Eastern Association for the Surgery of Trauma

27th Annual Scientific Assembly

Sunrise Session 07
Engaging All Members of the Acute Care Surgery Team

January 16, 2014
Waldorf Astoria Naples
Naples, Florida

STAFFING MODELS TO INCREASE THE QUALITY AND EFFICIENCY OF CARE IN TIMES OF LIMITED RESOURCES

A. Britton Christmas, MD, FACS
Carolinas Medical Center
Charlotte, NC

Evolution

- July 1, 2003 – implements residency work hour limitations
- "Shift" type work schedules and night float systems
- Concerns emerge regarding continuity and quality patient care
- Integration of health care extenders (ACP's) into trauma services

The Rise of Acute Care Surgery

- Service Line Expansions
  - Trauma
  - Trauma Critical Care
  - Surgical Critical Care
  - Neurosurgical Critical Care
  - Emergency General Surgery
  - Critical Care Procedures

The Problems

- Decreasing manpower in the form of residents
- Waning interest in Trauma/Critical Care as profession
- Increasing patient numbers
- Increasing patient acuity
- 24/7 Coverage
- Maintenance of continuity
- Resident/ACP education and interaction

Keys to Staffing

- Understand needs
- Understand resources
- Understand DOP's for your ACP's
- Develop SOP's
- Clearly PRIORITIZE coverage needs
- Must be able to "flex"

Carolinas Medical Center

- Level I Trauma Center
- Level II Pediatric Trauma Center (Pending)

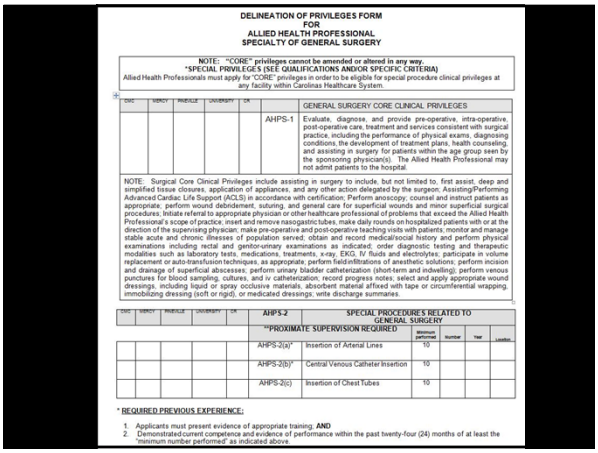
Beds	874
ICU Beds	141
Trauma Activations	4467
Trauma Admissions	4336
SCC Consults	1496
Operative Cases	2300

Daily Services

- Trauma Floor
- Trauma ICU
- Surgical Critical Care
- Emergency General Surgery
- Red Surgery
- Call Coverage

Personnel Resources

- 12 Acute Care Surgeons
- 11 ACP's (Approved for 13 positions)
- 1 Surgical Critical Care Fellow
- Residency Program
  - 4 Categorical/year



DELINEATION OF PRIVILEGES FORM
FOR
ALLIED HEALTH PROFESSIONAL
SPECIALTY OF GENERAL SURGERY

NOTE: "CORE" privileges cannot be amended or altered in any way.
*SPECIAL PRIVILEGES (SEE QUALIFICATIONS AND/OR SPECIFIC CRITERIA)
Allied Health Professionals must apply for "CORE" privileges in order to be eligible for special procedure clinical privileges at any facility within Carolinas Healthcare System.

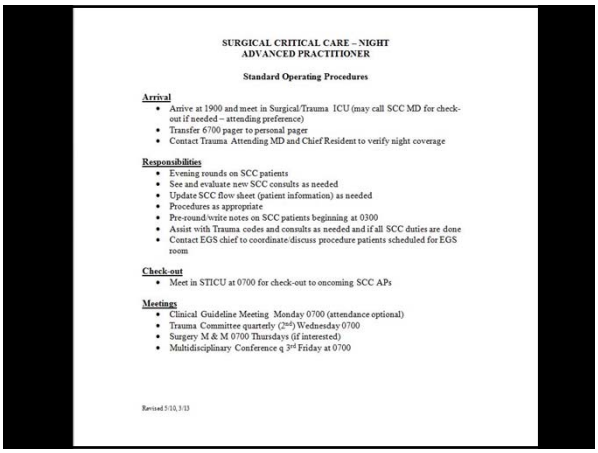
CMC	MEMO	PINEVILLE	UNIVERSITY	CH		GENERAL SURGERY CORE CLINICAL PRIVILEGES
					AHPS-1	Evaluate, diagnose, and provide pre-operative, intra-operative, post-operative care, treatment and services consistent with surgical practice, including the performance of physical exams, diagnosing conditions, the development of treatment plans, health counseling, and assisting in surgery for patients within the age group seen by the sponsoring physician(s). The Allied Health Professional may not admit patients to the hospital.

NOTE: Surgical Core Clinical Privileges include assisting in surgery to include, but not limited to, first assist, deep and simplified tissue closures, application of appliances, and any other action delegated by the surgeon; Assisting/Performing Advanced Cardiac Life Support (ACLS) in accordance with certification; Perform anoscopy; counsel and instruct patients as appropriate; perform wound debridement, suturing, and general care for superficial wounds and minor superficial surgical procedures; Initiate referral to appropriate physician or other healthcare professional of problems that exceed the Allied Health Professional's scope of practice; insert and remove nasogastric tubes; make daily rounds on hospitalized patients with or at the direction of the supervising physician; make pre-operative and post-operative teaching visits with patients; monitor and manage stable acute and chronic illnesses of population served; obtain and record medical/social history and perform physical examinations including rectal and genitor-urinary examinations as indicated; order diagnostic testing and therapeutic modalities such as laboratory tests, medications, treatments, x-ray, EKG, IV fluids and electrolytes; participate in volume replacement or auto-transfusion techniques, as appropriate; perform field infiltrations of anesthetic solutions; perform incision and drainage of superficial abscesses; perform urinary bladder catheterization (short-term and indwelling); perform venous punctures for blood sampling, cultures, and iv catheterization; record progress notes; select and apply appropriate wound dressings, including liquid or spray occlusive materials, absorbent material affixed with tape or circumferential wrapping, immobilizing dressing (soft or rigid), or medicated dressings; write discharge summaries.

