

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.JournalofSurgicalResearch.com

Association for Academic Surgery

A novel flight surgeon training model at a joint military and civilian surgical residency program



Erik S. DeSoucy, DO,^{a,b,*} Scott A. Zakaluzny, MD,^{a,b}
and Joseph M. Galante, MD^a

^aDepartment of General Surgery, University of California, Davis, Sacramento, California^bDepartment of General Surgery, David Grant USAF Medical Center, Travis Air Force Base, California

ARTICLE INFO

Article history:

Received 2 December 2016

Received in revised form

22 February 2017

Accepted 24 March 2017

Available online 31 March 2017

Keywords:

Military medicine

Aerospace medicine

Flight surgeon

Curriculum

Preliminary internship

Training

ABSTRACT

Background: Graduating military preliminary interns are often required to fill flight surgeon billets. General surgery preliminary interns get experience evaluating surgical and trauma patients, but receive very little training in primary care and flight medicine. At a joint military and civilian training program, we developed a supplemental curriculum to help transition our interns into flight medicine.

Methods: From 2013 to 2016, we developed a lecture series focused on aerospace medicine, primary care, and specialty topics including dermatology, ophthalmology, orthopedics, pediatrics, psychiatry, and women's health. During the 2016 iteration attended by 10 interns, pre- and post-participation 10-item Likert scale surveys were administered. Questions focused on perceived preparedness for primary care role and overall enthusiasm for flight medicine. Open-ended surveys from 2013 to 2016 were also used to gauge the effect of the curriculum.

Results: The composite number of agreement responses (indicating increased comfort with presented material) increased 63% after course completion. Disagreement responses and neutral responses decreased 78% and 30%, respectively. Open-ended surveys from 14 participants showed an overall positive impression of the curriculum with all indicating it aided their transition to flight medicine.

Conclusions: Survey responses indicate an overall perceived benefit from participation in the curriculum with more confidence in primary care topics and improved transition to a flight medicine tour. This model for supplemental aerospace medicine and primary care didactics should be integrated into any residency program responsible for training military preliminary interns who may serve as flight surgeons.

Published by Elsevier Inc.

Introduction

Every year, newly graduated military interns depart from their course of medical training to become flight surgeons or general medical officers (GMOs). This departure is not typical for

civilian medical training, and many will see their civilian peers graduate residency and become staff before they continue on the path toward board certification in their field of choice. As newly licensed physicians, this time away from medical training is spent in service of the men and women of

* Corresponding author. Department of General Surgery, UC Davis Medical Center, 2315 Stockton Boulevard Room OP 512, Sacramento, CA 95817. Tel.: +1 916 734 2724; fax: +1 916 734 5633.

E-mail address: esdesoucy@ucdavis.edu (E.S. DeSoucy).
0022-4804/\$ – see front matter Published by Elsevier Inc.
<http://dx.doi.org/10.1016/j.jss.2017.03.042>

the US Military. Their experiences will vary dramatically from running primary care clinics under the mentorship of experienced physicians to operating as independent providers in austere locations with minimal medical support.^{1,2}

Military medical students graduate from either the Uniformed Services University of the Health Sciences (USUHS) or a civilian medical school under the Health Professions Scholarship Program (HPSP).³ Those not selected by the Joint Service Graduate Medical Education Selection Board for categorical residency training go on to a preliminary internal medicine, general surgery, or transitional 1-y internship. Those who choose not to reapply to the Joint Service Graduate Medical Education Selection Board or are not selected for residency training during their preliminary intern year will go on to flight medicine or GMO tours where they spend at least 2 y treating patients in a clinical primary care setting where most patients' complaints will be nonsurgical in nature.

