of persons in custody of law enforcement.
9. Deaths occurring during surgery or general anesthesia.
10. Deaths resulting from any medical or surgical intervention.
11. Deaths occurring during the first 24 hours following admission to the hospital or when insufficient history has been gained to support a diagnosis.
12. Any death in which the attending physician declines to sign the medical "Certificate of Death".
13. Unusual or unexpected deaths in which criminal or civil litigation is likely to follow.

B. Coroner Notification:
1. For cases meeting the coroner's criteria, the coroner's office shall be notified to determine if the death will be investigated as a *coroner's case* or referred back to the attending physician for authorization.
2. Contact information:
   a. Tippecanoe County Coroner, Monday – Friday: (765) 420-7607
   b. Tippecanoe County Sheriff Dispatch afterhours: (765) 423-9321

C. Coroner's Case Consent:
1. Consent for autopsy by an Authorized Person is not required for a coroner's case. In the event the next of kin or Authorized Person requests an autopsy, regardless of the coroner's decision to perform an autopsy, the physician / designee shall inform the coroner of the request.

D. Coroner's Case Body Preparation and Evidence Collection
1. Body Preparation:
   a. Do not clean the body.
   b. Do not remove IV lines, catheters, etc. Tubing may be trimmed to 6 inches; tie or secure the ends to prevent leakage.
   c. Counsel family members to avoid physical contact during the viewing, especially in child/infant deaths.
   d. After viewing, place the body into a body bag and transport to the morgue unless otherwise directed by the coroner's office.
2. Clothing and Property:
   a. All property of the deceased must be released to the coroner / designee who is statutorily responsible for items "found on the body" and to make the appropriate disposition of such items.

b. When removing / cutting clothing, avoid visible penetration site(s), tears, etc.

c. Place individual items of clothing in separate paper bags to avoid seepage, cross-contamination and excess moisture formation.

3. Evidence Collection:

a. Evidence such as a bullet/projectile removed from the body should be taken in the presence of a law enforcement, when possible, to maintain chain of custody.

b. Wrap each item separately in cotton and package separately. Label package with patient name, physician's name, date, source and / or location item removed and signature.

c. As requested, authorize the chain of custody form provided by law enforcement.

d. If law enforcement is not present, obtain the physician signature on the container, complete a chain of custody form. Scan the original into the medical record and securely store the container and copy until handed over to law enforcement.

e. Document procedure in patient medical record.

E. Requests to Donate Organ/Tissue: Established IOPO referral procedures will be followed. IOPO representatives and the coroner's office will discuss and obtain the coroner's consent to proceed.

VII. CROSS REFERENCES

ADMCL4.03 IU Health Arnett Policy Care of the Time of Patient Death
ADMCL4.01 IU Health Arnett Policy Organ, Tissue, and Eye Donation
ADMCL4.00 IU Health Arnett Policy Organ Donation after Cardiac Death (DCD)

VIII. REFERENCES

Tippecanoe County Coroner's Office

IX. APPROVED BODY

Medical Executive Committee

X. APPROVAL SIGNATURES

VP Quality & Patient Safety

XI. DATES

Effective Date: October 2008
Revision Dates: August 2011

Indiana University Health	Section: ND Policy #: 1.03	Effective Date: October 2011
	Author/Responsibility: Kathy Dillard Title: Practice Manager	Next Review Date: October 2014

BRAIN DEATH – END OF LIFE RECORDING

APPLIES TO: ☐ **Organization (Arnett)** ☒ **Departmental (Arnett)**

PURPOSE
The purpose of this policy is to meet current standards in the support of the diagnosis of brain death with the aid of electroencephalographic testing.

SCOPE
All Neurodiagnostics Staff who meet the guidelines to provide Neurodiagnostic testing at IU Health Arnett Hospital.

POLICY STATEMENT(S)
It is the policy of IU Health Arnett to delineate clear guidelines for performing Electroencephalograms (EEG) in determination of patient brain death/ end of life.

DEFINITIONS
Brain Death
End of Life
Electroencephalography (EEG)
Electrocerebral Silence (ECS)
Neurodiagnostics

PROCEDURE

I. Procedure is ordered by a physician on staff at IU Health Arnett Hospital
II. This procedure is always performed at the patient's bedside.
III. The patient is hooked up to electrodes according to the International 10-20 System of Electrode Placement. Electrode Cream and tape is used to attach recording electrodes to the patient.
Additional electrodes are attached to record EKG, and room noise by attaching to the patient's hand (dorsum)- separated by 5-7 cm and on the same side as the ventilator.
IV. Prior to starting study:
Check the identity of patient with armband.
Document medications to verify that the levels are unable to suppress brain activity or alter the EEG.
Verify patient is not hypothermic.
V. Recording Montages

Pediatric ECI Montage

I	II	III
FP1-A1	FP1-T3	FP1-CZ
FP2-A2	T3-01	FP2-CZ
C3-A1	01-FP1	T3-CZ
C4-A2	FP2-T4	T4-CZ
01-A1	T4-02	01-CZ
02-A2	02-FP2	02-CZ
FP1-C3	FP1-A2	FP1-A2
FP2-C4	FP2-A1	FP2-A1
C3-01	C3-A2	C3-A2
C4-02	C4-A1	C4-A1
01-T3	01-A2	01-A2
02-T4	02-A1	02-A1
T3-FP1	T3-A2	T3-A2
T4-FP2	T4-A1	T4-A1
Hand	Hand	Hand
EKG	EKG	EKG

ADULT ECI MONTAGE

I	II	III
FP1-C3	F3-A2	FP1-A1
FP2-C4	F4-A1	FP2-A2
F3-P3	C3-A2	F3-A1
F4-P4	C4-A1	F4-A2
C3-01	P3-A2	C3-A1
C4-02	P4-A1	C4-A2
FP1-T3	01-A2	O1-A1
FP2-T4	02-A1	02-A2
F7-T5	F7-A2	F7-CZ
F8-T6	F8-A1	F8-CZ
T3-01	T3-A2	T3-CZ
T4-02	T4-A1	T4-CZ
01-CZ	T5-A2	T5-CZ
02-CZ	T6-A1	T6-CZ
Hand	Hand	Hand
EKG	EKG	EKG

- Recording electro cerebral silence
- Ask family and personal to step out of room during recording to keep room noise to a minimum due to the use of high sensitivities being used for the recording.
- Do 20 second recording of machine calibration.
- Do a biocal recording of Fp1- O2.
- Check all impedances on the machine, and then manually touch each electrode to redemonstrate that electrodes are operative. Must be below 5 Kohms.
- Begin montage- document the time of the recording actually beginning.
- Record montage(s) using HF70, S7, LF1 to start, then start increasing the sensitivity in steps until 2 uv/mm sensitivity is obtained. LLF of 0.3 should be used for approximately 8 pages during each montage. Use of the 15 mm/sec paper speed should also be used during each montage. During each montage, ventilator breath should be documented on the EEG tracing. Stimulation of the patient by sternal rub or other painful stimuli should be done during each montage with documentation of any movement or withdrawal by patient.
- If multiple montages are used, repeat the above steps through each montage.

VI. Recording time must be at least 30 minutes of actual recording with documentation of beginning and ending time of actual recording marked on the tracing.

VII. When study is completed, remove electrodes and wash off electrode cream. Remove supplies and restore order to patients' hair as well as situation allows.

VIII. Contact physician who is interpreting study to let them know study is available for review/interpretation.

IX. Clean electrodes and finish any information in computers. Enter patient charge.

CROSS REFERENCES
International 10-20 Electrode Application Policy

REFERENCES

1. Jasper MM: The ten-twenty electrode system of the International Federation. Electroenceph Clinical Neurophysiology 10:371-5, 1958.
2. Grass, ER: technical aspects of electroencephalography in determination of death. Am J EEG Tech 9:77-90, 1969
3. American EEG Society: American EEG Society Guidelines, Guideline Three, Minimum Technical Standards for EEG Recordings in Suspected Cerebral Death, 1976.

APPROVAL BODY
Administrative Director, Neurology

APPROVAL SIGNATURES
Chief Practice Officer

DATES
Effective Date: October 2008
Revision Dates: October 2011

Indiana University Health	Section: PC Policy #: 1.07	Effective Date: 8/1/08
	Sponsor: Sally Lowrey Title: Admin. Director, Inpatient Services	Supersedes: NEW
	Author: Carolyn Harshbarger Title: Nursing Unit Manager, AC 4	Next Review Date: 8/1/2011
SUPPORTIVE CARE PROGRAM (PALLIATIVE, TERMINAL CARE, BEREAVEMENT CARE)		
APPLIES TO: Arnett All or Arnett Hospital Arnett Medical Offices		

PURPOSE

The purpose of this policy is to describe the Supportive Care Program that is available at IU Health Arnett. Supportive care is an interdisciplinary care program that focuses on prevention of pain and suffering, relief of pain and suffering, and on maximizing quality of life for people living with serious, chronic, or life-limiting illnesses. This policy is meant:

A. To assist staff and providers as they plan for and delivery supportive, end of life, and bereavement care.
B. To communicate key concepts, beliefs or tenets of end of life care and bereavement support and,
C. To establish minimal expectations for supportive care at IU Health Arnett Hospital.

SCOPE

The policy applies to all staff having care giving and healing interaction with patients and families experiencing grief or loss.

DEFINITIONS

Supportive Care — Inclusive of care given to patients and families who are experiencing life altering diagnosis and/or events. Includes Palliative Care, End of Life Care, Bereavement support, and Hospice Care.

Palliative Care — A subset of Supportive Care that includes the care of patients whose disease is not responsive to curative treatment. The goal of palliative care is the achievement of the best possible quality of life and functioning for the patient and family, for as long as is possible. Focus includes the control of pain and other symptoms, including symptoms of psychological, social, and spiritual nature.

Hospice Care — A team oriented approach, tailored to the end of life patients' needs and wishes regarding compassionate care. Care is oriented toward well coordinated end of life focused medical care, pain management, emotional, and spiritual support.

End of Life Care — Those services or interventions planned and implemented with the aim of providing maximum comfort at the end of life or in the final stages of terminal illness.

Bereavement — The response to life changing events, such as significant diagnosis, response to the dying process (patient and family), and actual death of a loved one. Bereavement describes one's awareness and readiness to grieve during and through the death and dying process.

Bereavement support — The process and set of established activities designed to assist the patient and family with the grieving process.

POLICY STATEMENT(S)

It is the policy of CAH to provide compassionate, individualized care to all. The patient's Supportive Care plan (palliative, end-of-life, hospice, or bereavement) will be part of the plan of care and all team members will share responsibility for adhering to or implementing the plan.

PROCEDURE

A. Contacting Supportive Care Services

Contact the Supportive/Palliative Care Nurse for consult and assistance via beeper by contacting Houston. The beeper will be carried by a member of a specially trained team of nurses, including but not limited to the Nursing Unit Manager of Acute Care 4 and the Clinical Shift Supervisor. The Nursing Unit Manager of Acute Care 4 is the team lead. The Supportive Care Service may be consulted by any patient care provider (i.e., nurse, physician, social work, chaplain)

B. Patient and Family Involvement in Care Decisions

1. Patient and family participation in open discussion of treatment and care options will be encouraged by the interdisciplinary team. Particular attention will be given to the following information and treatment options:
   a. Advance Directives
   b. Do not Resuscitate orders
   c. Treatment options and plans for primary and secondary symptom management
   d. Comfort care measures
   e. Pain management options
   f. Hospice care
   g. Personal values and philosophy, Religious, Cultural, and Spiritual preferences
   h. Organ and/or Tissue donation options (per policy and IOPO compliance)
   i. Autopsy opportunity
2. Verbal and written form of communication will be utilized, as appropriate to the patient and family learning needs.
3. It is important to note that the patient's request and preference may differ from those of the family. The patient's requests and needs take precedence. The needs of the family will be accommodated if at all possible and as appropriate.
4. It is often beneficial for the family to identify a key member to work primarily with the care providers.