CMC	MEMO	PINEVILLE	UNIVERSITY	CH	AHPS-2	SPECIAL PROCEDURES RELATED TO GENERAL SURGERY **PROXIMATE SUPERVISION REQUIRED	Minimum performed	Number	Year	Location
					AHPS-2(a)*	Insertion of Arterial Lines	10			
					AHPS-2(b)*	Central Venous Catheter Insertion	10			
					AHPS-2(c)	Insertion of Chest Tubes	10			

* REQUIRED PREVIOUS EXPERIENCE:

1. Applicants must present evidence of appropriate training; AND
2. Demonstrated current competence and evidence of performance within the past twenty-four (24) months of at least the "minimum number performed" as indicated above.



SURGICAL CRITICAL CARE – NIGHT
ADVANCED PRACTITIONER

Standard Operating Procedures

Arrival
- Arrive at 1900 and meet in Surgical/Trauma ICU (may call SCC MD for check-out if needed – attending preference)
- Transfer 6700 pager to personal pager
- Contact Trauma Attending MD and Chief Resident to verify night coverage

Responsibilities
- Evening rounds on SCC patients
- See and evaluate new SCC consults as needed
- Update SCC flow sheet (patient information) as needed
- Procedures as appropriate
- Pre-round/write notes on SCC patients beginning at 0300
- Assist with Trauma codes and consults as needed and if all SCC duties are done
- Contact EGS chief to coordinate/discuss procedure patients scheduled for EGS room

Check-out
- Meet in STICU at 0700 for check-out to oncoming SCC APs

Meetings
- Clinical Guideline Meeting Monday 0700 (attendance optional)
- Trauma Committee quarterly (2nd) Wednesday 0700
- Surgery M & M 0700 Thursdays (if interested)
- Multidisciplinary Conference q 3rd Friday at 0700

Revised 5/10, 3/13

Daily ACP Assignments

• SCC	2 ACP's
• Night	1 ACP
• Trauma Floor	1 ACP (Mon – Fri)
• "Float"	1 ACP (Mon – Fri)
• TICU	+/-

ESTABLISH CLEAR PRIORITIES

- **ALWAYS 2 ACP's for SCC rounds and day coverage**
  - **– No resident support**
  - **– SCC 1 receives and delegates consults**
  - **– SCC 2 assist SCC 1 and first call for procedures**
  - **– Attempt to overlap for continuity**

PRIORITIES (Cont'd)

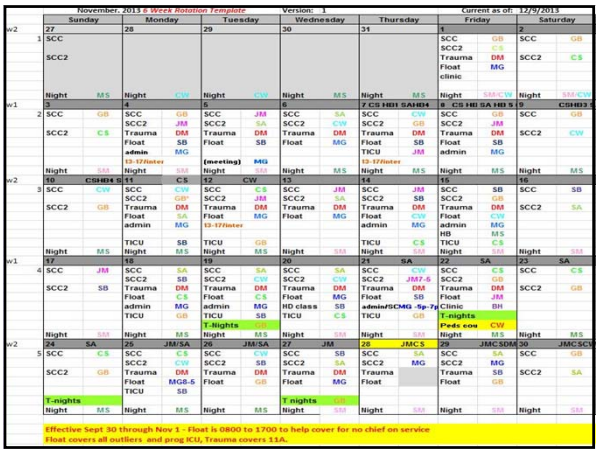
- **ALWAYS 1 ACP for nights**
  - Attending responsible for multiple service lines
  - Often resident cross coverage for multiple services
  - SCC is priority
  - Assist Trauma resuscitations and TICU PRN
  - Start SCC morning pre-rounds

PRIORITIES (Cont'd)

- **Trauma Floor ACP – central point of contact and continuity**
  - Monday – Friday - greatest need for discharge and coordination with other services
- **"Float" ACP – utility player**
  - Residents rounding and managing patients
  - Trauma resuscitations
  - Trauma clinic Wednesday PM
  - ACP clinic Friday AM
  - Flex to assist SCC, Trauma Floor, and Call as needed

PRIORITIES (Cont'd)

- **Gen Surg – Designated ACP (Mon-Fri)**
  - Residents in OR on weekdays
  - Consults, discharges, patient management



November, 2013 6 Week Rotation Template — Version: 1 — Current as of: 12/9/2013

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
w2	27	28	29	30	31	1	2
1	SCC SCC2 Night MS	Night CW	Night CW	Night MS	Night MS	SCC GB SCC2 CS Trauma DM Float MG clinic Night SM/CW	SCC GB SCC2 CS Night SM/CS
w1	3	4	5	6	7 CS HB SA HB	8 CS HB SA HB	9 CS HB
2	SCC GB SCC2 SCC2 CS Trauma DM Float SB admin MG t3-17/inter Night SM	SCC GB SCC2 JM Trauma DM Float SB Night SM	SCC JM SCC2 SA Trauma DM Float SB (meeting) MG Night SM	SCC SA SCC2 CW Trauma DM Float MG Night MS	SCC CW SCC2 GB Trauma DM Float SB TICU JM t3-17/inter Night MS	SCC GB SCC2 JM Trauma DM Float SB admin MG Night MS	SCC GB SCC2 CW Night MS
w2	10 CS HB SA	11 CS	12 CW	13	14	15	16
3	SCC CW SCC2 GB SCC2 GB Trauma DM Float SA admin MG TICU SB Night MS	SCC CW SCC2 GB Trauma DM Float SA admin MG TICU SB Night MS	SCC CS SCC2 JM Trauma DM Float MG t3-17/inter TICU GB Night MS	SCC JM SCC2 SA Trauma DM Float MG Night SM	SCC JM SCC2 SB Trauma DM Float CW admin MG TICU CS Night SM	SCC SB SCC2 GB Trauma DM Float CW admin MG HB MS TICU CS Night SM	SCC SB SCC2 SA Night SM
w1	17	18	19	20	21 SA	22 SA	23 SA
4	SCC JM SCC2 SB SCC2 SB Trauma DM Float CS admin MG TICU GB Night SM	SCC SA SCC2 SB Trauma DM Float CS admin MG TICU GB Night MS	SCC SA SCC2 CW Trauma DM Float CS admin MG TICU SB T-nights GB Night MS	SCC SA SCC2 CW Trauma DM Float MG HD class SB TICU CS Night SM	SCC CW SCC2 JM7-5 Trauma DM Float SB admin/SCMG -5p-7a TICU GB Night SM	SCC CS SCC2 GB Trauma DM Float JM Clinic BH T-nights Peds eos CW Night MS	SCC CS SCC2 GB Night MS
w2	24 SA	25 JM/SA	26 JM/SA	27 JM	28 JMCS	29 JMCSDM	30 JMCSCW
5	SCC CS SCC2 GB SCC2 CW Trauma DM Float MGB-S TICU SB T-nights Night MS	SCC CS SCC2 CW Trauma DM Float MGB-S TICU SB Night MS	SCC CW SCC2 SB Trauma DM Float GB Night MS	SCC SB SCC2 SA Trauma DM Float MG T nights GB Night SM	SCC SA SCC2 MG Trauma Float Night SM	SCC SA SCC2 MG Trauma SB Float GB Night SM	SCC GB SCC2 SA Night SM

