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A DISCUSSION OF PATIENT SAFETY PROGRAMS IN THE UNITED STATES AIR FORCE GROUND MEDICAL EXPEDITIONARY ENVIRONMENT AND AN ANALYSIS OF POTENTIAL SOLUTIONS FOR INCREASING THEIR EFFECTIVENESS



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ABSTRACT

This paper provides a discussion of the incorporation of patient safety practices within the United States Air Force ground medical expeditionary environment leading up to the present, some of the complex issues facing patient safety in this environment, what has been done to mitigate these concerns, and recommendations to increase the effectiveness of conducting patient safety in the deployed setting, wherever care may be provided. Specifically, this research focuses on patient safety program resources within the United States Air Force Expeditionary Medical Support (EMEDS) Unit Type Codes (UTCs) managed by Headquarters Air Combat Command as the Manpower and Equipment Force Packaging (MEFPAK) Responsible Agency (MRA). Some past efforts to improve the deployed patient safety program are examined and current practices are described relative to the EMEDS UTC building blocks and platform levels. A variety of resources were consulted including email interviews of deployment experienced medical leaders, the Joint Lessons Learned Information System (JLLIS), the Air Force Medical Service (AFMS) Knowledge Exchange (Kx), United States Air Force Instructions (AFI), and other available literature on the subject. A survey of expeditionary patient safety trained and experienced individuals was conducted to evaluate past practices, as well as the potential incorporation of future solutions for increasing the effectiveness of patient safety measures within the ground medical expeditionary environment. The summary of findings from this survey was evaluated against current courses of action and recommendations were proposed.

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## INTRODUCTION

“First, do no harm....” These words, commonly attributed to Hippocrates, the “Father of Medicine,” represent a tenet of healthcare practices and teaching programs worldwide.<sup>1</sup> The concept of which, may be found in the oaths of doctors, nurses, pharmacists, and a variety of other health services students and practitioners.<sup>2,3,4</sup> Yet, despite its inclusion in health care practices and education, deaths due to medical treatments, misdiagnoses, and other health care related events have continued to rise with some studies showing rates as high as 400,000 patient deaths per year.<sup>5</sup> As a result of a similar report by the Institute of Medicine, *To Err Is Human: Building a Safer Health System*, policymakers decided that there was a need to place an increased and enduring focus on patient safety.<sup>6,7</sup> Sections 742 and 754 of the National Defense Authorization Act of 2001 specifically direct the Department of Defense to “review and integrate processes for reducing errors associated with patient care and for enhancing patient safety.”<sup>8</sup>

This paper discusses some aspects of the “what” and “how” this patient safety focus was implemented within the United States Air Force ground medical expeditionary environment based on findings and recommendations from the 2010 (United States) Air Force Audit Agency, (United States) *Air Force Central Area of Responsibility Patient Safety Program* report. Actions taken to improve expeditionary patient safety leading up to the present and what has been done to mitigate concerns from this report of audit will be discussed. Specifically, this research focuses on patient safety practices within the Expeditionary Medical Support (EMEDS) Unit Type Codes (UTCs) managed by Headquarters Air Combat Command as the Manpower and Equipment Force Packaging (MEFPAK) Responsible Agency (MRA). Past efforts to improve patient safety are discussed, and current courses of action are described, relative to EMEDS UTCs and platform levels.

A survey of previously deployed patient safety trained individuals was conducted to evaluate current practices and potential solutions for increasing the effectiveness of patient safety within the deployed environment. A brief examination of the EMEDS modular construct was undertaken to discuss how UTCs are designed to be available at various EMEDS capability levels. Additionally, the Joint Lessons Learned Information System (JLLIS) was queried and select leaders were “email” interviewed regarding patient safety focus and concerns with patient safety processes within the deployed environment. Finally, recommendations are introduced to help realize the ultimate trusted care goal of “zero (patient) harm,” wherever care may be provided.<sup>9</sup>

## BACKGROUND

The National Defense Authorization Act of 2001 established patient safety program requirements for all Department of Defense Medical Treatment Facilities (MTFs).<sup>10</sup> Specifically, Department of Defense health care organizations were now required to establish “a system for identifying, analyzing, and reporting medical events that occur in the provision of health care.”<sup>11</sup> Medical events, as used here, are defined as “actions or inactions that lead to deviations from intentions or expectations and include problems in medical practice, procedures, or systems.”<sup>12</sup> If “patient safety is essential to all AFMS operations, including Aeromedical Evacuation and deployed locations,” as stated in AFI 44-119, *Medical Quality Operations*, dated 16 August 2011, then more work is needed to identify problems and offer solutions, particularly with regards to care in deployed environments.<sup>13</sup> The following paragraphs explore some of the actions previously taken to evaluate and potentially improve patient safety within the EMEDS capability system up to the present.

A review of the United States Air Force Central (AFCENT) Area of Responsibility Patient Safety Program was requested by the Air Combat Command Surgeon General in 2010. This review was conducted, from April to August 2010, by the (United States) Air Force Audit Agency (AFAA) with the intent of identifying opportunities for AFCENT medical officials to improve patient safety. Facilities surveyed included: Al Udeid Air Base, Southwest Asia; Bagram Air Base, Afghanistan; and Balad Air Base, Iraq.<sup>14</sup> The AFCENT Surgeon General (SG) stated, "...these three MTFs have been operational for up to six years.... Facility operations and programs should be in sustainment versus reactive mode; PSP (Patient Safety Program) processes should be fully implemented."<sup>15</sup> The findings and recommendations from this AFAA Draft Report of Audit, *Project Air Force Central Area of Responsibility Patient Safety Program*, were concurred by then Air Force Surgeon General, Lieutenant General Charles B. Green and then Deputy Surgeon General, Major General Thomas W. Travis (see appendix A).<sup>16</sup> Additionally, the Surgeons General concurred with the comments from the Air Force Medical Operations Agency Clinical Quality Division (AFMOA/SGHQ) that were attached to the signed memorandum dated, 27 December 2010.<sup>17</sup>

Recommendations from the final audit report, dated 28 January 2011, included the aforementioned AFMOA/SGHQ comments verbatim. Specifically, they stated that AFMOA/SGHQ, 'will establish guidance in AFI 41-106, *Unit Level Medical Readiness Management* and AFI 44-119, *Medical Quality Operations*, to coordinate with the Air Combat Command Surgeon General (ACC/SG) to: assign patient safety duties to a specific position within each level of the Expeditionary Medical Support (EMEDS Basic, +10, +25) package; establish a Unit Type Code (UTC) for a Patient Safety Manager (PSM) position at the Air Force Theater Hospital sustainment facilities; develop pre-deployment patient safety training, formalize

the event reporting process; and emphasize the utilization of the Medical Treatment Facility (MTF) Assessment Tool, among others.’<sup>18</sup> The following paragraphs describe and/or evaluate the work taken to verify completion of the aforementioned recommendations.

Evidence of the emphasis, and inclusion of the MTF Assessment Tool within applicable guidance, was found inside (United States) Air Force Instruction (AFI) 41-106, *Medical Readiness Program Management*, dated 1 July 2011. Section 2.1.11.3 of this publication, stated that Component Numbered Air Force (C-NAF) Surgeons would, “Assess effectiveness of deployed medical operations using the checklist provided in Attachment 9 of this Instruction.”<sup>19</sup> Future versions of AFI 41-106 saw this tool removed and a reference added pointing to its virtual location on the AF Medical Readiness Community of Practice (CoP) and later on the Air Force Medical Readiness SharePoint Site. The current draft version of AFI 41-106, dated 26 May 2016, but as yet unpublished, further emphasizes use of the revised and newly named Deployed MTF Functional Verification and Hand-off Tool.<sup>20</sup> The new verbiage states, “UTC Team Chiefs or UTC Family Group Leaders will review the Functional Verification and Hand-off Tool maintained on the AF Medical Readiness SharePoint Site prior to each Deployment Vulnerability Period (DVP).”<sup>21</sup>

The following lists the information found within AFI 44-119, dated 16 August 2011, possibly concerning the establishment of guidance to coordinate with ACC to emphasize utilization of the MTF Assessment tool. It states, “All MTFs will adhere to the National Patient Safety Guidelines (NPSG) for Universal Protocol (UP)... checklist templates are located in the Patient Safety Handbook posted on the Knowledge Exchange (Kx).”<sup>22</sup> Upon further examination, this researcher found the United States Air Force Patient Safety Deployed Patient Safety Program (PSP) Guide on the AFMS Patient Safety Kx. The Deployed MTF Functional

Verification and Hand-off Tool was found to be included as a clickable link at Tab 2 on page 25 within this guide.<sup>23</sup> The draft version of the unpublished upcoming 2017 update of AFI 44-119 contains verbiage directly referencing the use of the Deployed MTF Functional Verification and Handoff Tool and its location. Specifically, this instruction states, “Deployed medical facilities will implement a patient safety program relevant to their capabilities, mission and operational environment, in accordance with (IAW) the Deployed MTF Functional Verification and Hand-off Tool, and specific directions and policies of the corresponding Component Numbered AF Surgeon.... The MTF Hand-off tool is referenced in AFI 41-106, Medical Readiness Program Management and also located in Tab 2 of the Air Force Deployed Patient Safety Program Guide, posted on the Knowledge Exchange on the Patient Safety Homepage under EMEDS.”<sup>24</sup>

The requirement that specific training for the Patient Safety Manager (PSM) be provided prior to deployment was the next item explored. This training is provided by the Air Force Medical Operations Agency (AFMOA) Patient Safety Program Consultant (PSPC) for Expeditionary systems (EMEDS), who is attached to the Office of ACC Command Surgeon, Clinical Operations Division (referred throughout this document as the “Office of Expeditionary Patient Safety”). It is accomplished via one of two methods depending on the particular patient safety role. The first is an 8-hour basic class for PSMs and PSM Assistants including those individuals tasked with patient safety duties assigned to FFEP6 (Nursing and Ancillary Support Team) and FFPSM (Patient Safety Manager) UTCs as well as select personnel identified within deployment Line Remarks. This basic class is conducted by the Office of Expeditionary Patient Safety (AFMOA PSPC for EMEDS) via Meet-Me conference calls using PowerPoint presentations and other materials posted on the AFMS Knowledge Exchange (Kx).<sup>25</sup> The second “Executive” course is a 4-hour course targeted toward those individuals serving as the Chief of