C. Managing Supportive, End of Life Care

1. As appropriate to the case, the patient care team will identify a specific member to coordinate the patient's end of life care and bereavement support. The person identified will be noted on the plan of care. The person identified to coordinate the patient's end of life care will have special training in this area and may include nurses, social workers, or chaplain.
2. The physician and/or the Registered Nurse will collect the following assessments regarding patient and family needs or requests and facilitate the documentation and development of an individual end of life care plan:
    a. Advance Directive (physician and nurse). The existence of a patient's advance directive is assessed upon admission by nursing. If one exists, the patient and/or family will be asked to provide a copy. Until such time that a copy is provided, the intent of the advance directive will be made known to the team via medical record documentation. If the patient would like information on how to complete an advance directive, social work will be contacted and such education will be provided and documented in the medical record. The patient may choose to designate a health care representative.
    b. Do Not Resuscitate Order (physician). The physician is responsible for writing the Do Not Resuscitate Order and will include a description of the level of specific interventions which may be performed in the event resuscitation should be required.
    c. Psychosocial Assessment (social work). A social work referral will be made on all patients receiving end of life care.
    d. Personal Values, Philosophy, Religious, Cultural or Spiritual Preferences (chaplain). Patients and families come from various cultural or religious backgrounds. As caregivers, we will not assume understanding of patient desire or wishes. Individual differences or preferences exist within a culture or religion. Every attempt will be made to understand the specific desires and preferences of the patient and family. A chaplain will be made available as needed.
    e. Comfort Measures (multidisciplinary team). The following list includes common comfort measures available:

Positioning	Guided imagery	Presence of loved ones
Diversion/distraction	Verbal support	Hygiene
Massage	Environmental adjustments	
Emotional support	Hot/Cold Applications	

D. Bereavement Support

Families who have lost a loved one will received information, 2-4 weeks after their loved one's death, on support groups and services available in the area. On or about the first of November, the family will receive information how to handle their first holiday season after the loss.

E. Staff Education regarding End of Live Care and Bereavement Support

1. The highest level of sensitivity toward bereaved patients and families is expected at all times.
2. Staff orientation will include elements, specific to their job responsibilities, related to Supportive Care.
3. Opportunities for staff to debrief after the loss of a patient (s) is available by contact the Supportive Care Service. Resources are available via nursing, chaplainry, social work, etc.

REFERENCES

Hospice and Palliative Nurses Association. Core Curriculum for the Generalist Hospice and Palliative Nurse. Dubuque, IA: Kendall/Hunt Publishing; 2005.

CROSS REFERENCES

Advanced Directives Policy
Do Not Resuscitate Policy
Autopsy Policy
Withholding and/or Withdrawing of Life Sustaining Procedures
Organ/Tissue/Eye Donation
Donation After Cardiac Death
Care at the Time of Patient Death

APPROVAL BODY

Medical Executive Committee Chairman
Chief Medical Officer
Chief Nursing Officer

APPROVAL SIGNATURES

Sally Lowrey, Administrative Director of Inpatient Services
Linda Decker, Chief Nursing Executive

Indiana University Health

Indiana University Health Arnett is committed to caring for the ill and injured patient and affirms that it will not be on diversion more than five percent (5%) of the time. Further, Indiana University Health Arnett affirms that in that past year, the emergency department has not been on diversion at any time.

Kris Carlile

Kris Carlile, RN, MSN/MHA
Director Emergency Services
Indiana University Health Arnett

9/13/13

Date

IU Health Arnett
P.O. Box 5545
Lafayette, IN 47903-5545

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Indiana University Health	Section: ED Policy #: 1.27	Effective Date: June 2012
	Author/Responsibility: Susan Miller Title: ED Nursing Director	Next Review Date: June 2015
EMERGENCY DEPARTMENT DIVERSION		
APPLIES TO: ☐ **Organization (Arnett)**	☒ **Departmental (Arnett)**	

PURPOSE
To establish guidelines and level of authority when there is a need to temporarily divert ambulance patients from the Emergency Department (ED).

SCOPE
IU Health Arnett Hospital Physicians and Staff

DEFINITION
Diversion The process of diverting ambulance traffic in cases where resources are not sufficient to meet potential or real needs.

POLICY STATEMENT(S)
Diversion of ambulance traffic is to be avoided and instituted only as a last resort. Ambulance diversion status may be initiated under the following criteria:

I. ED saturation
   a. The ED's volume/acuity has consumed current/available ED resources of space/equipment/and staffing.
   b. Lack of available in-patient beds/staff has caused the ED to hold admissions.

II. Internal disaster situation—The ED cannot receive any patients because of a physical plan breakdown (e.g. power outage, fire, bomb threat, etc.). Only a partial diversion status will be initiated when only a portion of the facility's operation is compromised. For example:
   a. CT scanner is down—diversion to be determined by current situation and time frame of down time.
   b. ICU beds are full and ED is holding admissions—divert ICU patients only.
   c. Med-Surg beds are full and ED is holding admissions—divert medical patients only.
   d. OB's resources are saturated—divert OB patients only.

III. The decision to initiate ambulance diversion may only be made collaboratively by the Director of Emergency Services, Nursing Clinical Administrator and member of the Executive Leadership Team (ELT) at the request of the ED physician and the ED charge nurse on duty or the trauma surgeon.

a. The status of other Lafayette EDs must be considered.
b. At a minimum, the name of the administrator authorizing diversion and the reason for the diversion, and the start and stop time of each diversion occurrence will be documented by the unit support tech (UST) and kept as record by the ED Director.
c. At no time will an ambulance be refused if arrival on hospital property has occurred, if physician acceptance for a direct admit has been pre-approved or any patient experiencing signs and symptoms of Acute Coronary Syndrome.
d. Ambulance diversion is deactivated in the event that all local hospitals are also on diversion.

PROCEDURE

ED charge nurse and physician on duty evaluate status of all ED patients and level of care.

1. Evaluation of current resources i.e. equipment, staffing, space
    a. Director of Emergency Services is notified
    b. Appropriate diversion status is determined by the Director of Emergency Services or trauma surgeon
        i. Director and/or trauma surgeon will collaborate with on-duty nursing leadership to determine inpatient census and acuity
    c. Director and/or trauma surgeon notifies member of ELT or the administrator on call with the following information:
        i. Category of diversion
        ii. Reason for diversion
        iii. Estimated duration of the diversion status
    d. Director and/or trauma surgeon and ELT collaborate to make diversion decision
    e. Notification of ambulance services
    f. ED charge nurse and physician on duty re-evaluates minimally every 2 hours and contacts the Director and or trauma surgeon as needed
    g. ED charge nurse communicates diversion status with ELT member at least every 8 hours while on diversion
    h. Failure to follow appropriate channels before initiating diversion status may result in corrective action and/ or CMS sanctions for EMTALA violation.

CROSS REFERENCES

None

REFERENCES

None

FORMS/APPENDICES

None

APPROVAL BODY

ED Nursing Director
Trauma Medical Director

APPROVAL SIGNATURES
Trauma Medical Director
Chief Nursing Executive/VP Patient Care Services

DATES
Effective Date: October 2008
Revision Dates: June 2012

Name	28-Jan-13	2/25/2013	18-Mar-13	22-Apr-13	28-May-13	24-Jun-13	8-Jul-13	8/26/2013	
	TOPI	PIPS	TOPI	PIPS	TOPI	PIPS	TOPI	PIPS	
Dr. Nirmalan-Trauma director	x	x	x	x	x	x	x	x	
Dr. Heniff-ED	x	x	x	x		x	x		
Dr. Henson-ENT									
Dr. Orenstein-Ortho	x	x	x	x	x	x		x	
Dr. Reisman-Urology	x		x				x	x	
Dr. Crecelius-Neuro	x	x	x	x	x		x		
Dr. Marnocha-Rad									
Dr. Weber-Anesthesia		x	x	x		x			
Dr. Bangs-Surgery	x	x	x	x	x	x	x	x	
Brian Shockney	x				x				
Doug Jackson					x		x		
Ann Keyes RN-surgery	x				x		x		
Dr. Ali-ICU			x						
Dr. Brown-Hospitalist	x		x	x		x	x	x	
Amanda Rardon RN-TPM	x	x	x	x	x	x	x	x	
Luarie Spencer RN-ICU									
Joshua Fleming RN	x								
Dr. Berg-surgery	x			x	x	x		x	
Dr. Maresh-surgery		x		x			x	x	
Michelle Kreinbrook	x								
Sally Lowery	x								
Terri Lefew	x						x		
Mike Fleming	x		x						
Tracy DeBord	x		x				x		
Marcie Blessing-Phy. Liaison	x								
Dr. Kaup			x						
Dr. Zenarosa				x	x		x		
Kris Carlile					x		x		
Devon Brown					x				
Dr. Dunco-Radiology							x		
Dr. Buono-Anesthesia							x	x	
Dr. Arvin-Radiology								x	

IU HEALTH ARNETT HOSPITAL

PERFORMANCE IMPROVEMENT PLAN

1. MISSION AND GOALS OF THE TRAUMA PERFORMANCE IMPROVEMENT PROGRAM

The Trauma Performance Improvement Plan is designed to ensure efficient, cost effective, quality patient care that is facilitated by continuous, systematic and objective data analysis and multidisciplinary peer review to identify opportunities to improve patient safety through all phases of trauma care. The ultimate goal is to reduce mortality and morbidity in the trauma patient population.

2. CREDENTIALING FOR CALL PANEL PARTICIPATION

All physicians who participate in the care of injured patients will be credentialed according to the Medical Staff Bylaws. The Trauma Medical Director has the authority to set additional criteria, and to recommend changes to the trauma call panel based on performance review.

3. TRAUMA PATIENT POPULATION CRITERIA

The Trauma Program is responsible for those patients who are enrolled in the IU Health Arnett Hospital Trauma Registry. The criteria for Registry enrollment are:

1) At least one code within the range of the following injury diagnostic codes as defined in the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM):
   a) 800-959.9
      i) Excluding:
         (1) 905-909.9 (late effects)
         (2) 910-924.9 (superficial injuries)
         (3) 930-393.9 (foreign bodies)
2) And must also include 1 of the following criteria:
   a) Hospital admission,
   b) Patient transfer via emergency medical services transport (including air ambulance) from one hospital to another hospital, or
   c) Death resulting from the traumatic injury (independent of hospital admission or hospital transfer status).

4. ADMINISTRATIVE STRUCTURE

Performance improvement consists of ongoing evaluation of all facets of trauma care provided to the trauma patient. The Trauma Medical Director and Trauma Program Manager provide ongoing and systematic monitoring of care provided by medical, nursing and ancillary personnel. Performance Improvement review consists of the

utilization of the American College of Surgeons-Committee on Trauma pre-selected performance improvement "audit filters" and additional hospital and regional indicators. In addition, a process of tracking complications, systems issues, provider issues and adverse events is determined. The Trauma Program Manager will report all issues and opportunities for the improvement to the Trauma Medical Director for determination of the need for further review via the *Trauma Performance Improvement and Patient Safety Committee* or *Trauma Operational Performance Improvement Committee*. Documentation of resolution of identified issues (loop closure) is the responsibility of the Trauma Medical Director and the Trauma Program Manager.

The use of indicators to measure, evaluate and improve performance is an important component of the Trauma Performance Improvement Plan. Suggested indicators are indicated in Appendix A and are subject to change.

5. DATA COLLECTION

Concurrent and retrospective data is collected and entered in the Indiana University Health Arnett Hospital's Digital Innovations Trauma registry. Data is then quarterly uploaded into the Indiana State Trauma registry and yearly into the National Trauma Data Bank. Data definitions are consistent with those of the Indiana Trauma Registry Data Dictionary.