Effective Sept 30 through Nov 1 - Float is 0800 to 1700 to help cover for no chief on service
Float covers all outliers and prog ICU, Trauma covers 11A.

Assess Staffing Needs

- **SCC Needs Assessment (11/2013)**

Consultation Times	Consults (n)
0300 – 0700	24
0700 – 1100	40
1100 – 1500	76
1500 – 1900	130
1900 – 2300	37
2300 - 0300	23

What about resident interactions?

- Make it very clear that ACP's don't work for the residents…they work for the service line under direction of attending physicians
- ACP's conduct orientation to service line
- ACP's as a resource
- Provider responsible for patient gets first rights at critical care procedures

Other Keys to Success

- Build a team with functionality similar to the attending staff or representative service line
- Provide internal educational opportunities
- Teamwork is a MUST
- Establish a PHYSICIAN LIAISON
- Designate LEAD ACP when group large enough to need leadership/representation

PeaceHealth Medical Group

Maximizing the Effectiveness of PAs/NPs in the Acute Care Surgery Model

Elizabeth K. Crawford, M.S., PA-C
Trauma and Acute Care Surgery
PeaceHealth Southwest Medical Center
Vancouver, WA
ecrawford@peacehealth.org

PeaceHealth Medical Group

Objectives

- Why do you want one?
- How do you find the right one?
- How do you decide what they should do?
- How do you get staff buy-in?

© 2011 PeaceHealth

PeaceHealth Medical Group

Physician Assistants and Nurse Practitioners

- What we are
  - *Partners (Two-way relationship)*
  - *Physician extenders : allowing "you" to be in multiple places at the same time*
  - *Extensive research shows our value (time/money/productivity/quality of life/etc.)*
- What we are not
  - *Mini-docs*
  - *"Mid-levels"*
  - *Residents*

© 2011 PeaceHealth

PeaceHealth Medical Group

PA or NP?

© 2011 PeaceHealth

PeaceHealth Medical Group

Finding the right PA/NP

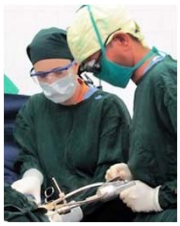
- It doesn't start with recruiting…
- Decide what role you want them fill:
  - *Initial visits?*
  - *Follow-up visits?*
  - *First assist?*
  - *Floor rounds?*
  - *ICU care?*
  - *Procedures?*
- Define *exactly* what will they need to know to be successful = *JOB DESCRIPTION*

© 2011 PeaceHealth

PeaceHealth Medical Group

A Day in the Life of an ACS PA-C

- The ultimate utility player…


© 2011 PeaceHealth

PeaceHealth Medical Group

We're a Team…

- How do you want ***your*** team to work?
- Where do you want your PA/NP to spend their time?
  - *Cloning is not an option… Feed and water them… Don't burn them out… They're like Gremlins*
- What will their schedule look like?
- What are your plans for when they take vacation?
  - *Do without?*
  - *Locum tenens?*

© 2011 PeaceHealth

PeaceHealth Medical Group

Who are you looking for?

- Experienced vs. new graduate
  - *You will have to train/orient both*
  - *The only question is how much*
- Locums to permanent?

© 2011 PeaceHealth

PeaceHealth Medical Group

How do you attract the right PA/NP to your position?

- Benefits: What do PAs/NPs value?
  - *(It might not be what YOU think…)*
- Orientation and training
- Opportunities for professional growth
  - *Education*
  - *Research*
  - *Presenting at national meetings*
  - *Teaching/mentoring*

© 2011 PeaceHealth

PeaceHealth Medical Group

Where should we advertise for the right PA/NP?

- *AAPA / AACN*
- *State PA or NP associations*
- *PA / NP programs; PA fellowship programs*
- *EAST*
- *AASPA, SCCM, SPATCCM, STN, etc.*
- *Your hospital website(s)*
- *Monster, Job Finder, etc.*

- ***ASK OTHER PAs/NPs!!!***

© 2011 PeaceHealth

PeaceHealth Medical Group

Orientation and training: Setting them up for success

- Define *exactly* what will they need to know to be successful = *JOB DESCRIPTION*
  - *Create specific objectives*
  - *Decide in advance how you will accomplish each objective*
- Define appropriate time-frame(s)
- Define key criteria for success/failure
- Decide in advance how you are going to mentor and remediate
- Be specific - but remain flexible too…