Nursing (SGN) or the Chief of the Medical Services (SGH) role on the FFEP4 (25 Bed Personnel Augmentation Team) UTC, as well as select personnel identified within deployment Line Remarks. Items covered in both courses include the Deployed Patient Safety Guide, the Functional Verification and Hand-off Tool, and the event reporting process using DoD Patient Safety Reporting (PSR) system. Both courses require follow-on mentored immersion training with their home MTF PSM, SGN and/or SGH prior to deployment over a 4-6 month or 3-4 month timeframe, respectively.<sup>26</sup> Instructional materials are under continuous revision based on student and deployed PSM feedback. Completion of this training is verified from a listing of course attendees provided by the AFMOA PSPC for EMEDS in the Office of Expeditionary Patient Safety at ACC/SGO.<sup>27</sup>

No information was found concerning expeditionary Patient Safety Reporting (PSR) processes in the current (published) and future (unpublished) versions of AFI 41-106 and the current (published) version of AFI 44-119. However, evidence of the formalization of Patient Safety Reporting (PSR) processes was found within the draft of the upcoming 2017 update of AFI 44-119. Paragraph 2.11.5 of this instruction requires all EMEDS section leaders, both officers and non-commissioned officers (NCOs) to utilize PSR systems, where available.<sup>28</sup> These individuals are responsible for gaining the appropriate level of access to the PSR system prior to deployment. Additionally, paragraphs 2.11.6 and 2.11.7 describe the requirement to monitor events internally and report them through the chain of command and to AFMOA.<sup>29</sup> The final requirement listed in paragraph 2.11.7 is to advise the MTF Commander and/or the SGH on all Patient Safety topics. Specifically, these topics include: “reporting Sentinel Events/Serious Reportable Events; conducting internal (Root Cause Analyses) RCAs, or requesting RCA Team external augmentation or entire external team; and, compliance to reporting

requirements through chain of command (CNAF) to AFMOA, as applicable, for above type of events as well as SGH reporting of SOC Reviews of deaths and suicide related incidents.”<sup>30</sup>

The last item explored from the AFAA Report of Audit concerned the assignment of patient safety duties to a specific position within each level of EMEDS (EMEDS HRT, +10, +25) package and the establishment of a UTC for a PSM position at Air Force Theater Hospital (AFTH) sustainment facilities. Remarks were added into mission capability statements (MISCAPS) of the respective EMEDS UTCs, which both assigned patient safety duties and defined associated patient safety training requirements (as additional duties) to specific positions within EMEDS UTCs. A description of these MISCAP updates follows.

The base platform level EMEDS, the EMEDS Health Response Team (HRT), includes a Clinical Nurse (AFSC 46N3) as part of the FFEP6 (Medical EMEDS Nursing-Ancillary Augmentation) UTC and assigns that position the function of Unit PSM “as an additional duty with direction from the Chief, Hospital Services (SGH) and guidance from the Nursing Administrator or Chief Nurse (SGN).”<sup>31</sup> Additionally, the MISCAP states, “can be augmented by UTC FFPSM (Med Patient Safety Management Support) at an (United States) Air Force Theater Hospital (AFTH) or equivalent deployed medical facility.... Member requires PSM training IAW guidance in the (US) AF Deployed PSP Guide prior to deployment.”<sup>32</sup> Assignment of patient safety duties to a position on FFEP6 ensures that patient safety, at least as an additional duty, was incorporated at the first increment of the EMEDS building block model. Similarly, this FFEP6 nurse performs PSM duties on the next EMEDS +10 increment level, as well.

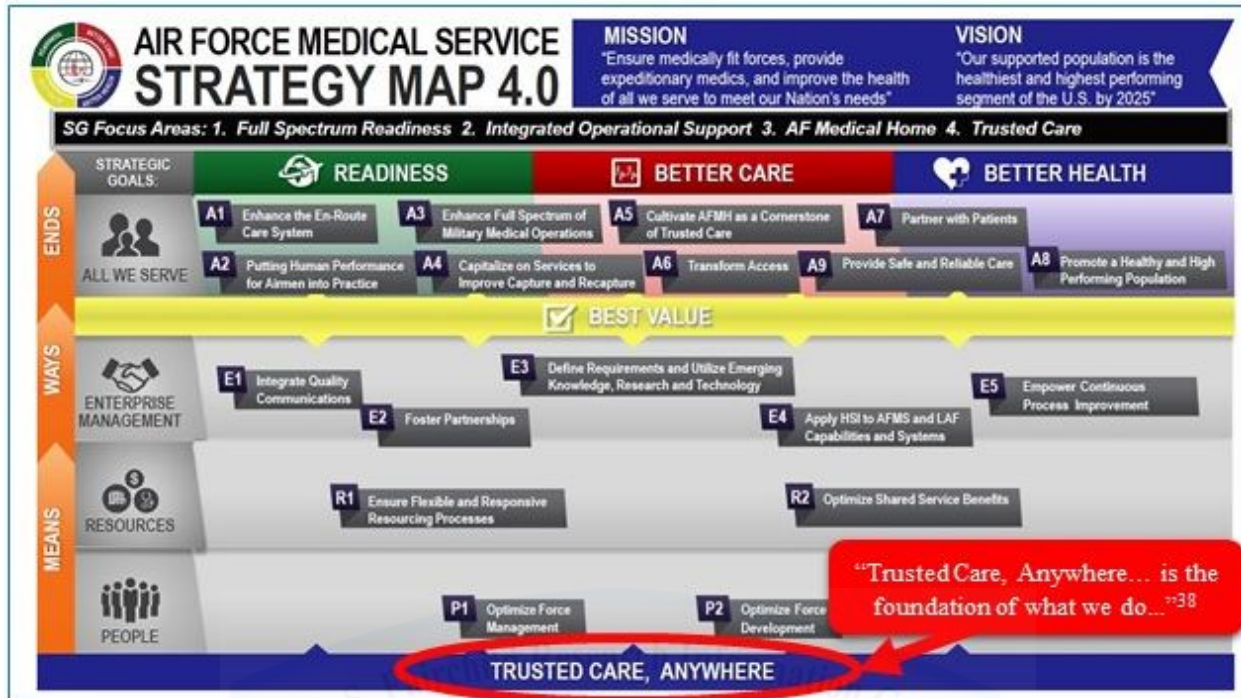
The latest (2014) MISCAP for FFEP4 UTC (Medical EMEDS 25 Bed Personnel Augmentation) levies patient safety duties on the Nursing Administrator (AFSC 46A3).

Specifically, the MISCAP states, “Nursing Administrator should complete Patient Safety Manager Training for deployers IAW guidance in the USAF Deployed Patient Safety Program Guide prior to deployment.”<sup>33</sup> This Nursing Administrator would have overall oversight of the Patient Safety Program and would assist the Patient Safety trained nurse. The combination of this, and the previously described FFEP6 UTC update meet the basic requirement that patient safety duties be assigned to a specific position within each level of EMEDS.

The final MISCAP update is the establishment of a new UTC for a PSM position at (United States) Air Force Theater Hospital (AFTH) sustainment facilities, was accomplished by Air Combat Command in January of 2014. This one-person UTC consists of a seven-level Aerospace Medical Services Craftsman (AFSC 4N071) that is responsible, as a primary duty, “to provide support to the appointed PSM, to manage the medical unit PS program during operations at an (United States) Air Force Theater Hospital (AFTH) or equivalent deployed medical facility, with direction from the Chief, Hospital Services (SGH), and guidance from the Nursing Administrator (SGN).”<sup>34</sup> As with the two previously described MISCAP updates, this UTC requires expeditionary PSM training prior to deployment.<sup>35</sup>

The previous paragraphs point to some progress towards compliance with the final audit report, dated 28 January 2011; however, more work may be needed to ensure full compliance. Fast forward to the present and one look at the current AFMS Strategy Map (Figure 1) is all that is needed to confirm that trusted care is “the foundation of what we do.”<sup>36</sup> The AFMS goals: Readiness, Better Care, Better Health, and Best Value, are built upon this “Trusted Care, Anywhere” foundation.<sup>37</sup>

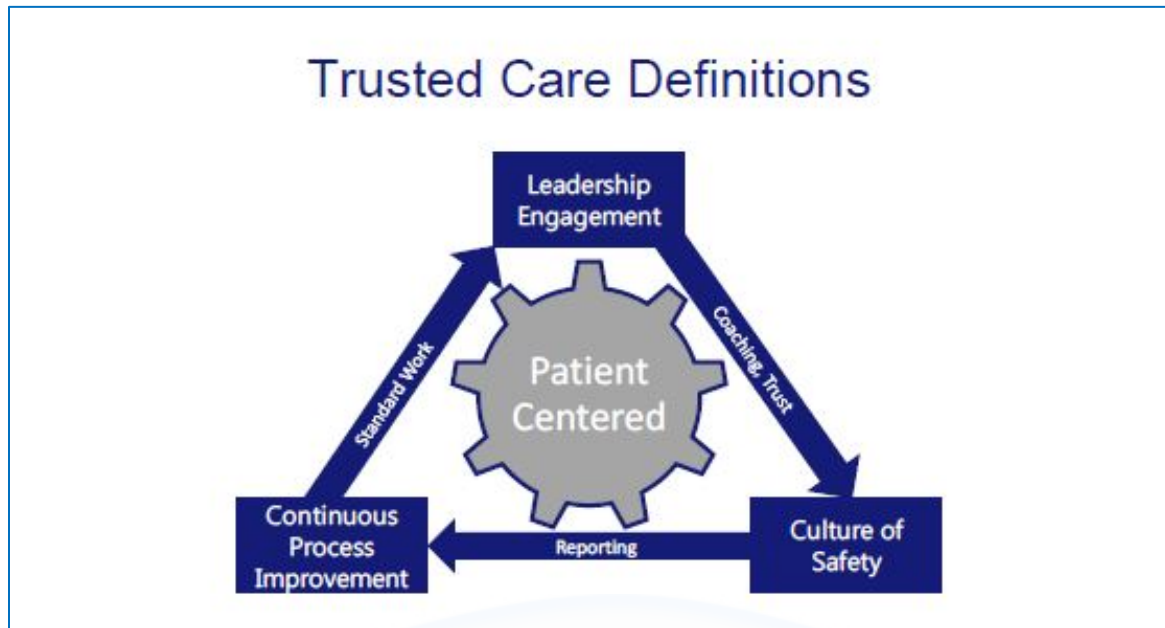
Figure 1. Air Force Medical Service Strategy Map 4.0



Adapted from Air Force Medical Service Strategy Map 4.0, Air Force Medical Service Strategic Medical Plans Division, accessed online 7 April 2017.