Data sources for the collection of this information include:

- Hospital Medical Record
- Pre-hospital Patient Care Reports (run sheets)
- Referring Hospital Record
- Medical Examiner Reports

6. PERFORMANCE IMPROVEMENT PROCESS

A. First Level of Review

The Trauma Program Manager or designee will do the initial case review of all trauma patients. Appropriate clinical care without provider or system issues identified will need no further review.

B. Second Level of Review

Opportunities for improvement in the system or provider and sentinel events are referred to the Trauma Medical Director. The Trauma Medical Director and the Trauma Program Manager will perform the second level of review. Further analysis of the case and issue(s) identified will occur. Those cases in which a simple action plan, such as trending the issue, targeted dedication, provider counseling or discussion is the only corrective action identified need not proceed to the next level of review. Deaths, significant adverse events and cases involving more than one service or provider with opportunities for improvement should be evaluated to the Third Level of Review.

C. Trauma PI issues will be documented in the Outcomes module of the Digital Innovations Trauma Registry. This module tracks all patient care issues, serves as a reference for all PI activity, and assures proper documentation and loop closure by tracking all aspects of the case review to include:

- Clinical Summary
- Trauma Program Manager/Trauma Medical Director Review
- Judgment of Committee
- Corrective Actions
- Re-evaluation and loop closure date

D. Third Level of Review

Tertiary Review will occur at the committee level. Cases for tertiary review may be referred to the Trauma Performance Improvement and Patient Safety Committee (PIPS) or Trauma Operation Process Improvement Committee (TOPI).

E. Purpose of the Meetings

A) PIPS-issues identified in the review that deal with specific cases and provider issues that arise. These include issues such as (but not limited to):
   a. Timeliness of response to a highest level of activation
   b. Appropriateness of evaluation and treatment
   c. Appropriateness of admission or transfer
   d. Trauma death

A judgment will be rendered by the committee with regards to the appropriateness of the issue referred for further review and on all mortality being reviewed according to the following metrics:

- Unanticipated mortality with opportunity for improvement
- Mortality without opportunity for improvement
- Anticipated mortality with opportunity for improvement

The PIPS Committee will be bi-monthly. Attendance requirements for this meeting are as follows:

All core surgeons, emergency medicine representative, orthopedic liaison, anesthesia liaison, radiology liaison, ICU liaison, neurosurgery liaison, Trauma Medical Director and Trauma Program Manager must attend at a minimum 50% of meetings per year.

Failure to meet this requirement could lead to corrective action and removal from trauma panel. The Trauma Program Manager will provide updates on attendance and provide a reminder when a member of the committee is in danger of falling below the 50% expectation.

B) TOPI-issues identified in the review that deal with the system of care in the facility are appropriate to discuss in this venue. These include issues such as (but not limited to):
   a. Creation of Trauma Activation criteria

b. Creation of pathways and protocols
c. Process improvement initiatives
d. Determination of additional requirements for service on the trauma call panel

These issues deal more with the system of care and not an individual provider. It is important to have representation from all hospital stakeholders (representatives) at this meeting.

The TOPI Committee will be bi-monthly. Attendance requirements for this meeting are as follows:

All core surgeons, emergency medicine representative, orthopedic representative, anesthesia representative, radiology representative, ICU representative, neurosurgery representative, Trauma Medical Director and Trauma Program Manager must attend at a minimum 50% of meetings per year.

Failure to meet this requirement could lead to corrective action. The Trauma Program Manager will provide updates on attendance and provide a reminder to the head of the department when the representation of a department is in danger of falling below the 50% expectation.

F. Performance Improvement Action Plan

All corrective action planning and implementation will be overseen by the Trauma Medical Director and Trauma Program Manager. Possible corrective actions may include (but not limited to):

- Education
- Trending of issue
- Policy or guideline development/revision
- Counseling
- Peer Review
- Focused Audit
- Resource enhancement

G. Loop Closure and Re-Evaluation

An essential component in Performance Improvement is demonstrating that a corrective action has the desired effect. The outcome of any action plan will be monitored for expected change and re-evaluation accordingly so that the PI loop can be closed. No issue will be considered as "closed" until the re-evaluation process has been complete and it demonstrates a measure of performance that has been deemed acceptable. This evaluation usually occurs within three to six months of the corrective action. Documentation should include the following aspects of follow-up and re-evaluation:

- Time frame for re-evaluation
- Documentation of findings
- Results of re-monitoring

H. Integration into the Hospital Performance Improvement

Trauma Performance Improvement issue reports are prepared in summary format of problem identification and resolution. These reports are then integrated in to the Hospital Quality Department through reporting of committee meeting minutes. The Trauma Program Manager will also attend hospital quality meetings as requested to report data and specific quality concerns.

APPENDIX

PI Filters

1. Admit by non-surgeon
2. Inappropriate admission by non-surgeon
3. Did patient with GCS <9 have ICP monitor placed w/in 24 hours?
4. Ambulance scene time >20 minutes
5. ED LOS> 4 hours
6. GCS <8, no intubation or surgical airway
7. Initial treatment of open fracture > 8 hours (excluding low velocity GSW)
8. Laparotomy after 4 hours
9. Missing EMS report
10. Nonoperative treatment of GSW to abdomen
11. Prehospital airway (esophageal intubation)
12. Prehospital airway (cric)
13. Readmission to ICU or unplanned admission to ICU from floor
14. Transfer after 3 hours at the initial hospital
15. Trauma Death
16. Unplanned return to OR within 48 hours
17. Patient with GCS <14 who does not receive head CT
18. Missing hourly vitals in ED
19. No GCS documentation in ED
20. Pt transferred out of ED to another facility after 2 hours
21. Cervical collar/backboard removal without MD order
22. Missed injury / delay in diagnosis
23. Fluid / blood rescusitaion mgt issue, including activation of MBTP
24. Trauma activation issue (over / under / delayed / pager)
25. EMTC Trauma Flow Sheet documentation inadequate (> 90% completion)
26. All Discharge ISS > 15 / Were they trauma activations or not?
27. Error in FAST exam: False Negative or False Positive
28. Trauma One Here Now
29. Trauma Alert Here Now
30. No Trauma Flowsheet on Activated Trauma Patient
31. Over Triage: Based on Activation Criteria
32. Under Triage: Based on Activation Criteria
33. Delay in Vascular Access
34. Deterioration of Condition While in Radiology: CT/MRI/IR
35. Airway Management Difficulties, including reintubation and self extubation
36. Delay in OR Availability
37. Delay in Anesthesia Availability
38. Delay to OR (>6 hours from Arrival) for Open Fractures
39. Delay to OR(>24 hours from Arrival) Abdominal, Thoracic, Vascular, Cranial
40. Delay to OR (>4 hours from Arrival) Craniotomy *excluding ICP placement
41. No Laparotomy for pt w/Abdominal Injury & SBP <90
42. For Pediatric Patients: ETT tube placement not confirmend before leaving ED
43. Tertiary Survey not completed within 24 hours
44. Readmission related to initial injury within 30 days
45. Surgeon response time > 30 minutes for Trauma One
46. Surgeon response time > 12 hours for trauma admission (other than trauma one)

Emergency Department

RN Certifications List:

Name	ESI	ACLS	CPR	PALS	ENPC	TNCC	NRP	CEN	CPEN
Andrzejewski, Ann	NA		6/13	4/14	10/17	11/17			
Armstrong, Alon Rrc	Y	5/15	8/15	6/15	12/15	11/15			
Ayers, Abby	NA								
Beech, Nikki (prn)	Y	7/13		6/14	Need card	Need card			
Bisher, Heather (prn)	NA	10/14	11/13	9/14		Need card			
Bozard, Linda	Y	4/15	3/15	6/15	8/16	5/16			
Brown, Kim	Y	1/15	1/15	1/15	3/16	Sched 11/13			
Brown, Rose	Y	7/15 (I/P)	3/14 (I/P)	9/14	4/17	Sched 11/13			
Bruns, Becky	Y	9/15	3/14	(I/P)	12/13	9/17			
Budreau, Stephanie	NA	11/14	2/15	Sched 7	(2014)	(2014)			
Butler, Brenda	Y	6/14	2/14	11/14	8/16	7/14			
Capecot, Ryan	Y	1/14	8/14	6/14	8/16	3/16			
Clyde, Mindy (prn)	Y	3/15	1/15	10/15	9/13	10/17			
Cody, Camilla	Y	1/14	8/13	10/14	12/16	11/16			
Collins, Kristy	Y	11/14	8/13	1/15	12/16	11/16			
Crose, Jackie	Y	7/15 (I/P)	12/13	1/14	10/13 (2014)	5/16		7/14	
DeBord, Tracy	Y	5/14	8/15	3/15	8/14	10/14			
Ball, Sue	Y	1/14	11/13	3/14	4/16	5/16			
Hall, Kaitlyn	NA	Awaiting card	7/15	Sched	(2014)	(2014)			
Hanson, Stephanie	Y	4/15	7/14	4/15	Need card	Need card			
Hines, Jo	Y	5/15	6/14	6/15	3/16	4/14			
Jackson, Carolyn	NA	10/13	3/14	9/14	Sched	11/17			
Lanette, Megan	Y	3/15	3/14	10/13	10/16 Instructor	9/16			
Lepage, Heidi (prn)	Y	6/14	1/14	6/14	8/17	9/17			
McIlwain, Shari	Y	5/15	1/15	4/15	4/14	11/14			
Miller, Melissa	Y	6/13	11/13	Need card	Need card	9/16			
Mitchell, Kathy	Y	5/14	3/14	3/14	Need card	7/17			
Newton, Marshall Shelley	Y	12/13	12/13	2/14 (I/P)	6/15	7/14			Issued 6/10
Panda, Jatine	Y	1/14	2/15	6/14	12/16	1/16			
Priedderor, Kim	Y	7/15	8/13	11/13	10/13 (2014)	10/14			
Pierce, Amy	Y	8/14	7/14	1/14	8/16	7/16			
Rainwater, Dean	NA	12/14	6/15		(2014)	(2014)			
Rarden, Amanda	Y	10/14 (I/P)	5/15 (I/P)	8/15	Instructor	Instructor			
Shaw, Tracy	Y	2/14	6/15	4/15	12/13	7/14			
Spence, Jon	Y	4/14	12/13	6/15	2/14	11/14			
Thompson, Laura (prn)	Y	7/14	10/13	10/14	Need card	Need card			
White, Stephanie	Y	5/15	5/15	7/14	12/16	9/16			
Williams, Brittany	Y	Need card	Need card	4/15	Need card	Need card			
Williams, Teresa	Y	9/15 (I/P)	4/15	11/14	10/14	7/17			

CPR, ACLS, PALS – You are responsible for knowing when you expire! Must recert **before** expiration date on card and get copies to Rose. If not recerted before expiration date on card, you'll be **suspended** up to 30 days until recerted; if no cert within 30 days = **involuntary termination! (per HR policy 1.01 on Professional Licensure, Certification, & Registration).** ENPC & TNCC I will give a little more latitude, but in the near future the same policy will apply.

Red Highlight–Cert has expired!
Pending – You have taken the class and are waiting to receive copy of new cert card, or are scheduled for the class.
Yellow highlight-Certs expiring this year, need to recert and get 1 copy to Rose ASAP. (Rose copies ACLS/PALS before you get the card. You need to get Rose 1 copy of BLS, ENPC, and TNCC certs, as those come to you first.)
Green Highlight-okay for Trauma Rooms-Has ACLS, PALS and TNCC (or Grandfathered) AND has completed Trauma Orientation.
Blue Highlighted-Okay for Triage. Has completed Triage Orientation and has ENPC & ESI quiz (If you have NOT completed your ESI test, been through ENPC, and Trauma Orientation, you **cannot** go to triage)
Orange Highlight- Still need to get this cert or get copy of card to Rose. I'll arrange TNCC/ENPC classes for you ASAP.
Grey Highlight – The instructor status does not have expiration date as long as actively teaching, per Amanda.
Olive Highlight – These folks hold both Instructor and Provider designations for these certs.