© 2011 PeaceHealth

PeaceHealth Medical Group

Getting staff buy-in

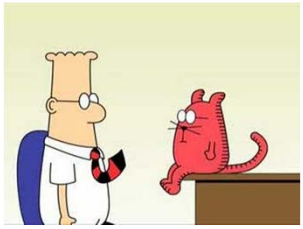
- Appropriate credentialing
- *COMMUNICATION*
  - *What the PA/NP can/can't do*
  - *PA/NP responsibilities*
    - Daily
    - Emergencies
  - *Expectations for staff behavior*
    - Establish the chain of command
- Advocate for your PA/NP

© 2011 PeaceHealth

PeaceHealth Medical Group

What do you do if it's not the right fit…

- This is where job description and specific orientation objectives will save you.
- Involve HR early



© 2011 PeaceHealth

PeaceHealth Medical Group

Resources

- American Academy of Physician Assistants
  - http://www.aapa.org
- American Academy of Nurse Practitioners
  - http://www.aanp.org
- Eastern Association for the Surgery of Trauma – Advanced Practitioners Committee
  - http://www.east.org

© 2011 PeaceHealth

PeaceHealth Medical Group

Questions?

© 2011 PeaceHealth

PeaceHealth Medical Group / PeaceHealth Southwest Medical Center
Competency Based Orientation
Trauma/Acute Care Surgery Physician Assistant

	Evaluator Date	Evaluator Initial
1. Introductions:		
□ **Dr. Riyad Karmy-Jones** □ **Kimberly Lewis** □ **Annette Hoxie**		
□ **Dr. Dennis Febinger** □ **Ann Kincaid** □ **Libby Bryant**		
□ **Dr. George Dulabon** □ **Julie Kirk** □ **Dr. Marty Bell**		
□ **Dr. MaryClare Sarff** □ **Shelia Goldsmith** □ **Donna Mairose**		
□ **Dr. Benjamin Rogoway** □ **Nellie Osterman** □ **Dr. Jaime Nicacio**		
□ **Dr. Kahled (Shad) Pharaon** □ **Rebecca Babcock, PA-C** □ **Tracey Bauer**		
□ **Cassandra Sappington PA-C** □ **Debbie Gale, ARNP** □ **Marty McCann**		
□ **Elizabeth Crawford, PA-C** □ **Jenny Wynn, ARNP** □ **Mary Keith**		
□ **Denise Haun-Tylor** □ **Jason Graeme, PA-C** □		
□ **Debbie Miller** □ **Dr. Kevin Kahn** □		
□ **Dr. Desarom Teso** □ □		
□ **Kim Cantwell-Gab, ARNP** □ □		
2. Purpose/Goals of Division & Organizational Structure		
• Educational and orientation objectives, Evaluation timing and format		
• Review required training and schedule classes as needed (ATLS, ACLS, PALS, BCLS)		
• Review/order required and suggested text(s): FCCS, ATLS, Schwartz's Principles of Surgery, The Trauma Manual: Trauma and Acute Care Surgery		
3. Review of Job/ Performance Expectations		
• Job description		
• Orientation schedule, training process, and educational needs		
• Pocket reference cards		
• Review office space / equipment / lab coats / business cards / other needs		
• Obtain locker in changing room, and review location of scrubs		
4. Compensation and Timekeeping		
• Assure direct deposit information		
• CME / national meeting requests		
• Vacation requests		
5. Attendance Requirements/ Scheduling		
• Schedule		
• Absence Reporting		
• Required training scheduled / performed: □ **RRT Training** □ **McKesson EMR** □ **Centricity** □ **N-95 fit testing** □ **CPOE** □ **Dictation** □ **HRSD (radiology) review** □ **Portal / HPF Webstation**		
• Lunch and refreshment breaks		
6. Event Reporting (http://eonline.ad.sw-health.org/body.cfm?id=72)		
7. Patient Safety • Quality Care Resources – Cindy Eling x3132 / x 3078 • Situation, Background, Assessment and Recommendation (SBAR) Structured Verbal Handoff Communication: (http://eonline.ad.sw-health.org/documents_smm_pnp/public/swWashmcemp10169_3875_8720_150%20Communication%20Handoff%20and%20Transition%20of%20Care.pdf) • Patient Relations / Risk Management – Daniel Huhta x3705		
8. Emergency Preparedness – (http://eonline.ad.sw-health.org/body.cfm?id=467)		

DRAFT

A. Emergency Preparedness Plans • Code Red response plan for fire or explosion • Weather and earthquake emergencies and evacuation plans • Code Gray/Silver plan • Amber Alert • Code Orange		
B. External triage / Internal triage (http://eonline.ad.sw-health.org/documents/Emergency%20Preparedness/Emergency%20Preparedness%20Plans/8731.002%20Internal%20or%20External%20Triage.pdf)		
9. Infection Control – Complete mandatory training: (PeaceHealth Crossroads / MyHR)		
• Reportable disease process • Standard precautions procedures • Transmission based isolation procedures • Reporting a communicable disease exposure • Reporting needlesticks and BBP exposures • Immunizations • Infection Control Resources		
10. Medication Use management		
• Demonstrates competency with accurately completing prescriptions • PRN Indications • Medication Reconciliation (http://eonline.ad.sw-health.org/documents_smm_pnp/public/3492_327_8720_088%20Medication%20Reconciliation.pdf)		
12. Sedation Training		
• Demonstrates familiarity with Procedural Sedation policy (http://eonline.ad.sw-health.org/documents_smm_pnp/public/swWashmcemp10169_4945_8720_718%20Procedural%20Sedation%20Moderate.pdf)		
13. Daily Routines		
• Clinical schedule – Unit workflow / routine		
• Supplies		
• Dictation and notes –format		
• Policies and Practice management guidelines – (Trauma Center / EAST)		
14. Divisional Meetings		
• First Thursday 7:00 – 8:00 am: Trauma/ACS M&M conference – Firstenburg Conference Room (M-level)		
• Second Wednesday 7:00 – 8:00 am: Policies & Guidelines – Trauma/ACS Conference Room (Office)		
• Second Thursday 7:00 – 8:00 am: TACS meeting – Trauma/ACS Conference Room (Office)		
• Fourth Wednesday 7:00 – 8:30 am: Multi-disciplinary Trauma Committee – Auditorium A/B (HEC)		
• Fourth Thursday 7:00 – 8:00 am: Trauma/ACS Systems Meeting – Auditorium A/B (HEC)		
• Quarterly Monday 6:00 – 8:30 pm: Regional QA/QI Trauma Committee – Classroom 3/4 (HEC)		
• Third Friday 12:30 – 1:30 pm: Critical Care Committee – Firstenburg Conference Room (M-level)		
•		

DRAFT

PeaceHealth Medical Group / PeaceHealth Southwest Medical Center
Competency Based Orientation
Trauma/Acute Care Surgery Physician Assistant

The Accreditation Council for Graduate Medical Education (ACGME) has designated six core competencies: medical knowledge, patient care, practice-based learning, interpersonal and communication skills, professionalism, and systems-based practice.