Trusted Care, in this context, may be defined as, “The increased focus on safe patient care – exceptional quality in-garrison, in the air, and deployed, and a systematic approach to Continuous Process Improvement,” or more simply as, “zero harm.”<sup>38</sup> This concept may be further explained as a melding of four domains: Leadership Engagement, Culture of Safety, Continuous Process Improvement, and Patient Centeredness (Figure 2). It was through this lens that, in coordination with the Office of Expeditionary Patient Safety, this researcher sought to see how patient safety might be enhanced in the deployed environment.

Figure 2. Trusted Care Defined (Concept)



*Reprinted from* Trusted Care Concept of Operations (CONOPS), October 2015, accessed online 7 April 2017.

## METHODS

Having previously examined the empirical evidence concerning the need to improve patient safety in the deployed environment, this research sought to gain current insight into the conduct of patient safety programs and solicit feedback on the perceived effectiveness of current and potential patient safety program initiatives. More specifically, this research hoped to expand the knowledge base regarding the effectiveness of specific courses of action for the improvement of patient safety practices within the (United States) Air Force Expeditionary Medical Support (EMEDS) Unit Type Codes (UTCs) managed by Air Combat Command as the Manpower and Equipment Force Packaging (MEFPAK) Responsible Agency (MRA). To acquire this information, multiple research methods were used including: soliciting opinions of individuals

who previously received patient safety training and were subsequently deployed in a patient safety role, conducting email interviews of a select few senior leaders who were previously, or currently, deployed in expeditionary MTFs, and performing a query of the Joint Lessons Learned Information System (JLLIS).

The first of these methods, a web based online survey, was selected over other options, as it was determined to be the quickest, easiest, and least costly method of soliciting potential respondents' opinions over a large geographic area. In order to encourage candid and thoughtful replies, responses were requested via an anonymous and confidential survey instrument. Questions were kept simple with multiple choice answers and were limited in number to further encourage survey responses. A comment box was included below each question within the survey to allow for free-form text responses. Care was taken to ensure that survey questions were written in a way that should prevent answers from being attributable to anyone in particular. Potential respondents were identified from a listing of expeditionary patient safety trained individuals. This listing was accessed through coordination with the Office of Expeditionary Patient Safety at Headquarters Air Combat Command. Information including, name, rank, and email address (or addresses), for a total of 203 potential respondents was loaded into a password protected Excel spreadsheet for use in the study.

By 14 February 2017, the survey instrument titled: *Short Survey Addressing Patient Safety Effectiveness in Expeditionary Medical Support (EMEDS)* (see appendix C) was completed and prepared for delivery to potential respondents. Those successfully reached were greeted with a welcome letter and survey invitation. Further details regarding the survey methodology and welcome letter are included in appendix B.

In addition to the survey of patient safety trained individuals, email “interviews” of a select few experienced expeditionary medical group commanders were conducted to appreciate deployed senior leaders’ general perspectives regarding patient safety in expeditionary MTFs. Email interview candidates were selected from an Area of Operation (AOR) Patient Safety (PS) Point of Contact (POC) Roster, provided by the Office of Expeditionary Patient Safety, and from personal contacts of this researcher. The results of these open ended interviews are discussed in a non-attributional way in the following results section.

Finally, an attempt was made to gain patient safety program information from the JLLIS. A query was accomplished, in coordination with the Air Force Medical Support Agency’s Medical Lessons Learned Program Manager, using the keywords “patient safety.” This proved to be of limited value and its outcome will be discussed in the following results section.

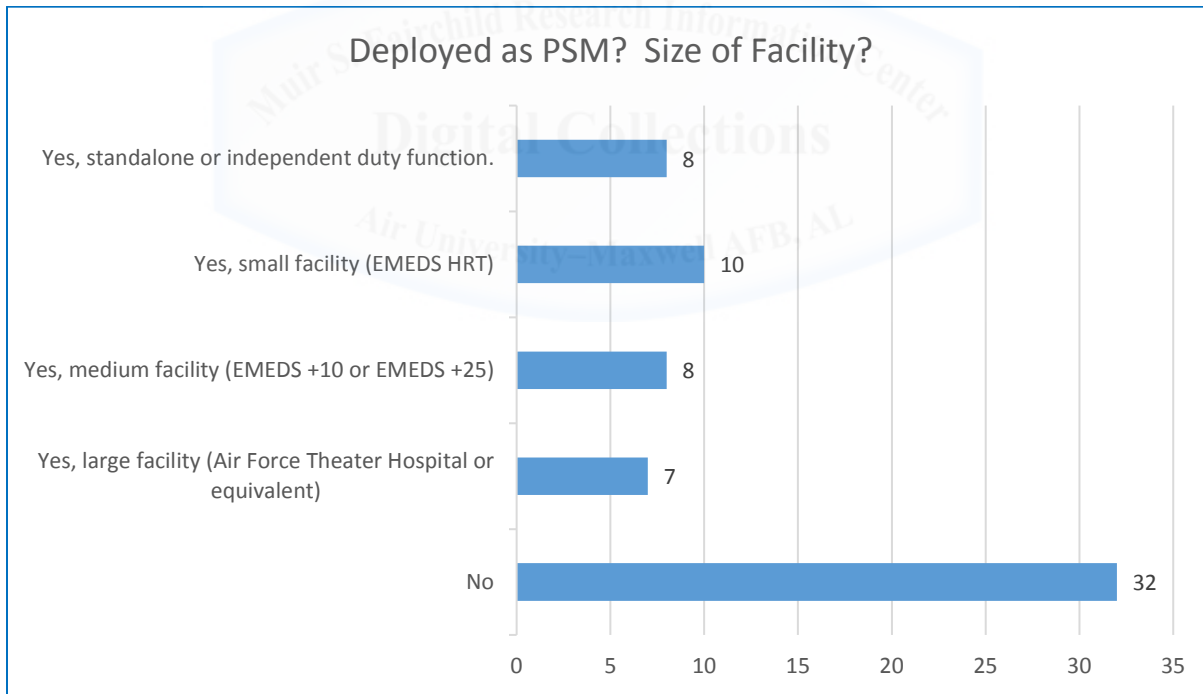
## RESULTS

Results from each of the three previously described research methods will be discussed in this section beginning with the summary of findings from each question of the electronic survey. Where identifying information has been entered by respondents, this information has been made unidentifiable to preserve the anonymous and confidential nature of this research.

The first survey question asked respondents if they had deployed or were currently deployed in a position with responsibilities for managing patient safety (either as primary or additional duties) and if so, to indicate the size of the facility these duties were performed in. The “No” choice for this question was designed to allow respondents, who had not deployed or were not currently deployed, the ability to self-eliminate from the remainder of the survey. This would help to control data integrity and ultimately contribute to more meaningful survey results.

Thirty-three respondents indicated that they had performed patient safety duties either as a standalone function or a member of one of the EMEDS or AFTH platform levels. The responses were nearly distributed evenly amongst platform levels with the most at small EMEDS HRTs (10) and the least at large AFTHs (7) or equivalent. A few comments were listed in the text boxes provided on the survey. These largely described the particular deployed unit size relative to the EMEDS construct. However, one comment stated that their PS duties had been redirected to other personnel by their superior. Thirty-two individuals terminated the remainder of their survey participation with a “no” response to this question.

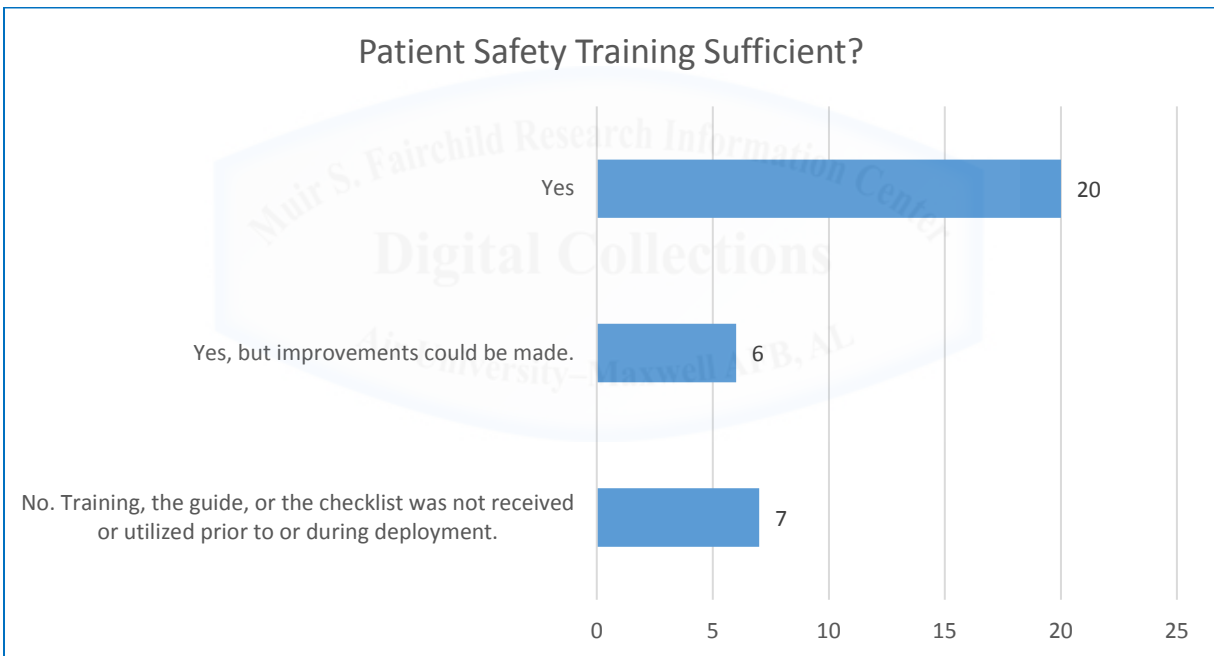
Figure 3. Patient Safety Survey Question 1