Updated 10/23/13 RMB

2013 MAD ED Blitz

Name: _____ Date: _____

Topic	Validation Method	Score	Evaluator's Initials
CVAP	Skills Check-Off		
Fluid Warmer	Skills Check Off		
Language Line	Skills Check-Off		
Foley Catheter	Skills Check Off		
Suture Set-Up	Skill Check-Off		
Bld Cx/Tube Draw Order	Skill Check-Off		
Pain	Role Play		
Warm Handoff	Role Play		
Triage	Role Play		
ESI	Quiz		
Trauma/Trauma Alert	Quiz		

Evaluator's Signature: _____/_____ Date: _____

Evaluation Completed: _____

Healer Name: _____ Healer ID: _____

Department/Unit Orientation- ICU – In Pursuit of Perfection

Review of additional Department-Specific Information

This "Department Specific" section of your passport identifies information beyond the "CAH Global Content" that you must learn to successfully function in your new department or role.

Note to Managers: Please add, delete, or revise the rows and categories on this template as needed to tailor it to your area.

Policies & Procedures	Completion Date	Healer Initials	Validating Signature
Critical Care			
• Intensive Care Unit (ICU) Program and Design For Plan Of Care: PC 4.14			
• Critical Care Clinical Care Practice Protocols: PC 2.00			
• Procedural Sedation and Analgesia ADMCL 4.07			
• Induced Hypothermia Following Cardiac Arrest: PC 4.13			
Pharmacology			
• Patient Controlled Analgesia PC 1.03			
• Epidural and Intrathecal Analgesia: PC1.01			
• Flumazenil (ROMAZICON) Protocol- Adult: ADMCL 7.02			
• Naloxone (NARCAN) Protocol-Adult: ADMCL 7.01			
• Location Guidelines for IV Infusions/PCA/Push Medications for Adult Acute Inpatient Care Units MM 1.32			
Cardiac			
• Transcutaneous Cardiac Pacemaker Utilization: PC 1.25			
• Synchronized Cardioversion: CATH 1.07			
• Care of the Patient on Cardiac Telemetry: PC 4.02			
• Sheath Removal: Procedural arterial and venous sheath: CATH 1.04			

• FemoStop Application: CATH 1.02			
Pulmonary			
• ICU Adult Ventilator Weaning: PC 4.05			
• Attachment A: Ventilator Weaning Protocol: PC 4.05a			
• Care of the Adult ICU Mechanically Ventilated Patient: PC 4.06			
• Tracheostomy Tube Care: RESP 1.81			
Neurology			
• External Ventricular &/or Subdural Drain Management: PC 1.21			
• Insertion and Maintenance of an Intracranial Pressure Monitor: PC 1.22			
• Bispectral Index (BIS) Monitoring: PC 1.20			
• Lumbar Drain Management: PC1.23			
• Skin Care for Patient with Cervical Collar: PC 1.05			
Renal			
• Warming Peritoneal Dialysis Fluid: PC 1.08			
• Routine Exit Site Care for Peritoneal Catheters: PC 1.04			
• Peritoneal Dialysis Postoperative Sterile Dressing Change for New Exit Sites: PC 1.32			
• Peritoneal Dialysis Transfer Set Change Using Aleavis 50: PC 1.33			
• CAPD Exchange Using Baxter Ultrabag Procedure: PC 1.10			
• Disposal of Peritoneal Dialysis Effluent PC 1.11			
• IV Access for Patients with CKD: PC 1.14			
• Peritoneal Dialysis Transfer Set Touch Contamination: PC 1.15			
• Peritoneal Dialysis: Fluid Cultures: PC 1.17			
• Assessing Peritoneal Dialysis Catheter Patency: PC 1.18			
• Hemodialysis Catheter: Site Care, Infusion Into and Blood Withdrawal From, Outside the Hemodialysis Setting: PC 4.01			
• Prevention of Catheter Associated Urinary Tract Infection: Urinary			

Retention Protocol, Foley Catheter Care, and Use of the Bladder Scanner: PC 1.34			
Emergency			
• Rapid Response Team ADMCL 7.00			
• Do Not Resuscitate/Limited Code Status Policy 4.09			
• Cardiopulmonary or Respiratory Arrest PC 1.16			
• Guidelines for the EZ-IO Emergent Intraosseous Infusion Device PC 4.12			
End of Life			
• Organ, Tissue, and Eye Donation: ADMCL 4.01			
• Coroner's Case: ADMCL 4.02			
• Care at the Time of Patient Death ADMCL 4.03			
• Organ Donation After Circulatory Death (DCD) ADMCL 4.00			
Other			
• Individual and Acute Care Restraint-Non-Behavioral Health Care ADMCL 5.02			
• Suicide Precautions ADMCL 5.04			
• Pain Assessment, Management and Evaluation PC 1.02			
• Blood Administration – Adult PC 1.09			
• Routine Adult and Pediatric Inpatient Assessment, Care Planning, and Documentation Standards PC 1.19			
• Patient and Family Education – Inpatient Setting PC 1.27			
• Oral Care: Clinical Practice Guidelines PC 3.00			
• Adult Skin and Wound Clinical Practice Protocol PC 2.06			
• Adult Bowel Elimination Clinical Practice Protocol: PC 2.02			
• Adult Mobility Clinical Practice Protocol: PC 2.03			
• Adult Nutrition Clinical Practice Protocol: PC 2.05			
• Use of the Flexi Seal Signal Fecal Management System: PC 4.11			

Information Systems	Completion Date	Healer Initials	Validating Signature
Cisco phones			
Medication Barcode Scanning Equipment			
Cerner class			
Drager Bedside monitor			
Hill Rom badge locator			
Pyxis			
Bedside cart key			

Critical Care Modules	Completion Date	Healer Initials	Validating Signature
Pharmacology			
Cardiovascular			
Pulmonary			
Hemodynamic Monitoring			
Neurological			
Renal			
GI			
Endocrine			
Hematological			
Multisystem			

Equipment & Devices	Completion Date	Healer Initials	Validating Signature
Baer Hugger			
BiPAP			
BIS Monitor			
Bladder scanner			
Blanket warmer			
Camino Monitor			
Cart locations / contents			

• *Code cart*			
• *Neuro cart*			
• *Open Heart Code Cart*			
• *Procedure cart*			
Drager M300 Telemetry units			
Drager Ventilator			
Glucometer			
Glucostabilizer			
Kangaroo pumps/tube feedings			
NxStage machine			
Oxygen cylinders			
Pacemaker generators			
Rapid Infusion Device (RID)			
SCD machines			
Site Rite			
Sub Zero Equipment			
• *Arctic Sun*			
• *Blanketrol II*			
Vein locator			
Vigelance			
Vigelio Monitor			
Observational Experiences	Completion Date	Healer Initials	Validating Signature
Cath Lab			
Charge Nurse			
Emergency Department			
Central Monitoring Station			
Ostomy / Wound nurse			
PACU			
PCU RN			
Unit Support Technician			

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Infection Control	Completion Date	Healer Initials	Validating Signature
VAP Bundle			
CLABSI Bundle			
CAUTI Bundle			
Pressure Ulcer Prevention			
Falls Prevention			
Hand hygiene			
Standard Precautions / PPE			
Isolation precautions			
Environmental cleaning			
Equipment cleaning			
Assist with Bedside Procedures	Completion Date	Healer Initials	Validating Signature
12 Lead EKG tracing			
Arterial Line Placement			
Cardioversion			
Central Venous Catheter Placement			
Endoscopy procedure			
EVD/ICP placement			
Intracompartmental Pressure monitoring			
Organ Donation			
Pronation Therapy using Rotoprone bed			
Rapid Sequence Intubation			
Thorocentesis			
Vacuum-Assisted Closure (VAC) System for Wounds			

Miscellaneous	Completion Date	Healer Initials	Validating Signature
Glucometer			
GEM			
Self Assessment Tool			
BKAT #1			
BKAT #2 due to retake -			
ACLS certification/renewal scheduled for -			

Required Competencies

These essential skills must be adequately demonstrated prior to unsupervised performance of your work role. These skills will supplement other required clinical competencies, and do not replace, duplicate, or supersede them.

Note to Managers: Use this form to add and document the essential skills required in your area. Devise the appropriate assessment to verify the competency. Written tests, if any, should be attached to the completed Passport for filing in HR.

Competency/Procedure	Competency/Procedural Steps Refer to: AACN's Procedure Manual for Critical Care Fifth Edition	Self Assessment 1=Never done 2=Needs review 3=With supervision 4=Independent	Method of Teaching L = Lecture W = Written D = Demonstration CBT = Computer Based	Assessment type VU=Verbal understanding RD=Return demonstration T=Test(include with file) DO=Direct Observation	Healer Initials	Validating Signature	Date
Code Blue 1st Response	• See Competency Validation		L, D	VU, RD / DO			
Care of Neurological Patient	• See Competency Validation • Bispectral Index Monitoring, Pg 699 – 711 • Assisting with Intracranial Bolt Insertion, Monitoring and Care Pg 720 - 729 • Assisting with Intra-ventricular Catheter Insertion (EVD), Management and Care Pg 730 - 737		L, D	VU, RD / DO, T			
CAPD Management	• See Competency Validation • Policies: PC 1.04, PC 1.08, PC 1.10, PC 1.11, PC 1.15, PC 1.17, PC 1.18, PC 1.32, PC 1.33 • Peritoneal Dialysis Pg 975 - 982		L/CBT, D	RD / DO, T			

Care of Patient with A Pacemaker	• See Competency Validation • Temporary Transcutaneous (External) Pacing Pg 333 – 339 • Temporary Transvenous/ Epicardial Pacing Pg 340 - 361		L, D	RD / DO, T			
Mediastinal Chest Tube Dressing Changes	• See Competency Validation		L, D	VU, RD / DO			
Management of Patient with CRRT	• See Competency Validation • Continuous Renal Replacement Therapy Pg 937 - 960 (CRRT using NXSTAGE)		L, D	RD / DO, T			
Pressure Line & Arterial Line Management	• See Competency Validation • Arterial Line , Insertion, Management, Site Care AP 445 – 464 • Blood Sampling From an Arterial Catheter Pg 465 – 470 • Single and Multiple Pressure Transducers Set-up and Management Pg 591 – 601 • Removal of Arterial Line Catheter Pg 451 - 464		L, D	RD / DO, T			
Care of Mechanically Ventilated Patient	• See Competency Validation • Assist with Endotracheal Intubation Pg 9 – 27 • Endotracheal tube and oral care of ventilated patient Pg 28 – 33 • Assist with Extubation/ Decannulation Pg 38- 41 • Suctioning: Endotracheal, Tracheostomy, Oropharyngeal Pg 62 - 70		L, D	VU, RD / DO, T			

Chest Tube Management	• See Competency Validation • Assist with Chest Tube Placement AP pg 125 – 139 • Closed Chest Drainage System Pg 151-169 • Assist with Chest Tube Removal Pg 146-150		L, D	VU, RD / DO, T			
Care of Adult Tracheostomy Patient	• See Competency Validation • Trachesotomy Tube Management Pg 79- 86 • Tracheal Tube Cuff Care Pg 71-78 • Suctioning: Endotracheal, Tracheostomy, Oropharyngeal Pg 62 – 70		L, D	RD			
Induced Hypothermia After Cardiac Arrest (Arctic Sun)	• See Competency Validation • Policy: Induced Hypothermia Following Cardiac Arest: PC 4.13		L, W, D	VU, RD / DO			
Basic Rhythm Interpretation			L, W, CBT	T			
PleurX drainage system	• See Competency Validation		L, W, D, CBT	VU, RD / DO			
Intra-Aortic Balloon Pump (IABP)	• See Competency Validation • Intraaortic Balloon Pump Management Pg 362 – 380		L, W, D	VU, RD / DO, T			