The scope of training during internal medicine and transitional internships encompasses a wide variety of specialties. Per Accreditation Council for Graduate Medical Education requirements, transitional year interns must "complete at least 28 wk in rotations provided by a discipline or disciplines that offer fundamental clinical skills in the primary specialties of emergency medicine, family medicine, general surgery, internal medicine, obstetrics and gynecology, or pediatrics" including "140 h of documented experience in ambulatory care."⁴ This differs markedly from a general surgery internship in which the trainee rotates only on general surgery and surgical specialties which may include cardiothoracic, pediatric, plastics, trauma, burns, oncology, urology, neurosurgery, and orthopedics.⁵ A surgical internship provides the military physician with rigorous training and an ideal foundation for the initial stabilization, workup, and treatment of combat injured patients. Although surgical internship may provide an excellent base for military medicine, there is minimal exposure to the workup, diagnosis, and treatment of common medical ailments in an outpatient clinical setting.

Air Force flight surgeon candidates go to the United States Air Force School of Aerospace Medicine at Wright–Patterson AFB in Dayton, Ohio. The Aerospace Medicine Primary (AMP) course is a 5-wk program designed to "introduce students to the unique aeromedical issues pertinent to the flight environment." This course is a combination of didactic and laboratory teaching which provide the initial qualification for new flight surgeons.⁶ These courses (AMP101, AMP201, and AMP202) are an excellent primer on aeromedical concepts; however, a significant amount of on-the-job training is completed once the new flight surgeons arrive at their initial stations. During AMP, there is no training or refresher given for the evaluation and treatment of common primary care clinical complaints. For members who completed a surgical internship, they will be evaluating and treating nonsurgical problems in a primary care setting for the first time since their medical school clerkships, which were completed at least a year and a half prior. There is opportunity to better prepare our surgical preliminary interns for a smooth transition to flight medicine by providing even earlier introduction to aeromedical concepts and a refresher in common clinical ailments.

We hypothesized that by providing supplemental instruction focused on flight medicine and primary care topics, our interns would feel more prepared and exhibit more enthusiasm for their flight surgeon tours as measured by pre- and post-curriculum surveying. This article will focus on a joint Air Force/civilian program and a training track developed to help transition surgical interns into the field of flight medicine. Although the experience is specific to one internship at a single training site, it is our hope that the model and the considerations elucidated within will be of benefit to any institution training preliminary interns who will soon be the primary care providers to our fighting men and women.

Methods

Medical school graduates selected for a general surgery preliminary internship year at David Grant Medical Center (DGMC) complete their training in a collaborative program between the military treatment facility (MTF) and the University of California Davis Medical Center (UCDMC). This collaboration has been continuous since 2003 to help increase surgical resident exposure to a greater breadth of pathology and subspecialty care not available at DGMC. In 2012, the UCDMC General Surgery Program identified the potential for improvement in the preparation of military preliminary interns and developed a flight medicine primer as an expansion of our joint military and civilian educational program. This track began with a single lecture given by a former flight surgeon, outlining the responsibilities of a flight surgeon and gave insight into what day-to-day life was like in this role. We expanded this program incrementally over the course of the next 3 y to provide a more in-depth discussion of flight medicine and cover a range of common primary care topics.

The curriculum was developed as a series of lectures delivered during protected didactic time. Each year, our cohort consisted of Air Force preliminary general surgery interns who were not selected for follow-on residency training. To allow the information to be timely for our interns, we launched the lecture series in the latter half of the academic year after the general surgery in-service examination. Each 2-h lecture was dedicated to topics pertinent to flight medicine including the history of flight medicine, daily duties of the flight surgeon, differences between deployed and in-garrison operations, and common medical complaints and their impact on the flyer. These topics were delivered by a flight surgeon who had returned to general surgery training.

In the second and third iterations of the curriculum, we enlisted subject matter experts (SMEs) in the fields of dermatology, ophthalmology, orthopedics, pediatrics, psychiatry, and women's health to provide lectures focused on outpatient clinical medicine. Additional medical evacuation familiarization was provided by a CCAT-qualified flight surgeon. When available, we sought SMEs with prior service as flight surgeons, able to provide unique insight into the aeromedical implications important to their field. In fields where the SME did not have clinical flight medicine experience, a flight surgeon was available to give the aeromedical perspective on specific disease processes. Attendance was recorded for each session.

Download English Version:

<https://daneshyari.com/en/article/5733722>

Download Persian Version:

<https://daneshyari.com/article/5733722>

[Daneshyari.com](https://daneshyari.com)