Was the expeditionary patient safety training sufficient or was something else needed? This was the topic of question two (Figure 4). The majority, twenty-six, of the thirty-three respondents felt that the training and materials provided by the Office of Expeditionary Patient Safety was sufficient for the performance of their patient safety duties. Of these, six felt that

improvements could be made. Zero respondents stated that the training was insufficient and something else was needed. However, a total of seven respondents stated that training, the guide, or the checklist was not received or utilized prior to, or during deployment. Optional text responses for this question ranged from the training was “over the top amazing... the Patient Safety Program Guide was my Bible throughout deployment” to “8 hours’ worth of training over the phone was a horrible idea.... I was completely zoned out and don't remember a thing” voiced by a person deploying the following week.

Figure 4. Patient Safety Survey Question 2



A selection of comments from question two are provided below.

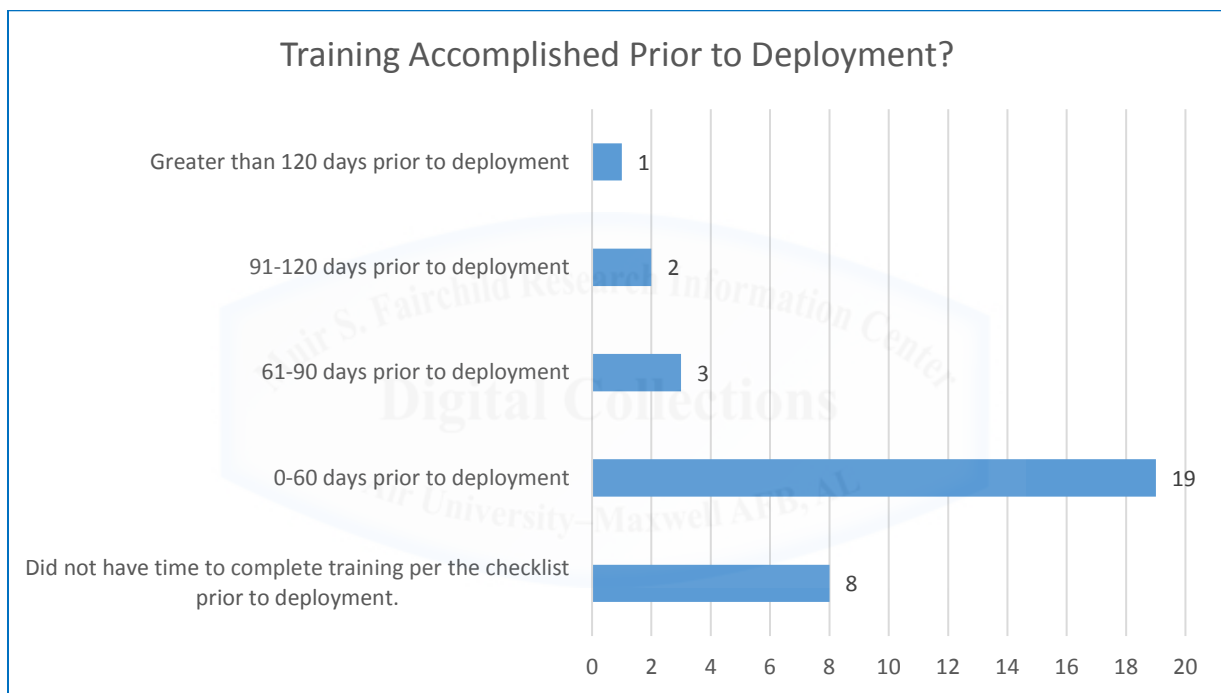
- “The PSM course was over the top amazing and provided any resource needed. Unfortunately, the focus of the deployed environment is unique and difficult to incorporate in-garrison PSM focuses due to staffing restraints, limited resources,

equipment challenges etc. This makes patient safety even more important yet the road to improvement is fraught with denied terrain.”

- “I was told about a week before I left I need to know how to do this. If you want people to take this serious a TDY should be implemented. 8 hours’ worth of training over the phone was a horrible idea. I was completely zoned out and don't remember a thing.”
- “Shadow someone in facility before deployment would provide a big picture for the role.”
- “I don't know anything about a virtual training class, guide, or checklist.”
- “I don't believe that except at maybe a role 2 or role 3 that a full patient safety program can be implemented. I would recommend modular implementation of patient safety sets be created depending upon the EMEDS configuration, location and whether hardened.”
- “The training was excellent and Mr. “X” is very proactive. My contention, at least as far as deployed SGHs go, is that unless you were either already an SGH with a good patient safety program or otherwise intimately involved in patient safety while CONUS AND recently (because its ever growing), you need hands on training. I do not have a solution for this as CONUS is strapped for manning as well and each additional pre-deployment training requirement takes away from the home station. The only thing I could recommend to improve it is preferentially select current or recently graduated SGHs for deployed SGH positions... or pair junior/new SGHs with established very solid patient safety managers, whose deployed position allots for a 30-50% FTE to be done as Patient safety verse adding it as an extra duty. In Summary the training was excellent, it covered a lot of topics and it emphasized patient safety, but being over patient safety is a mindset and skillset that has to be practiced in addition to taught. Just my two cents...”

Question three sought to gauge the time, in days, taken to complete all facets of patient safety training prior to deployment (Figure 5). Of survey respondents, only one individual stated they had completed training greater than 120 days prior to deployment. The majority, twenty seven respondents, either did not complete the training or completed the training, just in time, within the last sixty days prior to deployment.

Figure 5. Patient Safety Survey Question 3



The survey pointed out that most individuals were receiving the training just in time, after they reached their deployed location, or not at all. Reasons for not completing the training three to four months prior to deployment varied, but included: short notice (last minute) deployment tasking(s); guard or reserve and didn't have training; sister service that did not have resources; did not have or did not know about the checklist (or other resources). These comments point to a need to ensure patient safety resources are communicated and available to all and that individuals understand the need to complete the training at the recommended interval of three to four months

prior to deployment. Completion of the training, including “shadowing” with the individual’s local MTF PSM, would ensure that a sufficient level of proficiency in conducting patient safety duties is achieved prior to their deployment(s).

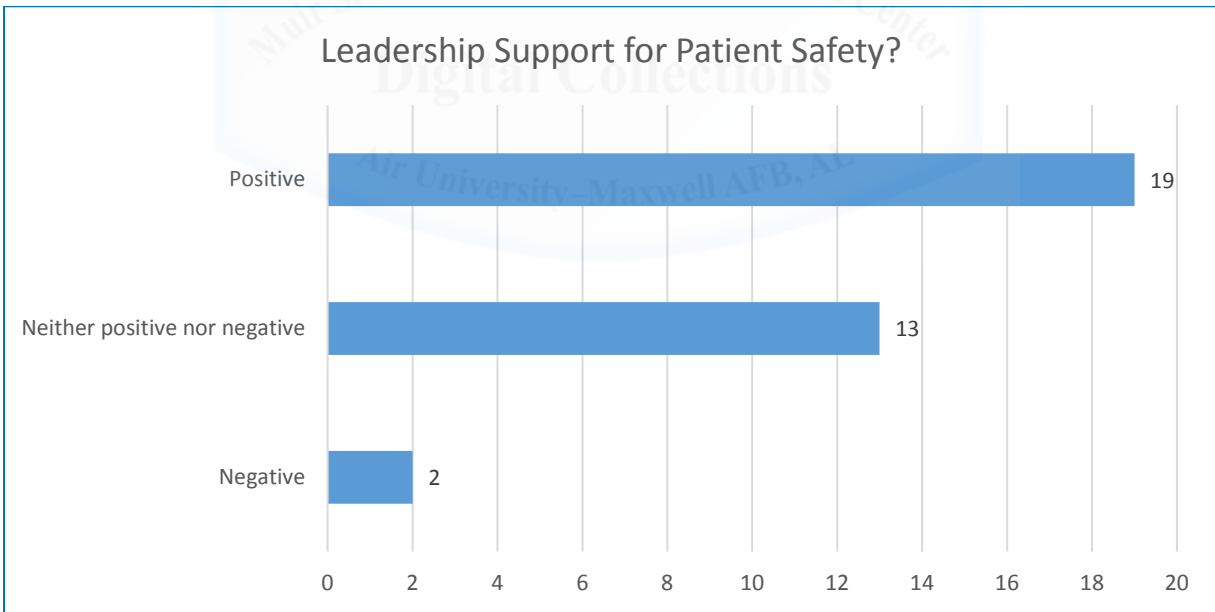
A selection of comments given in response to question three are listed below:

- “I volunteered for the deployment so I knew very early. I would recommend new or junior deployed SGHs be notified as early as possible so they can spend an optimal time shadowing.”
- “Tagged for deployment in May for an Oct departure. Began PSM trng (training) in May and did all hands on and checklist the entire summer. It was wonderful. I could have done so much with the skills but working 15-18 hour days most days and 24 hour shifts at times prevented much contribution. I did some complex PSR reviews and made recommendations on standardizing protocols for TPA administration and NTG drips. I reached back to the ICU consultants from all services to see if there were any resources stateside for this topic but no protocols at Travis, Walter Reed or SAMMC. I tried to get a team together for a PI (Process Improvement) but after a flurry of enthusiasm from a handful of nurses there was little interest or enthusiasm for follow through.”
- “This tasking came down last minute. There was not any funding taken into account and everything I did to prepare for this position I did on my own. I was originally tasked as the ERPSS (En-Route Patient Staging System) PSM; however, when I arrived at “X” the individual assigned to be the PSM for the AFTH did not desire to run the program.”
- “Short notice deployment to replace prior personnel sent back home emergently.”