Care of Patient with Pulmonary Artery Catheter	• See Competency Validation • Assist with Insertion of Pulmonary Artery Catheter, Management, Site care Pg 549 – 569 • Removal of Pulmonary Artery Catheter Pg 570 – 575 • Pulmonary Artery Catheter and Pressure Lines, Troubleshooting Pg 576-590 • Central Venous/Right Atrial Pressure Monitoring Pg 506 – 513 • Cardiac Output Measurement Techniques (Invasive) Pg 482 – 497 • Continuous Mixed Venous Oxygen Saturation Monitoring Pg 94-100		L, W, D	VU, RD / DO, T			
Accessing a Implantable Venous Access Device	• See Competency Validation Policy: Implanted Vascular Accrss Port (VAP), Access, Maintenance, and Removal of Access device-Adult ADMCL 6.08		L, D	VU, RD / DO			
Small Bore Feeding Tube (Corpack) Insertion Using Cortrack Electromagnetic Technique, and Maintenance	• See Competency Validation • Enteral Nutrition Pg 1142 - 1149		D	VU, RD / DO Placements: #1 #2 #3			
Removal of Arterial and Venous Sheath	• See Competency Validation • • Arterial and Venous Sheath Removal Pg 602-609		L,				

ICU

Manuel Annual Day Validations

IOPO – Annual
GEM – Annual
EKG – Every other yr
Code Blue – Every other yr

2014

- Mechanical Ventilation
- BiPAP
- Chest Tube Mgmt
- Mediastinal dsg changes
- Tracheostomy
- PleurX drainage system

2015

- Care of Patient with Pacemaker
- Pressure Lines/CVP/Arterial Lines
- PA Catheter
- Sheath Removal
- IABP

2016

- Care of Neurological Patient (Assess, EVD, ICP)
- CAPD
- CRRT
- Hypothermia
- SBFT

2014 Quarterly Education Topics

- Sheath Removal (1st Quarter: Jan-March)
- PA Catheter (2nd Quarter: April-June)
- IABP (3rd Quarter: July-Aug)
- SBFT (4th Quarter: Oct-Dec)

INDIANA UNIVERSITY HEALTH ARNETT, INC.
BOARD OF DIRECTORS RESOLUTION
SUPPORTING LEVEL III TRAUMA CENTER DEVELOPMENT

WHEREAS, the mission of Indiana University Health Arnett, Inc. ("IU Health Arnett") includes the provision of emergency care for the benefit of all patients of the community; and

WHEREAS, management has recommended that IU Health Arnett pursue Level III trauma center designation for its emergency services department as a means of expanding and enhancing this critical service for Lafayette and surrounding communities; and

WHEREAS, at its October 5, 2011 meeting, the Board of Directors endorsed a plan to move toward Level III trauma center designation; and

WHEREAS, the Board continues to support this endeavor and believes that achieving Level III trauma center designation will lead to improvements in quality of care, access, and patient experiences, and help deliver on the promise of assurance to the patients and families we serve.

NOW, THEREFORE, the Board hereby **RESOLVES** to support for the establishment of a Level III trauma center, including satisfaction of the standards established by the American College of Surgeons for such designation, and affirms its commitment of resources necessary to maintain such designation and to assure the high standards needed to provide optimal care for all trauma patients.

ADOPTED the 11 day of June, 2012.

Daniel F. Evans

Daniel F. Evans, Jr., Chairman
Indiana University Health Arnett
Board of Directors

INDIANA UNIVERSITY HEALTH ARNETT, INC.
BOARD OF DIRECTORS RESOLUTION
SUPPORTING LEVEL III TRAUMA CENTER
"IN THE ACS VERIFICATION PROCESS"
RESOLUTION

WHEREAS, the Indiana University Health Arnett Hospital Board of Directors passed and executed a resolution to establish a Level III Trauma Center on June 11, 2012; and

WHEREAS, the State of Indiana, through its State EMS Commission, has developed the designation of 'in process' designation; and

WHEREAS, IU Health Arnett has completed the American College of Surgeons (ACS) consultative site visit in May of 2013 and has addressed the consultant recommendations for improvement and certification.

THEREFORE, the Board of Directors hereby approves the submission of the "in the process of ACS verification" application for approval recognizing and assuring the following:

1. All application documents and appropriate acknowledgments are complete to satisfy the "in the ACS verification process" requirements for State certification.

2. Formal submission of request for the ACS Level III Trauma Certification will occur on or before November 1, 2013.

3. Indiana University Health Arnett will pursue verification by the ACS within one year of the application to the Indiana State Department of Health and achieve Level III designation by the ACS within two (2) years of the granting of "in the ACS verification process" status.

The Board of Directors recognizes that if ACS Level III Trauma Certification is not pursued within one (1) year of the application and/or does not achieve ACS Certification within two (2) years of the granting of "in the ACS verification process" status, the "in the ACS verification process" status will immediately be revoked, become null and void and have no effect whatsoever.

ADOPTED the 3rd day of October, 2013.

Victor Lechtenberg, Chairman
Indiana University Health Arnett Board of Directors

IU HEALTH ARNETT MEDICAL STAFF
MEDICAL EXECUTIVE COMMITTEE
RESOLUTION SUPPORTING
LEVEL III TRAUMA CENTER DEVELOPMENT

WHEREAS, the mission of Indiana University Health Arnett, Inc. ("IU Health Arnett") includes the provision of emergency care for the benefit of all patients of the community; and

WHEREAS, among the purposes of the medical staff of IU Health Arnett is to strive to ensure that all patients admitted to, or treated in, the hospital and related facilities l receive patient focused care of the highest quality; and

WHEREAS, management has recommended that IU Health Arnett pursue Level III trauma center designation for its emergency services department as a means of expanding and enhancing this critical service for Lafayette and surrounding communities; and

WHEREAS, at its October 5, 2011 meeting, the Board of Directors of IU Health Arnett endorsed a plan to move toward Level III trauma center designation; and

WHEREAS, the Medical Executive Committee supports this endeavor and believes that achieving Level III trauma center designation will lead to improvements in quality of care, access, and patient experiences, and help deliver on the promise of assurance to the patients and families we serve.

NOW, THEREFORE, the Medical Executive Committee hereby **RESOLVES** to support for the establishment of a Level III trauma center, including satisfaction of the standards established by the American College of Surgeons for such designation, and affirms the commitment of resources necessary to maintain such designation and to assure the high standards needed to provide optimal care for all trauma patients.

ADOPTED the 19th day of June , 2012.

M Beardmore, MD

Michael Beardmore, President
Indiana University Health Arnett Medical Staff

INDIANA UNIVERSITY HEALTH ARNETT, INC.
MEDICAL EXECUTIVE COMMITTEE RESOLUTION
SUPPORTING LEVEL III TRAUMA CENTER
"IN THE ACS VERIFICATION PROCESS"
RESOLUTION

WHEREAS, the Indiana University Health Arnett Hospital Medical Executive Committee passed and executed a resolution to establish a Level III Trauma Center on June 11, 2012; and

WHEREAS, the State of Indiana, through its State EMS Commission has developed the designation of 'in process' designation; and

WHEREAS, IU Health Arnett has completed the American College of Surgeons (ACS) consultative site visit in May of 2013 and has addressed the consultant recommendations for improvement and certification.

THEREFORE, the Medical Executive Committee hereby approves the submission of the "in the process of ACS verification" application for approval recognizing and assuring the following:

1. All application documents and appropriate acknowledgments are complete to satisfy the "in the ACS verification process" requirements for State certification.

2. Formal submission of request for the ACS Level III Trauma Certification will occur on or before November 1, 2013.

3. Indiana University Health Arnett will pursue verification by the ACS within one year of the application to the Indiana State Department of Health and achieve Level III designation by the ACS within two (2) years of the granting of "in the ACS verification process" status.

The Medical Executive Committee recognizes that if ACS Level III Trauma Certification is not pursued within one (1) year of the application and/or does not achieve ACS Certification within two (2) years of the granting of "in the ACS verification process" status, the "in the ACS verification process" status will immediately be revoked, become null and void and have no effect whatsoever.

ADOPTED the 7 day of Oct., 2013.

Michael J. Beardmore, MD, President
Indiana University Health Arnett Medical Executive Committee

VRC VERIFICATION REVIEW CONSULTATION

for excellence in trauma centers

AMERICAN COLEGE OF SURGERY COMMITTEE ON TRAUMA
VERIFICATION, REVIEW, & CONSULTATION PROGRAM FOR HOSPITALS

Consultation Level III Trauma Center Site Visit Report

INDIANA UNIVERSITY HEALTH ARNETT
LAFAYETTE, INDIANA
APRIL 30-MAY 1, 2013

AMERICAN COLLEGE OF SURGEONS
Inspiring Quality:
Highest Standards, Better Outcomes
100 years

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IX. RESEARCH

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XI. CASE REVIEWS

Indiana University Health Arnett
Lafayette, Indiana
April 30-May 1, 2013
Consultation, Level III Trauma Center
Site Visit Report

EXECUTIVE SUMMARY

Indiana University Health Arnett in Lafayette, Indiana was reviewed on April 30-May 1, 2013 by Drs. Charles Rinker, Rosemary Kozar, and Ms. Connie Mattice, RN, for consultation as a Level III trauma center. This hospital provides trauma care for adults and children. The findings of the reviewers are as follows.

Deficiencies

1. The multidisciplinary trauma program does not continuously evaluate its processes and outcomes to ensure optimal and timely care (5.4)
2. There is no method to identify injured patients, monitor the provision of health care services, make periodic rounds, and hold formal and informal discussions with individual practitioners (5.16)
3. Adequate (>50%) attendance by general surgery at the multidisciplinary peer review committee is not documented (5.19)
4. The orthopaedic trauma liaison or representative does not attend a minimum of 50% of the multidisciplinary peer review committee meetings (9.13)
5. Availability of anesthesia services and the absence of delays in airway control or operations are not documented by the hospital PIPS process (11.10)
6. The anesthesiology representative or designee to the trauma program does not attend at least 50% of the multidisciplinary peer review meetings (11.14)
7. The PIPS program does not evaluate OR availability and delays when an on-call team is used (11.19)
8. The PACU is covered by a call team from home without documentation by the PIPS program that PACU nurses are available and delays are not occurring (11.25)
9. Changes in interpretation of images are not monitored through the PIPS program (11.32)
10. The program is not able to demonstrate that the trauma registry supports the PIPS process (16.3)
11. The results of analysis do not define corrective strategies (16.6)
12. The results of analysis and corrective strategies are not documented (16.7)
13. Identified problem trends do not undergo multidisciplinary peer review by the trauma peer review committee (16.13)
14. The process does not identify problems (16.17)
15. The process does not demonstrate problem resolution (loop closure) (16.18)

Strengths

1. Dr. Ruben Nirmalan (TMD) and Ms. Amanda Rardon (TPM) are effective leaders of the trauma program
2. The administrator (Mr. Brian Shockney) is a strong supporter of the trauma program
3. The neurosurgeons, despite limited manpower, are committed to providing neurotrauma care to their community
4. Affiliation with Indiana University provides the trauma program with abundant resources
5. The physical plant is well designed and enhances patient care
6. The hospital's geographic location makes it an appropriate candidate for verification and designation as a Level III trauma center
7. The trauma service is an active participant in the system building efforts of Indiana University

8. Inpatient dialysis is an asset to the trauma program
9. The tube system for transport of blood products enhances patient care
10. The OR has the capability to care for a broad spectrum of injuries
11. The cardiac on-call team can serve as back-up in the event of multiple trauma victims
12. The on-site helicopter facilitates timely transfer of the injured
13. Hospital staff demonstrate enthusiasm for the trauma mission

Weaknesses

1. Lack of coordination between EMS and the ED significantly interferes with provision of effective and timely care of injured patients.
2. The trauma flow sheet is poorly designed and fails to support efforts to assess resuscitation of critical patients.
3. The trauma activation protocols fail to specify surgeon response times for trauma alerts and consultations.
4. The trauma service tends to have a casual attitude toward geriatric, low acuity trauma.
5. Emergency medicine and the trauma service are not utilizing standardized order sets available in the electronic record.
6. Documentation in the ED by physicians, surgeons, and nurses is poor.
7. Meaningful discharge summaries are lacking for many patients admitted to the trauma service.
8. The low volumes of FAST examinations are not being reviewed for accuracy.
9. The TPM has too many responsibilities and insufficient administrative support.
10. Radiologists are not grading solid organ injuries. They have resisted performance of sagittal reconstructions of head CT scans in head-injured patients, despite many requests by the neurosurgeons.
11. The radiologists are not attending the trauma committee meetings.
12. A massive transfusion policy has yet to be finalized.
13. PACU and ICU nurses lack meaningful trauma continuing education.
14. Distant location of the surgical office building creates problems for surgical response to activations and consultations.