At the completion of orientation, the Trauma Physician Assistant will need to be able to demonstrate each of the following core competencies:

Medical knowledge

1. Explain the physiology of the cardiovascular, pulmonary, hematological, neurological, endocrine, renal and gastrointestinal systems.
2. Describe the pathophysiology of common injuries and disease processes that might lead to admission to the Trauma service.
3. Describe the effects of injury and common disease processes on the cardiovascular, pulmonary, hematological, neurological, endocrine, renal and gastrointestinal systems.
4. Discuss the immediate management of post-operative trauma and general surgical patients, specifically detailing the immediate and delayed concerns and indications for emergent return to the operating room.
5. Compare and contrast the trauma patient from other surgical and medical patients, discussing pre- and post-operative management concerns.
6. Discuss the management of intracranial, intra-abdominal, and extremity compartment syndromes.
7. Explain the principles, use, physiology, and common pitfalls of emergency airway maneuvers.
8. Explain the goals of basic nutrition in the ICU patient, including indications for and routes of nutrition, risk factors associated with poor nutrition, and initial nutritional assessment of the ICU patient.
9. Discuss infection control goals and techniques used to help in the prevention of ventilator-associated pneumonia, urinary tract infections, central venous line infections, and post-operative wound infections.
10. Demonstrate knowledge of fluid balance management, to include the use of vasoactive medications, fluid resuscitation (including choice of crystalloid vs. colloid vs. blood), and diuretic therapy.
11. Demonstrate knowledge of indications for vasoactive medications.
12. Explain the indications, contraindications, complications, and pitfalls of the following procedures:
    a. Arterial puncture and cannulation
    b. Central venous catheter placement
    c. Needle and tube thoracostomy
    d. Diagnostic peritoneal lavage
    e. Echocardiography
    f. Percutaneous tracheostomy
    g. Percutaneous endoscopic gastrostomy

DRAFT

PeaceHealth Medical Group / PeaceHealth Southwest Medical Center
Competency Based Orientation
Trauma/Acute Care Surgery Physician Assistant

Patient Care

1. Differentiate between patients requiring treatment in an intensive care setting versus acute care hospitalization versus other care settings.
2. Identify patients who are ready for transfer or discharge, and the factors important to facilitate safe patient care transfer.
3. Describe diagnostic criteria and demonstrate proficiency in the initiation of treatment plans for patients with acute injury or impending organ system failure.
4. Demonstrate rapid assessment of severely injured patients in the emergency department, intensive care unit, and throughout the hospital.
5. Demonstrate prioritization of competing care needs of severely injured / ill patients.
6. Identify and initiate timely treatment for the following conditions:
    a. Traumatic brain injury / closed head injury / increased intracranial pressure
    b. Spinal cord injury
    c. Pneumothorax / hemothorax
    d. Respiratory insufficiency / arrest
    e. Acute lung injury (ALI) / Acute respiratory distress syndrome (ARDS)
    f. Shock
    g. Cardiac insufficiency / arrest
    h. Coagulopathy
    i. Extremity compartment syndrome
    j. Electrolyte and acid-base disturbances
    k. Sepsis
    l. Pulmonary emboli
    m. Abdominal compartment syndrome
    n. Mixed medical comorbidities and complications: Overdose, Acute myocardial ischemia / infarction, Cardiac tamponade, Acute / chronic renal failure, Acute / chronic liver failure, Endocrine dysfunctions, Rhabdomyolysis, Multi-organ system failure, etc.
7. Discuss the goals and techniques involved of the following procedures:
    a. Exploratory laparotomy
    b. Abdominal packing / damage control
    c. Emergency thoracotomy (including clamshell)
    d. Laparoscopic and open cholecystectomy
    e. Splenectomy
    f. Laparoscopic and open appendectomy
    g. Colecotmy
    h. Colostomy/ileostomy
    i. Management of the open abdomen
8. Use data from appropriate invasive and non-invasive monitoring devices to diagnose, treat, and titrate patient therapies.
9. Demonstrate caring and respectful communication with patients and their families.

DRAFT

PeaceHealth Medical Group / PeaceHealth Southwest Medical Center
Competency Based Orientation
Trauma/Acute Care Surgery Physician Assistant

Practice-Based Learning

1. Recognize and employ patient safety monitoring and error reduction strategies that could be employed in the trauma patient population.
2. Recognize and describe the importance to patient care of assessing and improving patient and family satisfaction.
3. Discuss basic methods for searching, reviewing, and evaluating medical and scientific literature.
4. Contribute to and support process improvements in the trauma program.
5. Describe methods for gaining insight into one's own performance, and for identifying methods for improvement.
6. Facilitate the education and learning of fellow providers.
7. Demonstrate overall clinical competency.