- “Never did training at home station.”
- “I am AD Navy and did not know about the checklist.”

Question four asked respondents to state the type of support they received from leadership regarding the training for and performance of their patient safety duties (Figure 6). The majority of respondents (19) indicated they had received positive support from their leadership. A total of two survey participants stated that they received negative support from their leadership. The remaining thirteen responses indicated neither positive nor negative support from leadership concerning the training for, or performance of, patient safety duties. Comments concerning leadership support varied widely from full support to no support at all.

Figure 6. Patient Safety Survey Question 4



A selection of comments are included below.

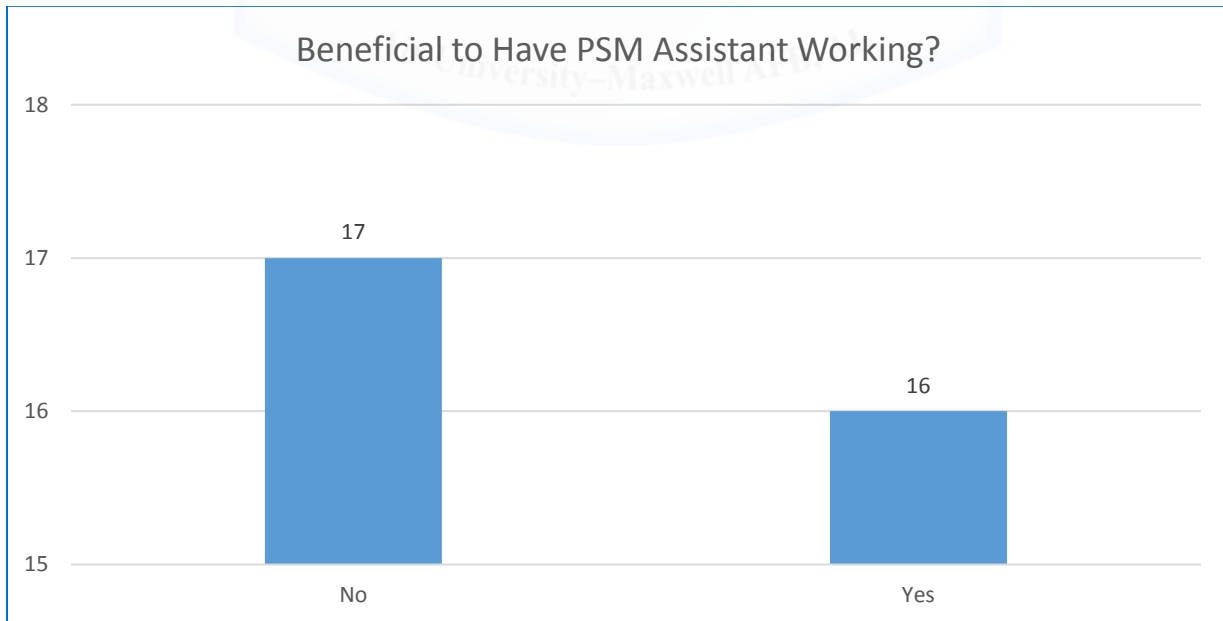
- “Supportive in training as patient safety is operational mission impacting.”
- “Patient Safety was another additional duty and treated as such.”

- "...MDG/CC made it clear that meeting deployment requirements was a priority and allowed flexibility in my normal SGH duties to meet those requirements."
- "...don't think they even knew....needs to be better defined if that is going to be an additional duty and maybe written into tasking letter?"
- "My Reserve commander was a bit confused at first because this "Patient Safety Concept" was not something that was stressed. My deployed Commanders who were all Active Duty bled patient safety with the exception of the EMD he said one thing and did another."
- "Roles changed when I got to the location. Hand off was not great from departing personnel."
- "Provided me the time to spend shadowing the patient safety manager of the hospital. Was able to spend a month learning specifics of the job."
- "...helped with schedule changes to assist in getting completed."
- "There was no time allotted for training during normal duty hours. Training was done on off time. Support from leadership in understanding the importance of setting time for training is important so that the member is able to concentrate."
- "They had no involvement beyond providing the ACC contact for the training."
- "Had to come in during personal time to complete the training."
- "Like I stated, I never had time."

The next question sought to gauge whether individuals who had been trained in patient safety and deployed in this function would have benefited from having a Patient Safety Manager Assistant work with them (Figure 7). It should be pointed out here that the PSM UTC has not yet been deployed in any size MTF, as it was introduced after the current Deployed MTF

locations were established and it currently appears as an option only for Theater Hospitals. Responses were virtually even with seventeen “No” and sixteen “Yes” responses. Comments to this question were interesting and ranged from “...would have helped to have them guide the program;” to “the program is manageable with one person;” and finally, “people never really filled out the PSRs... so it didn't matter... No one cares about that kind a stuff while deployed.” Answers to this question with their accompanying comments point to small facility size, and more likely, slower operational tempo, as the primary reasons for not feeling the PSM Assistant would be beneficial. Overall, the comments pointed towards the PSM Assistant would be valuable in larger or higher operational tempo facilities. Some respondents’ comments alluded to the implementation of local ad-hoc PSM Assistant solutions where 4N Aerospace Medical Technicians had shared or been delegated PS duties.

Figure 7. Patient Safety Survey Question 5



Some of the other more salient comments are listed here for reference.

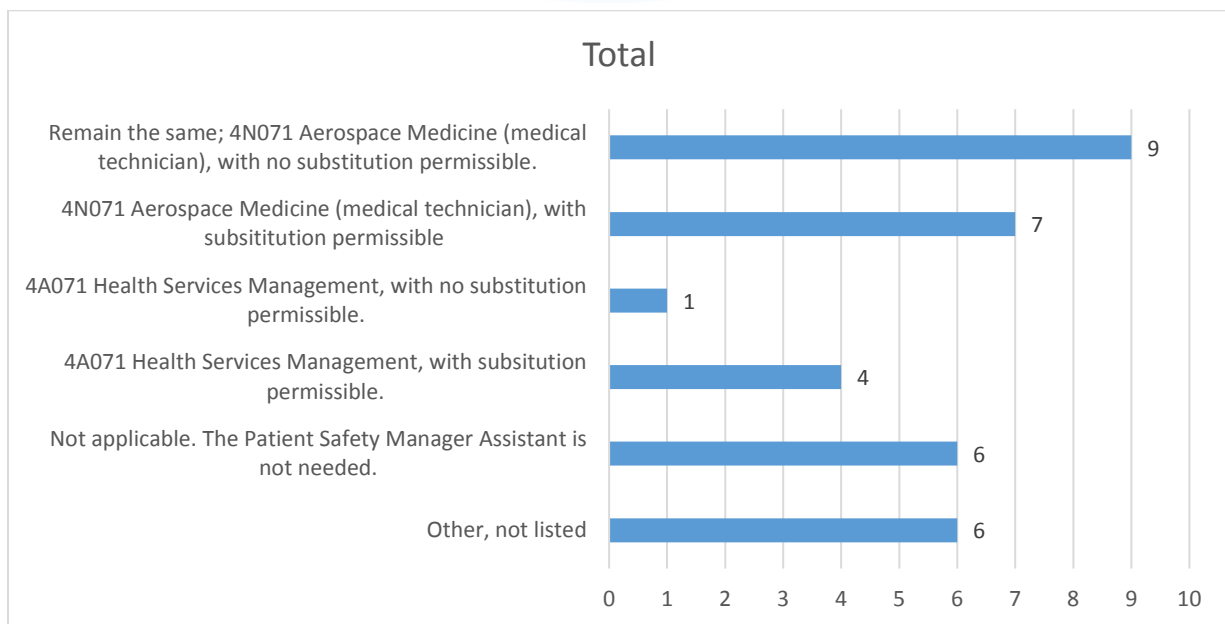
- “Volume of PSRs at this location does not necessitate need.”

- “The location I was assigned to was 24/7 ops, would have been beneficial to have PS on both shifts.”
- “I delegated a 4N (Air Force Specialty Code for Aerospace Medical Technician) as the Patient Safety Assistant.”
- “With a small facility, there doesn't seem to be a need for a large patient safety team. The team itself is enough to help with PS duties. It would be useful for larger facilities in my opinion.”
- “As far as I know we do not have a PSM assistant here at base “X.” We have a PSM, actually two officers we have made PSMs because both have other jobs. If given the choice between a PSM assistant or full time PSM with no other responsibilities other than PSM, perhaps combining PSM and IC into one single deployed position, preferably a nurse; that would be best. My opinion is if we say patient safety is first, let’s make it a dedicated deployed position with secondary duties of infection control and maybe MICT compliance to ensure they are gainfully employed for a full 60+hr work week every week.”
- “We currently assign a 46F3 and 4N to work Patient Safety together, and it has worked out fine in our environment.”
- “It is my opinion that there needs to be a permanent full time OIC and Assistant OIC in place with at a minimum one year turn-around (one year assignment).”
- “Not for the amount of work load at deployed location. But at the fixed facility it would be helpful definitely.”
- “Help keep track of numbers as well as assist when other individual is on nights.”

- “Having two people share the role allows more efficiency with the Patient Safety role.”
- “...small facility; not a lot of patient safety concerns currently; I'm a nurse, my other duties allow sufficient time for patient safety.”
- “Given the clinical duties in a lean deployed environment... it would be useful to have a dedicated PSM assistant able to fully support a strong PS program.”

