
USING DEPLOYED MEDICAL PROVIDERS TO SUPPORT IN GARRISON TELE ENT CARE- A MODEL TO CAPTURE EXCESS MEDICAL CAPACITY USING TELEMEDICINE

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Abstract

Within the military context telemedicine technology is commonly used to link specialty providers in rear area medical centres to support far forward, deployed medical needs. This paper describes a reverse of that concept, whereby deployed specialty providers in Afghanistan were linked by telemedicine technology to Landstuhl Regional Medical Center in Landstuhl Germany to provide tele-ENT consultations. This approach can be used to utilise excess medical specialty capacity from deployed specialty providers using telemedicine. Maintenance of competence is a problem for deployed military medical personnel who may be providing combat care instead of practicing their medical specialty. Using teleconsultation to allow them to practice their specialty may be a way to decrease this skill loss.

Keywords: Deployment medicine; telemedicine; military medicine

Introduction

In the military setting, telemedicine commonly links military medical centres to deployed locations to provide specialty or sub-specialty care.¹ This project performed the reverse of the usual flow by using a deployed ENT specialist at Bagram Air Force Base Afghanistan to provide teleconsultation to patients at Landstuhl Regional Medical Center (LRMC) in Germany. This was termed a Reverse video teleconferencing evaluation (RVTC).

Method

LRMC ENT service is limited on available appointments. To expand ENT capabilities a pilot was established to utilise deployed ENT to provide virtual care for the LRMC patient population. A deployed LRMC ENT surgeon in Bagram AFB Afghanistan agreed to see patients for the Army clinic in Vilseck, Germany by telemedicine. LRMC ENT providers agreed to schedule patients for surgery based upon the deployed provider's telemedicine consult recommendations. An in person, preoperative appointment was scheduled with the LRMC ENT provider that was to perform the surgery based upon the teleconsult on the day before the surgical procedure. Post operative follow up was completed through VTC as recommended by the operating surgeon.

Results

Four patients were seen by the deployed ENT specialist from Bagram supporting the Vilseck Army clinic. These cases are described below:

Patient 1: 17 month old with recurrent otitis media (OM). He underwent reverse VTC evaluation on 28 January. Reported 3 episodes of OM in the last 2 months. VTC examination revealed persistent bilateral middle ear effusions and abnormal flat tympanograms. He was recommended for Bilateral Myringotomy and Tympanostomy Tubes (BMTT). Preoperative exam in clinic on 25 February confirmed bilateral effusions. The child underwent BMTT on 26 February. No episodes of OM since surgery.

Patient 2: 15 month old underwent reverse VTC evaluation on 26 February for snoring and swallowing problems. The parents described loud snoring without apnoea. Examination was normal with small tonsils. Nasal endoscopy not performed. Medical treatment recommended with observation. No surgical indication. No change at 18 month well child check with Primary Care Physician.

Patient 3: 4 year old underwent reverse VTC evaluation on 26 February for snoring. Child had loud snoring without apnoea or daytime sleepiness. He had previously undergone a sleep study that was normal. On exam had 3+ tonsils. Diagnosed with primary snoring and recommended for observation without surgery.

Patient 4: 16 month old underwent reverse VTC evaluation on 26 February for chronic ear effusions. She had 1 episode of OM and persistent effusions bilaterally for more than 3 months. VTC physical examination revealed chronic serous otitis media bilaterally and a recommendation for BMTT was given. She underwent preoperative examination on 14 April and exam confirmed bilateral effusion. She underwent BMTT by on 15 April. A follow up exam by VTC was completed on 27 May with normal functioning PE tubes.

Discussion

This project demonstrates the ability to match deployed military medical providers, which have excess medical capacity, to high need medical areas. Excess medical ENT capacity at Bagram Air Force Base in Afghanistan was able to be utilised to provide patient care at Vilseck Army Medical Clinic. This increased medical capacity for LRMC and prevented these patients from waiting longer for care or being deferred for care to the civilian community which would have incurred much higher cost to the military. Deployed providers continuing to practice their

specialty during deployments by telemedicine may decrease the rate of surgical skill decay which can occur when military surgeons perform combat care instead of practicing their specialty for extended periods of time.^{3,4}

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Conflict of Interest. The authors declare no conflicts of interest.

Acknowledgements: The authors would like to thank Gail Kuper, Chief Operating Officer for the Center for Advanced Technology and Telemedicine, UNMC for assistance with this project.

The views expressed in this manuscript are those of the author(s) and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the U.S. Government.

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