Recommendations

1. Continue efforts to resolve prehospital dysfunction.
2. Specify and monitor response times to trauma alerts and consultations.
3. Recognize that low-acuity geriatric trauma is the responsibility of the trauma service.
4. Revise the trauma flow sheet and improve documentation, including discharge summaries.
5. Consider providing a mid-level practitioner for the trauma service.
6. Identify and empower a prevention coordinator.
7. Radiologists should
    a. Grade solid organ injuries.
    b. Perform sagittal reconstructions of neurotrauma head CTs.
    c. Report overread discrepancy rates to the trauma service.
    d. Attend trauma committee meetings.
8. Encourage surgeons to obtain additional trauma continuing education.
9. Provide continuing trauma education for ICU and PACU nursing staff.
10. Finalize the massive transfusion protocol.
11. Develop a process for oversight of FAST exams.
12. Address the PIPS issues identified in the executive summary and text.
13. Develop a trauma protocol manual. Suggested protocols could include:
    a. Standardized RSI protocol.
    b. Guidelines for clearance of the cervical spine.
    c. Management of anticoagulated patients with closed head injury.

14. Provide additional administrative support for the TPM.
15. Use standard trauma order sets when feasible.
16. Use PIPS to monitor response of PACU nurses, anesthesiologists, and OR personnel when called after hours.
17. Ensure appropriate peer review committee attendance by general surgeons, orthopaedic, and anesthesia liaisons.

Charles Rinker, MD, FACS

Rosemary Kozar, MD, FACS

Connie Mattice, RN

Indiana University Health Arnett
Lafayette, Indiana
April 30-May 1, 2013
Consultation, Level III Trauma Center
Site Visit Report

I. PURPOSE OF REVIEW

Indiana University Health Arnett (IUHA) in Lafayette, Indiana was reviewed on April 30-May 1, 2013 by Drs. Charles Rinker, Rosemary Kozar, and Connie Mattice, RN, for consultation as a Level III trauma center. This hospital provides trauma care for adults and some children. The review was requested by the hospital. The reporting year for the review was January, 2012 to December, 2012.

During the prereview meeting, the site surveyors met with the following members of the trauma program.

Ruben Nirmalan, MD	Trauma Medical Director
Amanda Rardon, RN	Trauma Program Manager
Richard Berg, MD	General/Trauma Surgery
Jeffrey Crecelius, MD	Neurosurgery Liaison
Randy Gehring, MD	Neurology
Eric Orenstein, MD	Orthopaedic Surgery Liaison
Mr. Brian Shockney	Chief Operating Officer
Rena Zenarosa, MD	Emergency Medicine
John Reisman, MD	Surgical Services
Stanley Weber, MD	Anesthesia Liason
Kristina Carlile, RN	Emergency Department Director
Mr. Mike Fleming	Trauma Registrar
Ann Keyes	Surgery Director
Robert Reed, MD	TMD, Methodist Hospital/Indianapolis
Missy Hockaday, RN	TPM, Methodist Hospital

During this meeting, the verification program was reviewed, and the prereview questionnaire was discussed in detail. Important issues that were addressed included the following.

- Organizational, oversight, and communication problems in the prehospital arena
- Lack of specified response times for trauma alerts and consults
- Documentation problems, including a poorly designed trauma flow sheet
- Undertriage

II. HOSPITAL INFORMATION

IUHA is a community, not-for-profit hospital. It has an affiliation with Indiana University School of Medicine, and is one of eight units of the Indiana University Hospital System. The payer mix for the hospital is as follows.

Payer	All Patient %	Trauma Patient %
Commercial	0	3
Medicare	48	44
Medicaid	9	6
HMO/PPO	37	33
Uncompensated	5	10
Other	1	4
Total	100	100

The "other" category includes Employee Health, Financial Aid, Guaranteed Vendors, Hospice, Out-of-State Medicaid, Special contracts, Veterans' Administration, and Workers Compensation.

All of the trauma activities are within one campus. The bed status for the hospital is as follows.

Hospital Beds	Adult	Pediatric	Total
Licensed	185	6	191
Staffed	185	6	191
Average Census	112	3	15

The hospital has the written commitment of the institutional governing body and the medical staff to become a trauma center. There are resolutions supporting the trauma program from both the hospital administration and the medical executive committee.

The trauma program has an operating cost center within the hospital financial structure. The trauma budget covers the following.

- Call pay for trauma, emergency general surgery, orthopaedics, and neurosurgical groups
- Hourly compensation for trauma medical director (TMD) activities
- One FTE for the trauma program manager (TPM)
- Purchase of the trauma registry
- 0.6 FTE for the registrar
- Education, outreach, performance improvement, and marketing initiatives

The hospital also supports trauma program staff involvement in the Indiana Trauma Network. The goal of the network is to develop a state wide trauma system within the IU Health system. TPMs and registrars from each of the hospitals hold quarterly meetings to work on policy development, performance improvement and benchmarking.

III. PREHOSPITAL

There are no verified trauma centers within a 50-mile radius of Arnett Hospital. Four ambulance services transport patients, with the majority arriving by the Tippecanoe County service. Medical control and staffing of this service is under the control of the other major hospital in town, which has self-designated as a trauma center. Three other ambulance services receive medical control from IUHA ED physicians. In the absence of state-wide protocols, the various prehospital programs function under protocols and guidelines determined by their own medical control. The distribution of patients is primarily guided by patient choice rather than capabilities. Field activation criteria differ depending on which hospital the patient is taken to, and as a result, notification of ED staff and appropriate activation of the trauma team is inconsistent and often delayed. Chart review and discussions with Arnett emergency physicians convinced the reviewers that the current lack of coordination between the several prehospital teams is compromising care in the field and contributes to both over and undertriage.

The air medical support service for the hospital is primarily provided by LifeLine, a rotor wing aircraft, which is based at IUHA. The hospital serves as its base station and medical control is provided by the hospital. There is always one aircraft stationed at Arnett and it is one of five aircraft owned by the IU Healthcare System. There are four additional air medical units in the area.

The TPM, Amanda Rardon, provides education and attends audit and review for IUHA sponsored EMS agencies. IUHA serves as a clinical site for EMT students and provides quarterly EMS education to Lafayette Fire Department. Ms. Rardon also conducts run report reviews and assists in development of protocols.

IV. TRAUMA SERVICE
A. TRAUMA MEDICAL DIRECTOR (TMD)

The TMD, Dr. Ruban Nirmalan graduated from Northeastern Ohio Universities College of Medicine in 2001 and completed his residency in general surgery at St. John Hospital, Detroit, Michigan, in 2006. He also had a trauma fellowship in 2008. He is board certified in surgery. During the reporting year, he admitted 16 patients, with three having an ISS greater than 15. One required operative intervention. Dr. Nirmalan reports directly to the chief operating officer, Brian Shockney. He has a very well-defined job description that allows him to manage the trauma program.

B. TRAUMA SURGEONS

Including Dr. Nirmalan, there are four board-certified core surgeons currently taking trauma call and providing continuous coverage. All of the trauma panel surgeons have privileges in general surgery and have successfully completed the ATLS course at least once. They do not document much additional trauma continuing education experience, however. The trauma surgeons respond promptly to activations, provide appropriate care, and participate in performance review activities.

C. TRAUMA PROGRAM MANAGER (TPM)

Amanda Rardon, the TPM, with a bachelors nursing degree, has been in her full-time position for 1.5 years and reports to TMD, administration, and the ED director. In addition to the responsibilities detailed in her job description, she also serves as EMS liaison and oversees 0.6 personnel in a supporting data entry role. The reviewers believe that she needs additional support personnel, which could include a mid-level practitioner to conduct prospective assessment of new trauma admissions, case management, and follow-up on transferred patients. This individual could also assist the trauma surgeons with patient assessments, inpatient rounds, and documentation.

Ms. Rardon is active in regional and state trauma activities. She also demonstrates evidence of educational preparation with greater than 16 hours of trauma-related continuing education per year and clinical experience in the care of injured patients. In summary, she is engaged in her program responsibilities, effective in implementing care processes, and is evolving in the role of TPM.

D. TRAUMA SERVICE

Since assuming his duties just over 1 year ago, Dr. Nirmalan has succeeded in developing a trauma service consistent with those seen in most Level III trauma centers. The trauma surgeons share call but take care of their own patients. Informal sign-out occurs at the beginning of the 3-day weekend call, and on weekday evenings as needed. With one exception the general surgeons attend the process and peer review committees chaired by Dr. Nirmalan. They respond promptly to Trauma One (first tier) activations. Strong support comes from the two neurosurgeons on staff, and the orthopaedic surgeons are also active participants. Opportunities for improvement of the service include continuing trauma education for all of the surgeons, development of a mechanism for getting them involved sooner in Trauma Alert (second tier) activations (see below), and improved committee attendance by orthopaedics, anesthesia, and radiology.

E. TRAUMA RESPONSE/ACTIVATION

IUHA has a multilevel response, involving three levels. The ED physician, ED nurse, and trauma surgeon can activate the trauma team. As currently structured, local EMS cannot effectively activate the trauma response based on field criteria. This is a serious shortcoming that needs to be corrected if undertriage is to be reduced.

The statistics for each level of response are tabulated below.

Level	Number	Response %
Highest	31	6
Intermediate	79	16
Lowest	395	78
Total	513	100
Direct Admits	8	

The highest level of activation (Trauma One) includes the six ACS required criteria and a 30-minute response time. Chart review indicates that the surgeons respond promptly when called, although poor documentation makes it difficult for either the reviewers or the TPM to verify their arrival times.

Criteria for intermediate activations are appropriate, but the trauma surgeon is not included in the initial notification, and has no specified response time. The ED records fail to document any communication between the ED staff and the on-call surgeon, and also are very inconsistent in demonstrating when, or if, the surgeon arrived to see the patient. The trauma flow sheet, when used, is confusing and inadequate. Notes by ED physicians and surgeons frequently fail to impart meaningful information. The surgeons' office building is located off campus (approximately a 20-minute drive), confounding efforts to encourage earlier involvement of the surgeons in trauma alerts. Finally, the reviewers found many instances of patients being transferred without having been seen by a surgeon, as well as a troubling rate of undertriage. Solutions to these problems would include the following.