DRAFT

PeaceHealth Medical Group / PeaceHealth Southwest Medical Center
Competency Based Orientation
Trauma/Acute Care Surgery Physician Assistant

Interpersonal and Communication Skills and Professionalism

1. Demonstrate effective communication with physicians, nurses, consultants, and all other members of the healthcare team on rounds and in daily interactions.
2. Communicate clearly, correctly and concisely in written reports, stressing important issues in an articulate plan.
3. Describe issues surrounding safe order writing and the requirements for communication as it relates to telephone and verbal orders.
4. Demonstrate prompt and courteous responses to pages and requests of patients, families, and staff.
5. Display support and empathy to patients and families.
6. Communicate care plans clearly and effectively to patients, families, and other members of the healthcare team.
7. Demonstrate good use of consulting specialty services when appropriate in managing complex clinical problems.
8. Discuss the importance of recognizing and respecting the specialized skills of other healthcare providers (nurses, RT, PT, OT, dietitians, pharmacists, etc.)
9. Demonstrate the skills required to maintain good relationships with other healthcare providers.
10. Discuss the importance of patient and family wishes in ethical issues surrounding treatment decisions.
11. Actively participate in the continuing education of fellow clinicians on relevant trauma topics.
12. Demonstrate respect for others, tolerance to others' opinions, and sensitivity to diversity.
13. Demonstrate the importance of placing the needs of the patient and the team above one's own self-interest.
14. Discuss and demonstrate the importance of accepting responsibility for one's own actions.
15. Model responsible, professional behavior.

Systems-Based Practice

1. Discuss issues of patient safety including systems that put patients at risk including hand-overs, medication reconciliation, surgical procedures, transfusions, and nursing/staffing ratios.
2. Describe the proper procedure to correctly identify a patient to minimize patient risk.
3. Describe the proper use and procedure for the "time out" or "team pause."
4. Describe the proper use and procedure for the SBAR-formatted patient handoff.
5. Discuss basic reimbursement methodologies and requirements for coding and billing.
6. Demonstrate cost-effective care in ordering tests and planning procedures.
7. Recognize, describe and ensure compliance with institutional and divisional policies, procedures, and practice guidelines, as well as regulatory policies from accreditation agencies, regulators, and payors.

DRAFT

Evaluation

To determine the Trauma Physician Assistant's competence in each of the above areas, the following evaluation tools may be utilized:

1. Direct observation
    a. Supervising MD and Attending MD evaluation
    b. Staff PA evaluation
    c. Consulting MD/PA/NP evaluation
    d. Nursing recommendations
2. Chart review
3. M&M conferences / Multi-disciplinary Trauma Conferences
4. Trauma and Acute Care Surgery team meetings
5. Skills assessment
    a. Simulation center
    b. Patient care observation
    c. Written assessment tool(s)

Learning Materials

1. Text and course – Advanced Trauma Life Support
2. Papers and articles as assigned by consultants / fellows / staff MLPs
3. Text – Schwartz's Principles of Surgery, The Trauma Manual: Trauma and Acute Care Surgery
4. Text and course - Fundamentals of Critical Care Support
5. Adult Resident ICU course (sponsored by the Society of Critical Care Medicine)

DRAFT

PeaceHealth Medical Group / PeaceHealth Southwest Medical Center
Competency Based Orientation
Trauma/Acute Care Surgery Physician Assistant

Orientation Needs Assessment and Competency Tool

On the following pages, activities are listed that reflect the role and responsibilities of the **Trauma Physician Assistant** for PeaceHealth Medical Group / PeaceHealth Southwest Medical Center.

The tool is divided into two components. One is the **Self Assessment.** It has been developed to help you identify your learning needs and orientation goals and to assist in the development of an individualized orientation plan. Your participation in the orientation process is essential to achieve an effective and meaningful introduction to the medical center. As you complete this assessment, consider your previous experiences and their application to your new role/assignment.

The second component is the **Competency Validation.** It will be used throughout your orientation to document progress towards meeting orientation goals. It provides a mechanism by which you can demonstrate the ability to carry out activities before you complete your orientation.

Your preceptor will share with you the responsibility for an effective orientation plan. They will assist you in identifying your learning needs and completing the competencies.

We look forward to facilitating a valuable orientation program that assists you in providing quality patient care.

The following required signatures verify review and completion of the Needs Assessment and Competency Tool.		**Date**
Orientee:		
Primary Preceptor:		
Supervising Physician:		
Trauma Center Medical Director:		

Evaluator Signatures			
Initials	Signature	Initials	Signature

DRAFT

PeaceHealth Medical Group / PeaceHealth Southwest Medical Center
Competency Based Orientation
Trauma/Acute Care Surgery Physician Assistant

Orientation Needs Assessment and Competency Tool

Self Assessment

- Please complete the "Self Assessment" portion of the tool by indicating whether you have no experience **(N)**; some experience and may require practice or assistance **(S)**; or experience **(E)**.

- Specific components of the competency may be listed under the statement. These components will assist you to understand the specific activities associated with each competency. If an activity is not available during your orientation, the content should be discussed and online resources accessed (policy, guideline, etc.).

- Being aware that as individuals we learn best in very different ways, we would like to help your preceptor(s) communicate in the ways that you learn most effectively. Your job will be to help communicate this to your preceptor(s). So, how do you learn best?

  □ Seeing □ Doing □ Reading □ Listening

- *Together, we will use this form daily to guide your orientation experiences in your assigned clinical areas.*

Competency Validation

- Criteria for competency validation are based on sound clinical practice, taking in to consideration appropriate standards, guidelines, policies and procedures.

- Competency is achieved when the orientee is able to carry out the competency **independently** and is mutually agreed upon by your preceptor/designated PA or MD and the orientee.

- Your preceptor/designated PA or MD will determine how and when competency is validated using the codes listed.

- Once competency has been validated, your preceptor/designated PA or MD documents the competency validation code, with their initials and date.

- Full signature of all PAs/MDs assessing competency during orientation is documented in the signature section on the first page of the tool.

- Your signature will be required at the end of orientation when all appropriate competencies have been validated by your preceptor/designated PA or MD.