Question six elaborated on the previous PSM Assistant idea by asking respondents to indicate the preferred AFSC they would like to see fill the PSM Assistant UTC, if it were to be revised (Figure 8). Currently, the PSM Assistant UTC is only a selectable part of the AFTH platform level and has never been employed. Sixteen respondents selected one of the two 4N071 Aerospace Medical Technician selections, five chose the 4A071 Health Services Management option, six chose other, not listed, and six respondents stated the PSM assistant was not applicable and not needed.

Figure 8. Patient Safety Survey Question 6



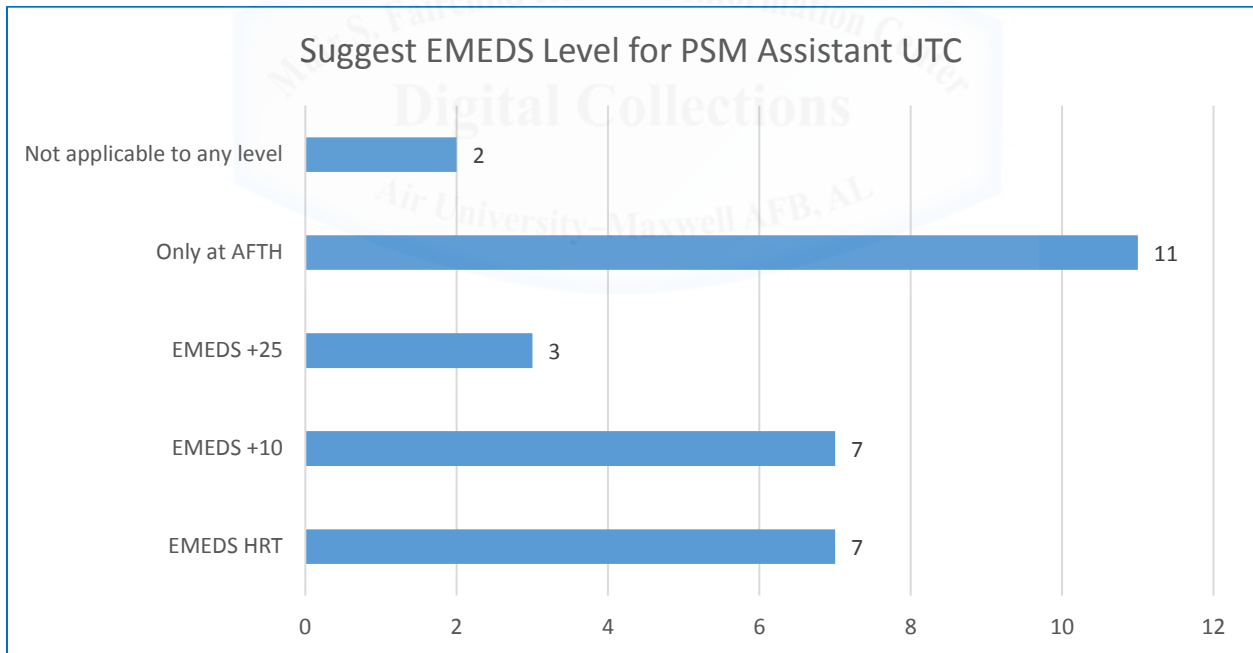
Respondents' comments follow and mostly agree that a (strong) medical background is needed for the position.

- “Should be a 4N that has had patient care experience to lend knowledge and support.”
- “We don't have one here... but if we did, I'd rather have an IDMT (Independent Duty Medical Technician)> standard 4N> other enlisted positions. I would outright exclude 4A because in my opinion the patient safety person should have some clinical background.”
- “You definitely need someone who has a strong medical background with both inpatient/outpatient and deployed experience who can be critical of the PSM program and write up deficiencies, roadmap improvement process, get buy in with staff and then monitor.”
- “Needs to be a medical background.”
- “4N or 4A in any venue.”

The final survey question sought to learn the level of EMEDS that respondents felt the PSM Assistant UTC should be incorporated (Figure 9). As mentioned previously, the PSM UTC has not been deployed to any size MTF and it currently remains an additive only for Theater Hospitals. While eleven respondents felt that the PSM Assistant UTC (FFPSM) should stay at the AFTH platform only, a majority of respondents (17) indicated that the PSM Assistant UTC should enter the EMEDS construct at a platform level below AFTH. Of these, seven respondents chose the EMEDS HRT, and seven respondents chose the EMEDS +10 level, respectively. The EMEDS +25 platform level was selected by respondents three times. Finally, two respondents felt that the PSM Assistant UTC was not applicable (not needed) at any platform level of EMEDS, including the AFTH level.

Overall, the majority felt that the PSM Assistant should be brought in at an earlier EMEDS level than the AFTH level. However, the survey responses did not demonstrate a consensus as to which level(s) would be most appropriate. Comments ranged from, “A dedicated person is needed at all levels” to “Should be an additional duty in relation to smaller facilities.” Interestingly, not applicable and not needed responses differed from question six and question seven, with six stating the PSM Assistant was not needed in the former and only two stating the PSM Assistant was not needed in the latter. Each respondent’s individual experiences working in a particular platform level combined with their observed operational tempo likely contributed to the diversity in responses.

Figure 9. Patient Safety Survey Question 7



Some of the other notable responses from question seven are listed below.

- “Should be at all Role 2 and up as they have increased risk with surgery, ER (Emergency Room) and ICU (Intensive Care Unit) capabilities.”

- “...but again if patient safety is an AFMS primary mission it should be a standalone position and at every level of fixed (as in there for more than 30 days) expeditionary medical facilities.”
- “I think it should be incorporated wherever we have patients for more than 24 hrs...”
- “Wherever patients are there should be a PSM program staffed by a full time OIC and NCOIC.”
- “...should start here (EMEDS HRT indicated in response).”

A total of two senior leaders responded to this researcher’s request to provide any opinions, thoughts, or experiences that could be shared regarding patient safety in the deployed environment. While one individual stated that patient safety was emphasized and included as a part of all daily discussions, the other stated that members felt that standards in place at home station do not apply while deployed and that they were not following, at least some, basic patient safety processes. These findings demonstrated the inconsistency between patient safety programs in the deployed environment and at home station. The actual responses are paraphrased or quoted below.

- “As with any other program, the leader/manager can make it or break it, so having thorough and relevant training before deployment is key. In addition, I have noticed that many deployed members think the standards that are in place at home station do not apply while deployed. For example, we found out that providers and techs were not doing timeouts before procedures--they admitted they were doing timeouts at home station, but were not doing them here. Another example is checking two patient identifiers: the techs were not consistently doing it here, although they admitted they should have been. Members like to take shortcuts and revert back to old habits while

they are deployed--for some reason. If I ever deploy again, one of the first expectations that I will communicate to staff is that the same processes/procedures that are in place at home station apply in the deployed environment--No Shortcuts!"

- "...I had great support from the deployed folks, AFMOA, and Mr. "X" for patient safety. We emphasized it, had a good catch award, and ensured it was part of all our daily discussions."

A brief examination of the EMEDS modular construct was necessary to add context to the results discussion of Question 7. EMEDS UTCs are designed to be available at varying levels of response capability per the EMEDS build diagram from Air Force Tactics, Techniques and Procedures 3-42.71, *Expeditionary Medical Support (EMEDS) and Air Force Theater Hospital AFTH*), dated 27 August 2014. Currently, the FFPSM, Patient Safety Manager Assistant, UTC is only available at the AFTH; therefore, the typical medical planner may rarely examine the FFPSM UTC as an option when planning, as most currently deployed locations have a bed requirement of 25 beds or less. The majority of the survey results indicated that the FFPSM UTC should come into the build prior to the AFTH platform level.

Using the FFHSR, International Health Specialist, UTC as an example, the FFPSM UTC could be placed within the build diagram at the EMEDS HRT build level as a selectable option (see FFHSR on Figure 10). Doing so, would ensure visibility to medical planners during the planning process and availability at any or every level of EMEDS build (HRT, +10, +25, and AFTH). Figure 10 demonstrates the total manpower requirement if the PSM Assistant were included at or below each platform level and points to the suggested area of inclusion for the FFPSM UTC within the EMEDS build construct.

Figure 10. Effects of Adding FFPSM UTC to Levels of EMEDS Construct

EMEDS INCREMENTS AND CORRESPONDING UTCs		
<b>Personnel</b> <b>Equipment</b> <b>Operation-Dependent Personnel or Equipment</b>		FFEP4 (23 people)
		FFEP5 (5 people)
		FFF0C (2 people)
		FF0X2 (AS 903A)
		FFEE3 (AS 938C)
	FFEP3 (24 people)	<b>EMEDS+10 Platform</b>
	FFPM3 (3 people)	
	FF0X2 (AS 903A)	
	FFEE2 (AS 938B)	
FFPSM (1 person) added at EMEDS HRT, EMEDS +10, or EMEDS +25 Platform Level		
FFEP1 (3 people)	EMEDS HRT Platform	EMEDS HRT Platform
FFEP2 (6 people)		
FFEP6 (7 people)		
FFF0C (2 people)		
FFMFS (5 people)		
FFPM1 (4 people)		
FFPCM (primary care) or FFDAB (flight medicine) (3 people)		
† FFPM2 (2 people)		
* FFHSR (1 person)		
* FFP01 (7 people)		
FFEPE (AS 938J)		
FFHR1 (AS 938P)		
FFMF1 (AS 938G)		
FFPM4 (AS 916E)		
FFPM5 (AS 916F)		
* FFP0E (AS 917R)		
<b>EMEDS HRT</b> 5 tents, 17,000 sq ft 40 personnel 10 pallets	<b>EMEDS+10</b> 8 tents, 26,000 sq ft 67 total personnel 21 pallets	<b>EMEDS+25</b> 11 tents, 40,000 sq ft 97 total personnel 28 pallets
41	68	98
<div style="border: 2px solid red; border-radius: 15px; padding: 5px; display: inline-block; background-color: red; color: white;">                     Total personnel w/FFPSM addition at or Below Platform Level                 </div>		
† Typically added to support combat operations * Typically added to support HA/DR operations		

Adapted from Air Force Tactics, Techniques and Procedures 3-42.71, Expeditionary Medical Support and Air Force Theater Hospital, 27 August 2014.