- Consideration of inclusion of the surgeon in the initial trauma alert notification
- Improved documentation of critical thinking and of communications between ED physicians and surgeons
- A specified surgeon response time to the ED (such as 45-90 minutes), once the need for the surgeon's presence has been identified
- Relocation of the surgical offices to an on-campus location
- Minimizing the practice of transferring trauma patients who have not been seen by the appropriate on-call surgeon

The TPM reviews all lowest-level cases for appropriateness of admission and for surgeon consultation, and found no serious problems. Chart reviews confirmed this. However, there is no specified time for completion of a consultation, which under current policy could be delayed as long as 24 hours. Chart review and discussions with the TMD and TPM left the reviewers with the impression that the trauma service tends to have a casual view of geriatric trauma, and should be more diligent in its approach to these elderly patients. The reviewers recommend establishment of a time limit for surgeon direct involvement in the care of these patients (many of whom are geriatric patients with injuries from same-level falls). Timeliness of response should be monitored along with appropriateness of admission. This will require a lot of man hours to accomplish; addition of a case manager or physician assistant to the trauma service for this purpose could be expected to significantly improve patient care.

The highest level of activation is instituted via group pager to dedicated in-house phones carried by all providers. A second set of calls must be made to contact any essential personnel who are not in the hospital. The reviewers encountered one Trauma One activation in which the operator forgot to notify the extramural personnel, resulting in a 2-hour delay in trauma surgeon arrival. Efforts to correct this communication issue should continue.

The personnel on the trauma team for each level of activation include the following.

Responder	Activation Level		
	Highest	Alert	Lowest
Trauma Attending Surgeon	X		
ED Physician	X	X	X
ED Charge Nurse	X	X	
ED Trauma Nurse	X	X	
ED Tech and/or 2nd RN	X	X	
Respiratory Therapy	X	X	
Radiology Technologist (with portable XR machine)	X	X	
CT Technologist	X	X	
Chaplain (if available)	X	X	
Associate Administrator	X	X	
Security	X	X	
OR (notified & held open until release	X	X	

F. TRAUMA/HOSPITAL STATISTICAL DATA

The ED activity and trauma demographics are summarized below.

Total ED Visits	33,398
Trauma ED Visits	7,055
Blunt trauma	97
Penetrating trauma	3
Burns	0

The trauma-related ED activity led to the following trauma admissions.

Service	Number
Trauma	67
Orthopaedic	72
Neurosurgical	31
Other Surgical	7
Burn	0
Non-Surgical	226
Total	403

The disposition of trauma admissions from the ED is shown below.

Disposition	Number	Admitted to Trauma Service
ED to OR	43	3
ED to ICU	13	5
ED to Floor/Ward	347	59
Total	403	67

The ISS and percent mortality are as follows.

ISS	Trauma Admissions	Deaths	Mortality	Admitted to Trauma Service
0-9	258	1	0	36
10-15	134	6	4	21
16-24	11	0	0	10
>25	0	0	0	0
Total	403	7	1	67

The numbers of trauma transfers are as follows.

Transfers	Air	Ground	Total
Transfers In	0	12	12
Transfers Out	13	64	77

Trauma service policy mandates that pediatric patients who might require admission to the ICU should be transferred to one of the centers in Indianapolis. Orthopaedic patients with unstable pelvic fractures, acetabular fractures, hand injuries, or the need for replantation are routinely transferred. The neurosurgeons are willing to care for most neurotrauma, but on occasion may need to transfer because they are already encumbered with another patient. The general surgeons have a policy of transferring all blunt liver injuries unless they require immediate operative management. So as to not delay transfers, the surgeons rarely come in to see those patients for whom transfer is routine. In the interest of optimal patient care, however, the trauma service needs to revisit its expectations of surgeons. In many circumstances, the surgeons may have valuable input into the bedside management of these individuals in preparation for transfer, even though they will not be providing definitive care.

G. TRAUMA BYPASS

IUHA has a bypass protocol, but has never used it. The trauma service was involved in the development of the policy, and the on-call surgeon is to be included in any decisions to divert.

H. NEUROSURGERY

Dr. Jeffrey Crecelius, the neurosurgical liaison, graduated from the University of Kentucky College of Medicine in 1980, and completed his residency at Henry Ford Hospital in 1986. He is certified by the American Board of Neurological Surgery, is a member of the American Association of Neurological Surgery and the Congress of Neurological Surgery, and is an ATLS instructor. He and his associate, Dr. Randy Gehring (also board certified), share call at both hospitals in Lafayette, and will provide back-up to each other for emergencies. Local trauma statistics document that fewer than 25 craniotomies for injury within 24 hours of admission occurred at IUHA during the reporting year.

The neurosurgeons are strongly supportive of the trauma program, and were early advocates for its establishment. In conjunction with the general surgeons and ED physicians, they have defined which type and severity of neurological injury patients should remain at the facility on the unusual occasions when no neurosurgical coverage is present. There are transfer agreements with appropriate Level I and Level II centers.

I. ORTHOPAEDIC SURGERY

Dr. Eric Orenstein, the orthopaedic liaison, graduated from University of Maryland School of Medicine in 1980, and completed his residency training at Loyola University Affiliated Hosptials, Maywood, Illinois, in 1985. Dr. Orenstein was board certified in 2006. He is a member of the Orthopedic Trauma

Association and the American Academy of Orthopaedic Surgery. Currently, Dr. Orenstein's attendance at peer review committee is less than 50%. Including Dr. Orenstein, there are three board-certified/eligible orthopaedic surgeons on the call panel, all of whom have privileges in general orthopaedic surgery.

During the reporting year, 31 operative cases were done within 24 hours of admission by the orthopaedic service. The majority of orthopaedic trauma at Arnett is the result of same level falls in the geriatric population. Patients with acetabular fractures and/or unstable pelvic fractures, as well as pediatric patients who might require ICU admission, are routinely transferred to a higher level of care.

ORs are promptly available to allow for emergency operations on musculoskeletal injuries, such as open fracture debridement/stabilization and compartment decompression. The PIPS process does review the appropriateness of the decision to transfer or retain major orthopaedic trauma. This facility has an orthopaedic surgeon on call and promptly available 24 hours a day.

V. HOSPITAL FACILITIES
A. EMERGENCY DEPARTMENT

Dr. Thomas Heniff, the emergency medicine liaison to the trauma program, graduated from Rush Medical College in 1993, and completed his residency at Methodist Hospital, Indianapolis in 1996. Dr. Heniff is board certified and has taken ATLS in the past.

Including Dr. Heniff, there are 16 board-certified/eligible emergency physicians who treat trauma patients. All of the emergency physicians have successfully completed the ATLS course at least once. There are no physicians who are not board-certified in emergency medicine who work in the ED and are not current in ATLS.

The roles of the emergency physicians and trauma surgeons are well defined, agreed upon, and approved by the director of the trauma services. Emergency physicians do not leave the ED to cover in-hospital emergencies, except for pediatric codes. The hospital does not admit any children to the ICU, and thus pediatric codes are exceedingly rare. There are always two ED physicians and/or one physician and one advanced provider in the ED except for less than 8 hours a day. There are no ED specific policies for care of the trauma patient. The docking site is an enclosed facility with four stations. There is ample room for additional ambulances outside. The Hazmat area is located within this area. There are three showers that have a separate entrance to the ED.

Four main trauma resuscitation bays are located immediately inside from the ambulance entrance. Each is quite large and essential equipment is in place. There are rapid transfusers and glidescopes in each room. FAST exams are conducted by ED physicians on a unit dedicated to the department. The probe is new, at 3 months old. Images are not saved, and no process is in place for reviewing accuracy of the studies.

The flow sheet is hand written and then scanned into EMR. The reviewers judged the trauma flow sheet to be of poor quality. The major issue is that it is a system flow sheet that uses activation criteria and levels of activation that are not the ones used at Arnett. Therefore, determining level of activation is difficult. Additionally, compliance with completion is suboptimal. There were examples of lower-level traumas where no trauma flow sheet was used for brain injured patients. Therefore, no GCS was being recorded.

All ED nurses are required to have BLS, PALS, and ACLS, and must complete TNCC and ENPC within 1 year of hire. New nurses are required to go through a 12-week orientation, including a one-on-one meeting with TPM where trauma policies, procedures, and trauma documentation are discussed. The nurse then must spend a minimum of 12 hours in the trauma rooms with either the TPM or the ED educator. All are required to do yearly competencies which include Level 1 infuser use, arterial and central line placement, triage requirements for trauma activations, and chest tube placement.

Nurses are required to have trauma-related continuing education and some reimbursement is available for extramural meetings. Trauma grand rounds streamed from Methodist Hospital in Indianapolis are also available for the staff to watch. The average nurse has served 11 years, with a turnover rate of 13%. Extra certifications include 94% TNCC, 6% CEN, 100% PALS, 100% ACLS, 91% ENPC, and 3% CPN.

The hospital has a separate area with pediatric-specific equipment in the ED for pediatric resuscitations.

B. RADIOLOGY

Radiologists are promptly available, in person or by teleradiology, for the interpretation of radiographs, performance of complex imaging studies, and interventional procedures. Eleven radiologists are on staff, including five with interventional capabilities. Radiologists are not in-house 24/7. After hours interpretations are performed via teleradiology. Diagnostic information is communicated in a written form and in a timely manner. Critical information is communicated verbally and in writing to the trauma team. Final reports accurately reflect communications, including changes between preliminary and final interpretations. Changes in interpretations are monitored prospectively by the radiology department, but until now have not been reported to the trauma service.

The trauma service notes that radiologists are not routinely grading solid organ injuries, and requests that they do so. In addition, the neurosurgeons have had difficulty convincing the radiologists of the need for routine sagittal reconstruction of head CT scans in patients with closed head injury. A positive response to both of these requests would enhance patient care.

Radiology is situated immediately adjacent to the ED, and the CT scanner is in close proximity to the trauma bays. In the department there is resuscitation equipment for both adult and pediatric patients. There are policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportations to and while in the radiology department. Conventional radiography and CT are available 24 hours per day.

After hours, response time for MRI and angiography is 30 minutes.

C. OPERATING SUITE

The six-bed OR is located on the same floor as the ED. In the OR corridor, there is a limited access elevator that can be taken directly to the second floor ICU. The OR is adequately staffed and readily available. The OR personnel are not in-house 24/7 to start an operation. The staff has a 30-minute response time to be present and ready for a case. There are two calls teams, one for general cases (one RN and one CST) and one for open heart cases (two RNs and two CSTs). If needed afterhours, there is adequate staff for up to three OR rooms. When an OR is needed after hours, the associate administrator in the hospital has individuals paged to respond. There is a general room available for trauma cases, an open heart room for cardiac cases, and a neurosurgical room for craniotomies. During the day, one room is held open the majority of time for emergency and add-on cases. The PIPS program does not evaluate OR availability and delays when an on-call team is used. There is a mechanism for documenting the trauma surgeon's presence in the OR. The OR has the essential equipment.

The anesthesia liaison to the trauma program is Dr. Stanley Weber. Dr. Weber graduated from the University of Pittsburgh in 1981, completed his training at the University of Pennsylvania, and was board certified in 1984. There are 13 anesthesiologists on staff, and three are on backup call off-hours. CRNAs are not involved in the care of the trauma patient.

Primary airway management for trauma patients is the responsibility of the ED physicians. Anesthesia services may be required in some circumstances. Although there appear to be no problems in their

availability for airway management or the OR, delays are not documented by the trauma service PIPS process.

D. PACU

The PACU contains 12 beds and has qualified nurses available 24 hours per day as needed for recovery. Their availability, however, is not documented by the PIPS program. The PACU has the necessary equipment to monitor and resuscitate patients. The PACU does not serve as an overflow for the ICU; most intubated patients go directly to the ICU from the OR.

New hires are required to complete ACLS. There is no trauma-specific education or requirement for PACU nurses.

E. ICU

The ICU consists of 14 medical/surgical beds, with an occasional overflow from the open heart unit. There are no pediatric ICU beds. Dr. Nirmalan is the surgical director of the ICU. He is credentialed by the hospital to care for ICU patients, and participates in the performance improvement process.

Trauma patients are admitted to the trauma service, with a consult by an intensivist to occur within 30 minutes. The intensivist group is pulmonary-critical care trained. The immediate response for life-threatening events is provided by intensivists during regular working hours or by the in-house hospitalist afterhours until the intensivist arrives.