DRAFT

PeaceHealth Medical Group / PeaceHealth Southwest Medical Center
Competency Based Orientation
Trauma/Acute Care Surgery Physician Assistant

Trauma PA Orientation Needs Assessment and Competency Tool	**NEEDS ASSESSMENT** Needs Assessment Codes N= No experience S= Some experience, may need help E = Experienced			COMPETENCY VALIDATION **Competency Validation Codes** **D= Demonstration** **E= Explanation and discussion**			
	N	S	E	Code	Preceptor's Initials	Orientee's Initials	Date
Assessment							
1. Applies knowledge of mechanism of injury and injury patterns to prepare team, supplies, and equipment for arrival of injured patient.							
2. Applies knowledge of health and human behavior to perform assessment of patient.							
A. Performs rapid Primary Survey ● Informing Recording RN and Trauma Team of results and/or needed interventions o Airway (with cervical spine protection as needed) o Breathing/ventilation/oxygenation o Circulation ▪ Signs of shock ▪ Hemorrhage o Disability ▪ Glasgow Coma Scale ▪ Pupil size and reactivity o Expose/Environmental Control ▪ Bair Hugger ▪ Ventilator warmer ▪ Fluid warmer ▪ Blanket warmer ● Directs team to begin removal of spinal immobilization straps and initiation of role-specific tasks.				**Comments**:			
A. History ● Obtains appropriate history from EMS, patient, and/or family concentrating on the chief complaint and mechanism of injury o History of present illness o Medications o Allergies o Past medical and surgical history o Social and, when appropriate, family history							

DRAFT

B. Physical Examination • Secondary Survey o Review ABC's o Disability (if not already done) ▪ Glasgow Coma Scale ▪ Pupil size and reactivity o Expose/Environmental Control (if not already done) ▪ Bair Hugger ▪ Level I fluid warmer ▪ Warm blankets o Obtain and evaluate vital signs • Secondary Survey Total patient evaluation o Head and skull o Maxillofacial and intraoral o Neck o Chest o Abdomen (including back) o Perineum/rectum/vagina o Musculoskeletal o Neurologic examination				
2. Orders and evaluates appropriate testing based on patient presentation, history and physical examination.				
• Demonstrates appropriate ordering of diagnostic tests / panels o Trauma Alert / Trauma Team panel(s) o ABG o CT scans o X-rays o EKG				**Comments:**
• Demonstrates appropriate interpretation of diagnostic tests and follow up monitoring o Trauma Alert / Trauma Team panel(s) o ABG o CT scans o X-rays o EKG				
• Collaborates appropriately with physician and other health care providers when appropriate				
Diagnosis				
3. Demonstrates competency in determining correct diagnosis for:				
• Airway compromise / impending airway compromise				**Comments:**
• Respiratory failure / impaired respiratory mechanics				
• Pneumothorax (simple and tension)				
• Hypovolemia / hypovolemic shock				
• Hemothorax				
• Elevated intracranial pressure				
• Spinal cord injury				

DRAFT

• Coagulopathy							
• Extremity compartment syndrome							
• Acid-base disturbances							
• Electrolyte abnormalities							
• SIRS / Sepsis							
• Pulmonary embolus							
• Deep venous thrombosis							
• Acute lung injury / ARDS							
• Abdominal compartment syndrome							
Disease management/plan/coordination of care							
4. Develops a plan of care appropriate to the patient.							
• Collaborates appropriately with physician and other health care providers when necessary				**Comments:**			
• Demonstrates appropriate documentation of Admission History and Physical (dictation and McKesson Notes)							
• Demonstrates appropriate use of CPOE for admission orders							
• Demonstrates appropriate use of CPOE for post-operative orders							
Procedures							
5. Demonstrates appropriate understanding and technique for:							
• Arterial line placement				**Comments:**			
• Central venous cannulation and catheter placement							
• Tube thoracostomy							
• Foley catheter placement							
• Nasogastric tube placement							
• Dressings, including chest tube site, wound-vac and Abthera dressings							
Management of the acutely injured patient							
7. Applies knowledge of mechanism of injury and injury patterns to determine expected progression of injuries.							
8. Applies knowledge of health and human behavior to perform daily (or more frequent) assessment of patient.							

DRAFT

9. Demonstrates competency in prevention of, and correct diagnosis of common complications: ○ Anemia ○ DVT ○ Hyperglycemia ○ VAP ○ ALI/ARDS ○ Elevated ICP ○ UTI ○ Sepsis / SIRS ○ Coagulopathy				
10. Develops a plan of care appropriate to the patient.				
• Collaborates appropriately with physician and other health care providers via written and verbal communication				**Comments:**
• Demonstrates safe and appropriate decision making regarding transfer to- and from- ICU				
• Demonstrates appropriate documentation of daily progress note, including documentation for coding purposes				
• Demonstrates appropriate use of CPOE ○ Daily orders ○ Transfer review				
Discharge from hospital				
11. Develops an appropriate plan of care for discharge from the hospital.				
• Collaborates appropriately with physician and other health care providers via written and verbal communication				**Comments:**
• Demonstrates safe and appropriate decision making regarding discharge setting				
• Completes discharge documentation ○ Daily progress note ○ Discharge orders ○ Discharge instructions ○ Medication reconciliation / prescriptions ○ Dictates discharge summary				
• Orders appropriate home equipment/therapies ○ Durable medical equipment (DME) ○ Home health services ○ Neuro-rehabilitation referral				
• Orders appropriate follow-up appointments ○ Trauma Clinic ○ Specialty physicians / services ○ Primary care provider				

DRAFT

• Demonstrates understanding of special discharge circumstances o Lovenox/Arixtra prescriptions o Kaiser patients o Discharges to SNF o Discharges to 4 West o Pharmacy "compassionate fill"							
Trauma and ACS Clinic							
12. Applies knowledge of mechanism of injury, injury patterns, and natural history of injuries to prepare for appointment.							
13. Applies knowledge of health and human behavior to perform assessment of patient. o Following appropriate SOAP format							
14. Demonstrates competency in determining correct diagnosis for common conditions/complications							
15. Develops a plan of care appropriate to the patient.							
• Collaborates appropriately with physician and other health care providers when necessary				**Comments:**			
• Orders appropriate diagnostics and medications							
• Orders appropriate follow-up appointments / referrals							
• Demonstrates appropriate and timely documentation of clinic visit							