Finally, results from the JLLIS query using the keywords “patient safety” included 122 line items of information returned. Most information concerned instances of adverse patient safety incidents involving particular patients and not failures or limitations of the patient safety program in general. While the information was interesting, nothing was found relevant to the questions of this research project.

## CONCLUSION

In conclusion, this research reviewed the available literature and guidance regarding Patient Safety in the deployed environment. Verifications of the accomplishment of solutions for the findings from the 2010 (United States) Air Force Audit Agency, (United States) *Air Force Central Area of Responsibility Patient Safety Program* report were completed. Additionally, individuals with PSM responsibilities who had deployed, or were currently deployed, were surveyed, some select senior leaders were email interviewed about their deployed experiences, and information from the JLLIS was queried.

The following recommendations are given based on the research from this project:

- First, incorporate and synchronize all patient safety information in relevant AFIs.
  - Publish the current draft AFI 41-119 inclusive of the information as described in this paper.
  - Ensure guidance on tracking and reporting of Patient Safety training in MRDSS, and other readiness reporting systems, as well as a link to the MTF Functional Verification and Hand-Off Tool, is incorporated into the upcoming release of AFI 41-106. This will provide needed PS program guidance, help prevent short-notice or JIT training, and improve execution of PS programs within EMEDS (deployed MTFs).

- Second, keep the PSM Assistant (FFPSM) UTC AFSC as 4N071, but allow substitutions of clinical AFSC, but not skill level. This will ensure an experienced Senior NCO is assigned this important management level role.
- Third, incorporate the PSM Assistant (FFPSM) as a standard UTC within the core set of UTCs associated with EMEDS HRT. This will result in capability availability at all levels of EMEDS.

This final recommendation will require more research and discussion beyond the scope of this paper regarding the resourcing and training of additional personnel. For example, the addition of a UTC comprised of one person, will require three personnel to fill on a rotational basis per current USAF doctrine. Similarly, while one person is deployed in the UTC, one will be getting ready to deploy, and one will have returned from deployment. Though creation of enough PSM Assistants to fill EMEDS HRTs will ensure capability availability at each level of EMEDS, this capability could always be tailored out for those locations whose operational tempo may not require it.

These single-person UTCs using the most common enlisted AFSC, with AFSC substitutions allowed, could be sourced at any AF MTF, particularly those smaller MTFs with minimal expeditionary readiness requirements. By training these personnel in PS management and principles and sourcing requirements from smaller MTFs, these individuals could serve the dual benefits of enhancing a Patient Safety culture at home station while simultaneously boosting that host MTF's readiness mission focus. Applicable AFSC functional managers would, of course, need to be consulted to distribute UTC requirements across their Major Command's (MAJCOM's) respective MTFs, as required.

Implementation of these recommendations should provide the guidance, tools, and program management assets needed to help AFMS leaders promote a culture of patient safety with its focus on “zero harm” and encourage a climate of compliance regarding patient safety and PSR procedures both at home and in the expeditionary environment. For as was stated during this researcher’s recent medical course attendance at Joint Special Operations University, “just because we’re out in the field (deployed) doesn’t mean that we don’t need to maintain sterility (with regard to surgical practices).”<sup>39</sup> The same basic rules regarding patient care and patient safety should apply both at home station and in the expeditionary environment, to the maximum extent possible. Trusted Care begins with me, you, and us all – everywhere and anywhere care may be provided.



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Notes

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9. Office of the Surgeon General, Trusted Care Concept of Operations (CONOPS), October 2015, accessed 7 April 2017, <https://kx2.afms.mil/kj/kx8/AFMSSStrategyMgmt/Pages/home.aspx>.
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  11. Air Force Audit Agency, *Air Force Central Area of Responsibility Patient Safety Program*, F2011-0003-FD2000, 28 January 2011, 1.
  12. Ibid., i.
  13. Air Force Instruction 44-119, *Medical Quality Operations*, 16 August 2011, 29.
  14. Air Force Audit Agency, *Air Force Central Area of Responsibility Patient Safety Program*, F2011-0003-FD2000, 28 January 2011, 2.
  15. Ibid., 4.
  16. Maj Gen Thomas W. Travis to SAF/AG, 27 December 2010, Department of the Air Force, Headquarters United States Air Force, Washington DC, Subject, Air Force Audit Agency (AFAA) Draft Report of Audit, *Project Air Force Central Area of Responsibility Patient Safety Program*.
  17. Ibid.
  18. Ibid.
  19. Air Force Instruction 41-106, *Medical Readiness Program Management*, 1 July 2011, 20
  20. Air Force Instruction 41-106, *Draft Medical Readiness Program Management*, Unpublished 2017 Draft.
  21. Ibid., 27-28.
  22. Air Force Instruction 44-119, *Medical Quality Operations*, 16 August 2011, 29-30.

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23. Vinacco, John “Vinny” J., *Air Force Patient Safety Deployed Patient Safety Guide*, accessed 3 April 2017, <https://kx2.afms.mil/AFMOA/ClinicalQuality/PS/Documents/Forms/ShowFolders.aspx?RootFolder=%2fAFMOA%2fClinicalQuality%2fPS%2fDocuments%2fDeployed%20%28EMEDS%29%20PS%20Prgms%2fDeployed%20PSP%20Guide%20and%20%20Acronym%20Pamphlet&FolderCTID=0x01200056130F9DBCCDE242B35BFE1EFB5012BA>.
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31. Medical Readiness Decision Support System, Mission Capability Statement, FFEP6, Med EMEDS Nursing-Ancillary Aug, accessed 7 April 2017.
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33. Ibid.
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39. Joint Special Operations University, Joint Special Operations Medical Orientation Course Lecture, March 2017. [non-attributional].



## APPENDIX A

# SIGNED REVIEW OF AIR FORCE AUDIT AGENCY DRAFT REPORT OF AUDIT



**DEPARTMENT OF THE AIR FORCE**  
HEADQUARTERS UNITED STATES AIR FORCE  
WASHINGTON DC

27 December 2010

MEMORANDUM FOR SAF/AG  
ATTN: BROOKE WHITE

FROM: AF/SG

SUBJECT: Air Force Audit Agency (AFAA) Draft Report of Audit, *Project Air Force  
Central Area of Responsibility Patient Safety Program*

I concur with the findings and recommendations of the AFAA Draft Report of Audit, *Project Air Force Central Area of Responsibility Patient Safety Program*. Please see the attached comments from the Air Force Medical Operations Agency Clinical Quality Division. If you have any questions or concerns, please contact Lieutenant Colonel Beverly Thornberg, AFMOA/SGHQ at (210) 395-9325, DSN 969-9325, or [beverly.thornberg@us.af.mil](mailto:beverly.thornberg@us.af.mil) or Ms. Eileen Serpa, ACC/SGXM, (757) 764-5333, DSN 574-5333 or [eileen.serpa.ctr@langley.af.mil](mailto:eileen.serpa.ctr@langley.af.mil).

A handwritten signature in black ink, appearing to read "T. W. Travis".

THOMAS W. TRAVIS  
Major General, USAF, MC, CFS  
Deputy Surgeon General

Attachment:  
Draft Report of Audit, Review of Air Force Central  
Area of Responsibility Patient Safety Program.

Air Force Audit Agency  
Report of Audit, Review of Air Force Central Area of Responsibility Patient Safety Program  
(Project F2010-FD2000-0301.000)

**Finding (Patient Safety Program Performance):** Concur.

**Recommendation.**

A.1 AF/SG should, in coordination with AFCENT/SG, revise Air Force Instruction 44-119 to:

- a. Include PSP functional structure and personnel staffing assignment guidance specific to deployed MTF environments. Revised guidance could include defined levels of PSP functionality and staffing along a graduated scale based on MTF sustainment levels.
- b. Establish requirements to report deployed MTF patient safety events to AFMOA for tracking and analysis, and detecting and responding to negative medical trends.

A.2 AFCENT/SG should establish a deployed MTF patient safety oversight process designed to ensure PSPs and patient safety event reporting maintains compliance.

**AFMOA/SGHQ Comments:**

A.1 Concur. AFMOA/SGHQ will:

- a. Establish guidance in AFI 41-106, *Unit Level Medical Readiness Management* and AFI 44-119, *Medical Quality Operations*, as follows:
  1. Coordinate with ACC/SG to assign the duties of Patient Safety Manager (PSM) to a specific position in each Expeditionary Medical Support (EMEDS) (Basic, +10, +25). Establish a Unit Type Code for a PSM position at AFTH/sustainment facilities. This position may also be tasked with quality and risk management duties.
  2. Coordinate with ACC/SG to define Patient Safety Program requirements for the varying levels of EMEDS, which will include the Deployed MTF Assessment Checklist. At the basic level, requirements include only event identification, resolution and reporting to the chain of command. AFTH and sustainment facilities would be expected to establish an expanded program to include implementation of evidence-based modalities to resolve identified problems and a process for reporting to AFMOA. Recommend the theater air component surgeon be the designated authority to determine when specific deployed MTFs will be required to implement checklist measures.
  3. Develop an event reporting process to include periodic reports to AFMOA. This process will be paper-based initially and progress to use of the Department of Defense electronic Patient Safety Reporting System when feasible. All USAF medical personnel are currently instructed in patient safety event reporting at their permanent assignments. The deployed PSM will be responsible for ensuring staff members are aware of the reporting process available to them.
  4. Specific training for the PSM role will be provided prior to deployment via DCO, handbook, and interaction with the permanent station PSM, with provision for continued support via phone and web. Training will include reporting, classifying, and

investigating patient safety events, data analysis, action planning, and implementation and evaluation of corrective actions. (OPEN, Estimated Completion Date: 1 May 2011)

- b. Develop a reporting process with to ensure patient safety events are appropriately analyzed and resolved with reporting through the chain of command and to AFMOA on a periodic basis. Include provisions for requesting additional information and/or further analysis. (Open, Estimated Completion Date: 1 May 2011)

A.2 Concur. AFCENT/SG will:

- a. Collaborate with AFMOA/SGHQ in defining PSP and PSM requirements in a deployed setting and at the various levels of EMEDS.
- b. Review and revise, as appropriate, AFCENT Patient Safety Checklist to ensure patient safety events are appropriately identified, analyzed and resolved based on the requirements that will be defined in forthcoming guidance.
- c. Develop a reporting process that ensures PSP and patient safety events are reported to AFCENT/SG on a monthly basis using the format specified in the MHS PSP guidance. (OPEN, Estimated Completion Date: 1 May 2011)



## APPENDIX B

### PATIENT SAFETY SURVEY WELCOME EMAIL

The welcome letter briefly described the purpose, timeline, and contact information for the survey. Individuals were provided three weeks to respond from the official date of survey opening, 15 February 2017. Approximately one week after the survey opened, on 1 March 2017, one email reminder was sent to each potential respondent. This email reminder asked individuals to complete the survey (if they had not already) and thanked them for their participation in the study. At survey close, on 8 March 2017, a final thank you message was sent to all potential participants and the survey was inactivated online.