The trauma service retains responsibility for patients in the ICU and coordinates all therapeutic decisions. The trauma surgeon is kept informed of all therapeutic and management decisions made by the ICU team and is given the opportunity to concur with those decisions. The PIPS program reviews admissions and transfers to ensure appropriateness.

All ICU nurses are required to have ACLS. TNCC is strongly recommended but not required at the current time. Yearly competencies are done which include using the Level 1 rapid infuser, chest tubes, and ICP monitoring. Nurses working in the unit have an average of 6 years of experience, with an annual turnover rate of 21%. The hospital maintains a one-nurse-to-two-patients or better staffing pattern for patients in the unit.

Extra certification for ICU nurses includes 21% TNCC, 100% ACLS, and 21% CCRN. There is trauma-related education for nurses working in the unit, though this is limited. Posting of educational opportunities, including trauma education, is done on the education board in the unit. All nurses are also encouraged to attend TNCC, which is reimbursed by the ICU. Trauma grand rounds from another hospital are also available via teleconference quarterly, free of charge.

The ICU has the necessary equipment to monitor and resuscitate patients. This Level III trauma center admits neurotrama patients and has intracranial pressure monitoring equipment. There is a respiratory therapist available and on-call 24 hours per day.

F. BLOOD BANK

The source of blood products is Indiana Blood Center in Indianapolis. IUHA has an active cardiac surgery program, and accordingly has an ample supply of blood and blood products, including platelets. The average turnaround time for type-specific blood is 15 minutes, and for full crossmatch, 40 minutes. FFP may be thawed by water bath in 20 minutes. The trauma service and blood bank are in the final stages of development of a massive transfusion policy, which will include clinical targets for transfusion of packed

cells, FFP, and platelets. The lab utilizes a tube system for delivery of blood and products to the point of care, and conducts routine maintenance to ensure safety and satisfactory delivery.

VI. SPECIALTY SERVICES
A. PEDIATRIC TRAUMA

The trauma program defines an injured pediatric patient as younger than 15 years old. The number of pediatric trauma admissions to the specific services during the reporting year is summarized below.

Service	Number of Admissions
Trauma	0
Orthopaedic	17
Neurosurgical	0
Other Surgical	5
Non-Surgical	2
Total Trauma Admissions	24

The ISS and mortality rates for these patients are shown below.

ISS	Trauma Admissions	Deaths	Mortality	Admitted to Trauma/Pediatric Surgery	Admitted to Non-Surgical
0-9	23	0	0	0	2
10-15	0	0	0	0	0
16-24	1	0	0	0	0
>25	0	0	0	0	0
Total	24	0	0	0	2

Most of the pediatric patients have fractures and are admitted by orthopaedics. IUHA admits fewer than 100 injured children annually and reviews the care of the injured children through the PIPS program. There is not a separate pediatric trauma team.

During the reporting year, one child was admitted with a splenic injury. This child did not require any intervention.

B. REHABILITATION SERVICES

There is no medical director of rehabilitation. The hospital provides physical, occupational, and speech therapy for inpatients. When it is determined during the patient's hospital stay that rehabilitation will be needed, social services are immediately consulted. At that time, an evaluation is completed to determine the level of rehabilitation and proper facility. Social services then assist in obtaining preauthorization, referral to the appropriate facility, and transportation once the patient is discharged. Upon discharge, social services also arrange appropriate transportation to the facility.

C. BURN PATIENTS

During the reporting year, the hospital admitted no burn patients and there is not a separate burn team. No patients were transferred in; six were transferred out. Transfer arrangements for burn patients are in effect.

D. VERTEBRAL COLUMN INJURIES

During the reporting year, the hospital admitted 140 patients with spinal column injuries, but none had neurological deficits. Two patients were transferred in while 27 patients were transferred out. There are transfer agreements in place.

E. ORGAN PROCUREMENT

The trauma center has an established relationship with a recognized organ procurement organization (OPO). There are written policies for triggering notification of the OPO. The program led to seven trauma referrals during the reporting year, which in turn resulted in one donor. The PIPS process reviews the organ donation rate. There are written protocols for declaration of brain death.

F. SOCIAL SERVICES

The trauma program does not have a social worker dedicated to the injured patient. There is a social worker in house from 0700 till 2200, and crisis intervention and individual/family counseling is available. There is a chaplain on call for the hospital 24/7. If not in house, the chaplain will respond as needed.

G. DISASTER PLANNING AND MANAGEMENT

The trauma center has a hospital disaster plan and meets the disaster-related requirements of JCAHO. The TMD is a member of the hospital's disaster committee. Hospital drills that test the disaster plan are conducted at least every 6 months. The hospital is able to respond to radiological, chemical, and biological hazardous materials.

H. OTHER SURGICAL SPECIALISTS AND MEDICAL CONSULTANTS

Internal medicine specialists are available for consultation on trauma patients.

VII. PERFORMANCE IMPROVEMENT AND PATIENT SAFETY (PIPS)

A. PIPS

The PIPS program is in the early developmental phase. The process of analysis includes multidisciplinary review, which occurs at regular intervals at three levels: initial review by the TPM; secondary review by the TMD; and tertiary review by committee, if indicated. The TMD is ultimately responsible for overseeing the performance improvement program, in close collaboration with the TPM. Currently, trauma PIPS is able to:

- Identify the trauma patient population for review
- Identify specific system problems
- Intermittently define corrective strategies
- Sporadically resolve specific events and achieve loop closure

The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care. There is a performance improvement and patient safety plan in place; however, it has not been linked with the hospital quality department to ensure a collaborative approach and a seamless uplink and resource.

B. TRAUMA REGISTRY

The trauma program utilizes the Digital Innovations registry program. Data entry is completed within 2 months of discharge in at least 80% of the patients. Selection criteria for data entry are based on ICD-9

codes of 800-994.7, admission to the hospital, transfer to another facility, death in the ED, direct admission, and trauma alert patients who meet NTDB criteria.

The registrar was able to demonstrate the ability to retrieve data. Data are submitted to the state and to NTDB. Strategies for monitoring data validity for the trauma registry that have been put into place and are evolving. However, because of limited TPM and registrar exposure to the software, and limited use of the tracking, trending, and report writing features, we would have to consider the registry to be minimally supportive of the trauma program. Importantly, however, the trauma program does ensure that trauma registry confidentiality measures are in place.

C. TRAUMA DEATH AUDITS

During the reporting year, the hospital had a total of nine deaths, two in the ED and seven in hospital. There was one with and eight without opportunity for improvement. The autopsy rate was 0%.

D. MULTIDISCIPLINARY TRAUMA COMMITTEE

The multidisciplinary trauma committees were unable to demonstrate consistent issue identification and correction. Less than 10% of the injured patients were admitted to non-surgical services and the appropriateness of that practice was demonstrated through the PIPS process; timeliness of consultant response is, however, neither stipulated nor monitored. The trauma service has not yet instituted a method to monitor the provision of health care services, make periodic rounds, and hold formal and informal discussions with individual practitioners. Addition of a mid-level practitioner to the service could enhance this aspect of patient care.

There is a multidisciplinary peer review committee chaired by the TMD with participation from general surgery, orthopaedic surgery, neurosurgery, emergency medicine, and anesthesia. This committee meets bimonthly. Documented adequate attendance of at least 50% by each of the core group of trauma surgeons at the multidisciplinary peer review committee is documented; orthopaedic and anesthesiology liaisons have not met the appropriate benchmarks. In addition, radiology has failed to attend the meetings despite having been invited.

The trauma program operational process performance improvement committee (TOPPIC) addresses the trauma program operational and system issues. Review of these issues, analysis, and proposed corrective actions are documented in the minutes. Nursing issues are also reviewed by PIPS.

E. PROTOCOL MANUAL, EVIDENCE-BASED GUIDELINES AND BENCHMARKS

During the past year, the trauma program has instituted an evidence-based trauma management guideline for venous thromboembolism prophylaxis. Policies to consider adding to the protocol manual would include standardization of rapid sequence intubation, management of anticoagulated patients with closed head injury, and management of clearance of the cervical spine.

The analysis of care and outcomes to be expanded upon. There is a lack of documentation of corrective actions and identification of specific patient care problems was not routinely associated with loop closure. Identification of problem trends has been implemented but at an immature level. Currently data analysis is limited to evaluate care. There is limited audit filters to measure process components and complications. There is a performance improvement plan draft in place; however, this has not been fully operationalized. The key components for provider engagement in the peer review process have not been fully implemented. There is a lack of systematic steps for objective peer case analysis and review therefore lends to unidentified issue and ineffective corrective actions. A more clearly defined organizational process and uplink committee process with medical staff and quality department is suggested.

F. RECOMMENDATIONS FOR PIPS PROGRAM

Overall, the reviewers judged the performance improvement to be immature, with a focus on system and process issue identification. As the team becomes more familiar with the registry and its capabilities, and as reporting structures improve, the next step will be to move beyond the current focus on process and begin critically evaluating the appropriateness of patient care.

Deficiencies or weaknesses in the PIPS process found during the review could be corrected or improved by the following.

- Produce minutes that accurately reflect the discussions and resulting decisions occurring in peer review.
- TPM and support staff to attend vendor trauma registry software educational updates to maximize the registry utilization.
- Utilize the registry to its fullest extent in support of the trauma program, including report writing, benchmarking, trending, and documentation of loop closure.
- Expand on audit filters/indicators to capture time sensitive clinical care management, such as consultant response times, time to OR, and time to CAT scan.
- Revise the trauma flow sheet, assure proper documentation, use it as a key tool in assessment of trauma team response and performance.
- Monitor and trend over- and under-triage.
- Improve physician, surgeon, and nursing documentation, particularly in the ED.
- Include and utilize trauma registry data to support loop closure.
- Redefine criteria for non-surgical admissions.
- Lack of clinical management guidelines. Develop and implement and evaluate evidence-based guidelines for consensus of optimal patient care—such as C-spine guideline, unstable pelvic management, antibiotic therapy guideline, chest tube management guideline, anticoagulation reversal protocol, and massive transfusion protocol.
- Consider an elder clinical practice guideline to address the high-risk population and weighted death outcomes.
- Incorporate a process to evaluate clinical practice guidelines/protocols and report via the PI process.

VIII. EDUCATIONAL ACTIVITIES, OUTREACH PROGRAMS, AND PREVENTION

Educational offerings for physicians, nurses and pre-hospital providers include the following.

- Physicians: ATLS opportunities; trauma grand rounds via webcast
- Nurses: TNCC and ENPC opportunities; trauma grand rounds via webcast; trauma journal club
- Prehospital providers: Monthly in-services

Each nursing department has allocated funds for education and travel expenses. There are also free educational opportunities available to all IU Health staff, such as trauma grand rounds that are done quarterly at a hospital in Indianapolis and available via webcast at IU Health Arnett Hospital.
IUHA has a trauma injury prevention program which includes public education. Examples of injury prevention outreach programs include car seat checks and fittings, annual health and safety fairs, bike rodeo events, and the Every Fifteen Minutes program for local high schools. A coordinator for trauma prevention activities has not been identified.

IX. RESEARCH

IUHA does not have a trauma research program.

X. CHART REVIEW PROCESS

The requested charts were fully provided by the trauma team. These charts were appropriately subdivided by the requested categories, and the trauma team members were helpful in the chart review process. The charts were more than 90% complete for OR reports, EMS run sheets, ED flow sheet, history/physical examinations, and specialty consultations. The chart review process demonstrated that the quality of patient care was satisfactory. The surgical response times to the ED were difficult to evaluate because of poor documentation.

XI. EXIT INTERVIEW

The exit interview was attended by many of the same members who were present at the pre-review dinner. The VRC statement was read verbatim. The summary was then presented and various aspects of the review were discussed by the site visitors and the trauma team members. There were no disagreements with the summary report expressed by the trauma team members.