

# Student Engagement and Assessment in a Unique Clinical Setting: Outdoor Medicine Rotation

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## BACKGROUND

Securing clinical training sites remains a challenge for medical educators who often resort to paying preceptors or searching for new clinical training sites which haven't traditionally taken students. We describe a unique partnership between the Boy Scouts of America (BSA) and PCOM, providing a clinical training opportunity for OMS4 students at PCOM: Outdoor Medicine rotation at the Summit Bechtel Family National Boy Scout Reserve in rural West Virginia at the National Scout Jamboree, serving 35,000 scouts. We present the rationale for developing the course, course learning objectives, educational resources, learning activities, and assessments (specific methods and how each satisfies EPA requirements).

## RATIONALE

- The BSA needed >700 volunteer medical staff.
- Students needed rotations to learn from patients.
- A formal medical school affiliation did not exist with the National Scout Jamboree (NSJ).
- A partnership developed between PCOM and NSJ.

## COURSE LEARNING OBJECTIVES

- Provide urgent care for common outdoor injuries: fractures, abrasions, insect bites, gastroenteritis, sprains, heat exhaustion, sunburn, eye injuries, etc.
- Provide basic life support, resuscitation and first aid in an outdoor setting.
- Identify and treat common chronic medical conditions (asthma, ADHD, etc) which are common to all children, not just those in a wilderness setting.
- Explain adolescent development and impact on character development.
- Explain the structure and mission of scouting.
- Identify characteristics of international scouts with regard to culture, background, experience and perspectives.

## ACTIVITIES

### TRAINING

- Stop The Bleed: certification to teach the public proper tourniquet placement and wound care.
- Electronic Medical (EMR) training.



## ACTIVITIES

- Mass Casualty Simulation: participated as mock victims in a civilian EMS and National Guard drill on site.



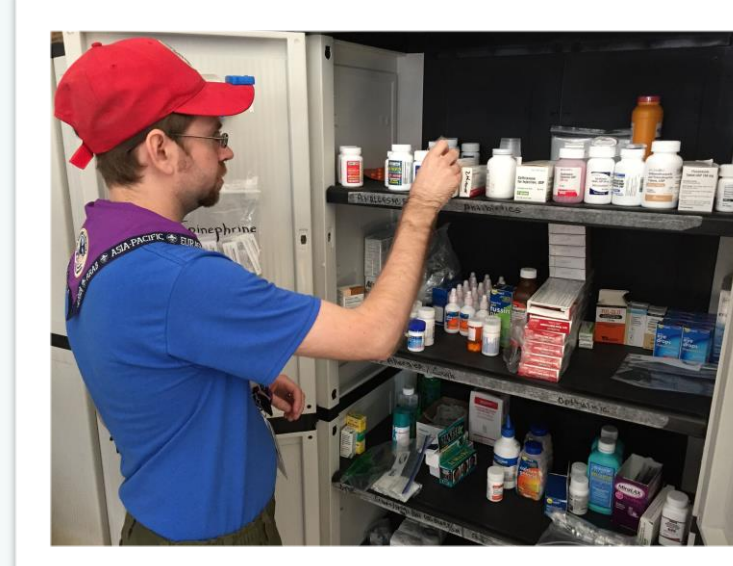
- Emergency medical training: backboarding and transport techniques, airway ventilation, splinting and wound dressing.



- Youth Protection Training.

## SERVICE AND PATIENT CARE

- Set up medical field center and mobile hospital on site, prepared pharmacy, and organized all medical supplies.



- Worked with medical team to provide 24hr/7 care in the Foxtrot International Base Camp Medical Tent to 6,000 youth campers and adult leaders from around the world.
- Provided care to scouts with heat exhaustion, dehydration, rashes, injuries, chronic conditions, mental health disorders, asthma exacerbations, seizures, concussions, malaria
- Performed procedures such as splinting, OMT, I&D, IV placement, and providing nebulizer treatments.
- BLS and ACLS care as needed.