Greetings,

In coordination with the Goal Champion for Air Force Medical Readiness, Brigadier General Sean L. Murphy, and the AFMOA Patient Safety Program Coordinator for Deployed MTFs, Mr. Vinny Vinacco, I cordially invite your participation in our brief seven question survey. Although completion of this survey may take only a few minutes of your valuable time, the benefits gained from your responses will help shape current and future solutions for improving patient safety in the Expeditionary Medical Support (EMEDS) environment. Your candid and thoughtful responses are encouraged and will be greatly appreciated. Please note, all responses will be completely anonymous and non-attributable to any individual. The survey opens today, 15 February 2017, and will close on 8 March 2017. A courtesy email will follow on 1 March 2017.

Please copy and paste the following link into your browser to begin the survey now!

<https://www.surveymonkey.com/r/SCJSFZG>

Thank you in advance for your participation.

V/r,

JAMES L. LAUGHRIDGE, Capt, USAF, MSC, CPH, CMRP  
Medical Readiness Fellow

Office of the Command Surgeon  
Headquarters Air Combat Command  
162 Dodd Blvd, Suite 100

## APPENDIX C

### SURVEY INSTRUMENT DESCRIPTION

Respondents were identified for possible participation in the survey from a listing of expeditionary patient trained individuals. A total of 162 potential respondents' email boxes were reached out of a beginning pool of 199 potentially qualified individuals. Of these 162 individual email boxes reached, a total of 66 individuals responded to at least one question from the survey instrument. This resulted in a response rate of forty-one percent. Some of the reasons for not reaching the entire pool included: unverified email addresses, individuals no longer in military service, and full email boxes. Additionally, it is possible that deployed individuals' unit email boxes were not being monitored regularly while they were on their deployment and this researcher was unable to acquire the proper forwarding information for most.

The average time taken to complete the survey, from each respondent opening the survey to closing the survey, was six minutes and nine seconds. The longest response time, an outlier, clocked in at one hour, nine minutes, and seven seconds. While the shortest response took a respondent only twenty-two seconds. The average time burden for completion of the survey, between five and ten minutes per respondent, met this researcher's goal of maximizing information gained while minimizing respondents' time invested. Additionally, the investment of only a few minutes, for a few questions, likely encouraged greater participation in the survey as a whole.

The second question was designed to get feedback on the effectiveness of the expeditionary patient safety training and tools provided by the Office of Expeditionary Patient Safety at Air Combat Command. Respondents were asked to comment on the sufficiency of the

patient safety virtual class training, patient safety program guide, and patient safety checklist on the performance of patient safety duties in the deployed environment.

The next question sought to learn the amount of time prior to deployment that each respondent had to complete the remainder of their training per the patient safety checklist. This evaluation was important as patient safety training and the patient safety training checklist are designed to be completed at the individual's home station MTF approximately four months prior to deployment. This time has been proposed to ensure that all training requirements are met and that a sufficient level of proficiency in conducting patient safety duties is achieved. This PS training is not intended as Just-in-Time (JIT) Training (1-month or less before deployment). As a UTC requirement, members should be trained well before the Period of Deployment Vulnerability. One month of training or less may challenge the trainee's receptiveness and limit adequate opportunities to sufficiently observe and master routine patient safety activities.

Question four was concerned with the type or level of support provided by leadership in support of training for and or performance of patient safety duties. Understanding that Leadership Engagement is a key element of Trusted Care, this question sought to understand the real or perceived leadership support of patient safety training and programs. Respondents were encouraged to make free-form comments in the box below the question to explain their respective responses.

The following question aimed to determine if it would have been beneficial to the respondent to have the Patient Safety Manager Assistant (4N071 Medical Technician) with primary duties dedicated to patient safety working with them. Currently, this UTC is only found in the Air Force Theater Hospital level of the EMEDS construct. There were two responses

possible: yes or no. Respondents were asked to explain their reasoning in the text box below the multiple choice responses.

Question six asked respondents to indicate the particular Air Force Specialty Code (AFSC) they would like to see as the Patient Safety Manager Assistant, if the UTC was revised. This question was designed as an affirmation or re-evaluation of the best AFSC mix for the recently created FFPSM Medical Patient Safety Management Support UTC at the AFTH level.

The final question involved asking respondents to state what level of the EMEDS model should the Patient Safety Manager Assistant be incorporated. Currently, this UTC is only found at the AFTH level. Possible responses included each respective level of the EMEDS/AFTH construct and not applicable... not needed at any level of EMEDS. As with all other questions, a free-form text box was provided for comments.



## APPENDIX D

### SURVEY INSTRUMENT

**1. Have you deployed or are you currently deployed in a position with responsibilities for managing patient safety (either as primary or additional duties)? If yes, please indicate the size of the facility these duties were performed in.**

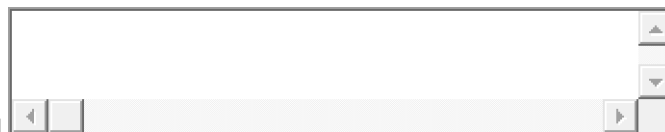
- Yes, large facility (Air Force Theater Hospital or equivalent).
- Yes, medium facility (EMEDS +10 or EMEDS +25).
- Yes, small facility (EMEDS HRT).
- Yes, standalone or independent duty function.
- No (please stop here; this completes your survey).

A rectangular text input field with a light gray border and a white background. It contains a faint watermark that reads "Air University - Maxwell AFB, AL". The field is empty.

Please comment, if desired.

**2. Was the patient safety virtual class training, patient safety program guide, and patient safety checklist sufficient for performance of patient safety duties in the deployed environment?**

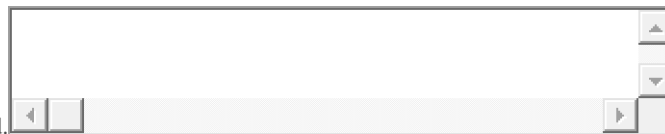
- Yes.
- Yes, but improvements could be made (please explain).
- No. Training, the guide, or the checklist was not received or utilized prior to or during deployment (please explain).
- No. Training was insufficient and something else was needed (please explain).

A rectangular text input field with a light gray border and a white background. It contains a faint watermark that reads "Air University - Maxwell AFB, AL". The field is empty.

Please comment, if desired.

**3. How much time prior to your deployment did you have to complete the remainder of your training per the Patient Safety Checklist?**

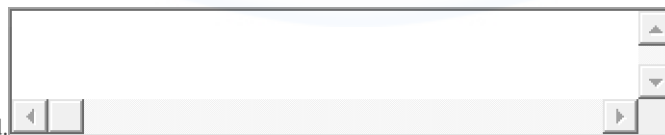
- 0-60 days prior to deployment.
- 61-90 days prior to deployment.
- 91-120 days prior to deployment.
- Greater than 120 days prior to deployment.
- Did not have time to complete training per the checklist prior to deployment (please explain).



Please comment, if desired.

**4. What type of support did leadership provide regarding the training for and performance of your patient safety duties? Please comment on how it could be improved.**

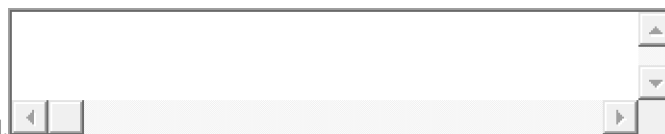
- Positive (please explain).
- Negative (please explain).
- Neither positive nor negative (please explain).



Please comment, if desired.

**5. In your opinion, would it have been beneficial to have the Patient Safety Manager Assistant (4N071 Medical Technician) with primary duties dedicated to patient safety working with you?**

- Yes (please explain).
- No (please explain).



Please comment, if desired.

**6. If the Patient Safety Manager Assistant Unit Type Code (UTC) was revised, which Air Force Specialty Code (AFSC) would you feel would be the best fit?**

- Remain the same; 4N071 Aerospace Medicine (medical technician), with no substitution permissible.
- 4N071 Aerospace Medicine (medical technician), with substitution permissible.
- 4A071 Health Services Management, with no substitution permissible.
- 4A071 Health Services Management, with substitution permissible.
- Not applicable. The Patient Safety Manager Assistant is not needed.
- Other, not listed (please explain).

Please comment, if desired.

**7. At what level of the Expeditionary Medical Support (EMEDS) model should the Patient Safety Manager Assistant be incorporated?**

- Expeditionary Medical Support Health Response Team (EMEDS HRT).
- Expeditionary Medical Support 10 Beds (EMEDS +10).
- Expeditionary Medical Support 25 Beds (EMEDS +25).
- Only at the Air Force Theater Hospital level, as currently allocated today.
- Not applicable. The Patient Safety Manager Assistant is not needed at any level of the Expeditionary Medical Support (EMEDS) build.

Please comment, if desired.

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