DRAFT

PeaceHealth Medical Group / PeaceHealth Southwest Medical Center
Competency Based Orientation
Trauma/Acute Care Surgery Physician Assistant

Admission Labs/Tests

Test	Order	Interpretation	Preceptor initials/date
ABG			
CBC with / without differential			
PT, aPTT, Fibrinogen			
Basic Metabolic Panel			
Lactate			
Alcohol / Tox screens			
Magnesium			
Phosphorus			
Calcium, Ionized			
Glucose (POC), q 1 hour			
Lipase			
Amylase			
Bilirubin, Total and Direct			
AST, ALT, Alk phos			
Prealbumin			
Cardiac Biomarker Panel			
ABO type and antibody screen			
Blood cultures			
Urinalysis			
Urine culture			
Bronchial washings			
Chest X-ray			
EKG			

DRAFT

_____has completed the PeaceHealth Medical Group / PeaceHealth Southwest Medical Center's Trauma Physician Assistant Orientation Program and has successfully demonstrated the ability to perform the basic skills required of this role.

Preceptor signature_____ Date: _____

Employee signature:_____ Date: _____

Trauma Medical Director signature: _____ Date: _____

Emergency Physicians as Partners in Acute Care Surgery

Marc Portner, MD
St. Luke's University Health Network
Bethlehem, Pennsylvania

Overview

- Training Model – Past, Present, and Future
- Surgical Intensivist
- Emergency Traumatologist
- Acute Care Surgery

Fellowship Training Through 2013

- Multiple Fellowship programs
  - Some specific for Emergency Physicians (EP's)
- 1 and 2 year programs
- Most trained in accredited programs
- Several trained in non-accredited programs
- No standard curriculum for Trauma/ACS

Fellowship Training 2013 and Beyond

- 2 year curriculum
  - Eligible for Certifying Exam through ABS
- 2nd year: Traditional Surgical Critical Care
- 1st year: 'Supplemental Surgical Education'
  - New opportunities to focus on:
    - Critical elements in early surgical management/ decision making/perioperative care
    - Trauma resuscitation/decision making/ leadership

Surgical Intensivist Model

- Well described in literature and other forums
- Model exists at many institutions
  - Academic and Non-Academic centers
- No quality or resource utilization issues demonstrated

Trauma

- Potential roles for a fellowship trained Emergency Physician?
- Impact
  - Increased ACS / General Surgery volume
  - May improve collaborative relationship with ED
- Key factors to consider…
  - Penetrating volume
  - Staffing model – robust surgical backup
  - Experience with non-op management BSOI

Our Experience

- St. Luke's University Hospital
- Level 1 Trauma Center
  - Moderate trauma volume, ~ 94% Blunt
  - 7 Trauma Surgeons, 1 Emergency Traumatologist
  - Trauma service staffed by:
    - ED and Gen Surgery residents
    - Advanced practitioners
    - Fellows

Our Experience

- SCCS / Trauma / General Surgery / Backup
- Alternate between SCCS and Trauma
- Trauma
  - Alerts / consults – Lead team with in-house surgical backup immediately available
  - Management of patients in Step-down and Med-surg units
  - Ongoing management of patients in outpatient office

ORIGINAL SCIENTIFIC ARTICLES

Emergency Traumatologists as Partners in Trauma Care: The Future Is Now

Michael D Grossman, MD, FACS, Marc Portner, MD, Brian A Hoey, MD, FACS, Christy D Stehly, BS, CW Schwab, MD, FACS, Jill Stoltzfus, PhD

BACKGROUND: Decreasing manpower available to care for trauma patients both in and out of the ICU has led to a number of proposed solutions, including increasing involvement of emergency medicine-trained physicians in the care of these patients. We performed a descriptive comparative study in an effort to define the role of fellowship-trained emergency medicine physicians as full-time traumatologists.

STUDY DESIGN: We performed a retrospective review of concurrent and prospectively collected data comparing process of care and outcomes for the resuscitative phase of trauma patients cared for by full-time fellowship-trained trauma surgeons (TS), a fellowship-trained emergency medicine physician (ET), and a first-year fellowship-trained trauma surgeon (TS1).

RESULTS: Patient age, Revised Trauma Score, and Injury Severity Score were similar between groups. Process of care, defined by transfusion of uncrossmatched blood, prevalence of hypotension in patients receiving uncrossmatched blood, time spent in the emergency department, frequency of ICU admission, severity of injury for ICU admission, and time between emergency department and operating room for patients requiring surgery, was equivalent between groups. Outcomes evaluated by mortality and length of stay in the hospital and ICU did not differ between groups, and provider group was not predictive of mortality in stepwise logistic regression.

CONCLUSIONS: These data suggest that emergency traumatologists can provide trauma care effectively within a defined scope of practice and may provide an effective solution to manpower issues confronting trauma centers. (J Am Coll Surg 2009;208:503–509. © 2009 by the American College of Surgeons)

Patient age, Revised Trauma Score, and Injury Severity Score were similar between groups. Process of care, defined by transfusion of uncrossmatched blood, prevalence of hypotension in patients receiving uncrossmatched blood, time spent in the emergency department, frequency of ICU admission, severity of injury for ICU admission, and time between emergency department and operating room for patients requiring surgery, was equivalent between groups. Outcomes evaluated by mortality and length of stay in the hospital and ICU did not differ between groups, and provider group was not predictive of mortality in stepwise logistic regression.

Our Experience

- ED Traumatologist role
  - Safe and Effective
  - Efficient
  - Allowed for expansion of elective general surgery practice and Acute Care Surgery program

Acute Care Surgery

- Fellowship trained EP roles:
  - Surgical Intensivist
  - Traumatologist
  - Expanded role for a busy ACS program?
    - Pre-operative evaluation / resuscitation
    - Peri-operative management
- Economic and staffing impact…

Summary

- Workforce limitations and increasing demand for services will require **innovative solutions**
- EP Surgical Intensivist model extensively validated
- New training model provides new opportunities to train EP's to be **partners** in an evolving Acute Care Surgery model