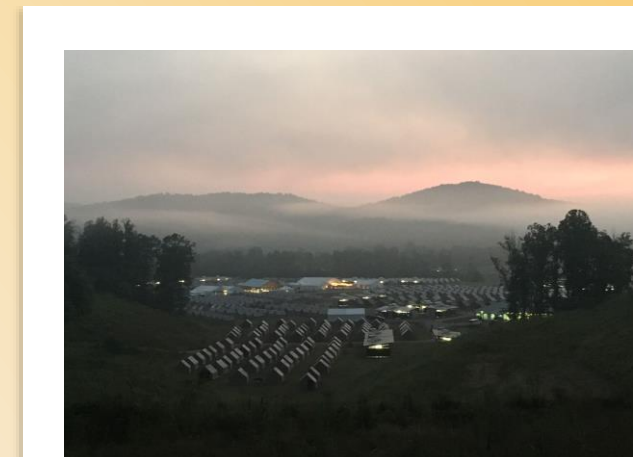
## SCOUTING AND LEADERSHIP

- Mentored scouts regarding osteopathic medicine, development, homesickness, anxiety or social stressors.
- Multicultural festivities with visiting scouts from other nations.



## ACTIVITIES

### LEISURE



## ASSESSMENTS AND EPA

Students were expected to participate as they would in other clinical rotations, learning from patients and providing care to patients (scouts in this case). Students were expected to maintain a daily log of patients, participate in facilitated problem-based discussions, case presentation and direct observation.

Required Assignments	Required Participation
Daily Patient Log	NSJ Volunteer Activities (training)
Daily Journal Entry	Scheduled Medical Staff Shifts
Direct Observation (x2)	Problem-Based Discussions
Case Presentation (x1)	Simulated Exercises
Youth Protection Training	
Global Rotation Evaluation	

Assessment	EPA Assessed													
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Daily Patient Log Review		x	x			x	x	x		x	x	x		x
Daily Journal Entry										x				x
Direct Observation		x	x	x	x	x	x	x	x	x	x	x	x	x
Case Presentation		x	x	x			x	x			x			x
Youth Protection Training Certificate		x	x						x	x	x			x
Global Rotation Evaluation		x				x	x			x				

EPA 1: Gather a history and perform a physical examination; EPA 2: Prioritize a differential diagnosis following a clinical encounter; EPA 3: Recommend and interpret common diagnostic and screening tests; EPA 4: Enter and discuss orders and prescriptions; EPA 5: Document a clinical encounter in the patient record; EPA 6: Provide an oral presentation of a clinical encounter; EPA 7: Form clinical questions and retrieve evidence to advance patient care; EPA 8: Give or receive a patient handover to transition care responsibility; EPA 9: Collaborate as a member of an interprofessional team; EPA 10: Recognize a patient requiring urgent or emergent care and initiate evaluation and management; EPA 11: Obtain informed consent for tests and/or procedures; EPA 12: Perform general procedures of a physician; EPA 13: Identify system failures and contribute to a culture of safety & improvement

## CONCLUSION

Through this unique partnership between PCOM and the BSA, OMS4 students were provided with a valuable clinical training opportunity to care for 35,000 scouts beside trained clinicians from around the country. Students learned about urgent care, outdoor medicine, adolescent development, and Scouting in a remote location. The rotation blended service needs with academic opportunities and global health. Throughout the 2-week rotation, medical conditions included many common injuries seen in the context of wilderness or outdoor medicine - dehydration, burns, lacerations, insect bites, fractures and sprains, as well as chronic conditions, including asthma, ADHD, and anxiety. With supervision of medical staff, students provided direct care to the 5000-7000 scouts at Foxtrot base camp. In addition, students participated in regular debriefing and small group learning activities. This rotation was a rewarding and unforgettable learning experience for students. PCOM plans to offer the rotation again for the 2019 World Scout Jamboree.

## ACKNOWLEDGEMENTS

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