Military/Civilian Trauma Workforce: A Volunteer Physician Force Gets the Job Done

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History including the Berry Act

- Frank B. Berry, MD
- Served in the Army 1942-1946
- Consultant to the army during the Korean war
- Assistant Secretary of Defense, Health and Medical under President Eisenhower from 1954 - 1963
- Dissatisfaction among medical officers at that time about fairness – why not have a draft of young doctors?
- Doctors draft goals: Provide doctors for hospitals and military
History including the Berry Act

Three choices:

1. Join services immediately after internship
2. Complete internship and one year of residency, serve, and then return to complete residency.
3. Complete full residency in specialty of their choice in civilian hospitals.
   - Discontinued in 1974.
   - Dr. Berry viewed the Berry Act as ...

“Getting a few people together to see what could be done to solve a difficult problem”

Perhaps that is a good thought to keep in mind as we attempt to create a better system that strives for Zero Preventable Deaths.

Volunteer Force

- Supply of physicians decreased dramatically, reaching an all time low in 1978.

- “Procurement” of physicians:
  - Uniform Services University of the Health Sciences (USUHS)
    - 19% Army’s “procured physicians” FY 2005-6
  - Health Professions Scholarship Program (HPSP)
    - 71% Army’s “procured physicians” FY 2005-6
  - Direct Commissioning of fully qualified physicians
    - 10% Army’s “procured physicians” FY 2005-6

- Manpower needs:
  - Staff Medical Treatment Facilities (MTF’s)
  - Deployments
Uniformed Services University of the Health Sciences (USUHS)

- 1972, Act of Congress
- First class 1982 – 29 students
- Graduate more than 200 medical students currently
- Graduates supply a portion of medical physician and other health professional workforce
Health Professions Scholarship program (HPSP)

- 2, 3 and 4-year scholarships (tuition, fees, stipend, signing bonus) during medical school
- Army, Navy, Air Force
  - 71% of Army physicians*
- GMO after medical school
- Residency Programs – if do not match in first specialty choice, can complete transitional year internship (guaranteed internship)
- Military Match for military residency Programs – counts as years of service for promotion, pay longevity and retirement.
- Fellowships in Acute Care Surgery, Vascular Surgery, other specialties

* 2005-6 data; Edgar EP. Physician Retention in the Army Medical Department (Strategy Research Project), US Army War College, 2009
Military Need for Health Care Professionals

- Staff Military hospitals – active duty families and retirees
- Care for combat victims
- To date the military has been able to meet all of its deployment needs, but continuous battle has taxed the system, especially some specialties:
  - Surgeons, anesthesia, PA’s

- “Procurement” of physicians is important and so is retention.
Staffing/Modeling/Planning

- Army Medical Department’s Professional Filler System (AMEDD’s PROFIS) – started in 1980 and allowed physicians to staff medical treatment facilities (MTF’s) when not deployed.

- PROFIS deployment system (PDS), 2005 internal system to help US Army Medical Command plan deployments include the correct PROFIS personnel.

- In the past 15 years the number of deployments has increased; desire to evaluate if the PDS is a management tool that ensures fair and equitable deployment planning.
RAND Report - Army

- RAND Report included 10 major findings, which were categorized into four areas of concern:

1. Predictability – short notice of deployment
2. Skills and Training
3. Impact on Medical Treatment Facilities
4. Equity – length and frequency of deployments; battalion surgeon role especially problematic (long deployments, ill prepared, degradation of skills)
Staffing/Modeling/Planning

- 23 recommendations; Highest yield recommendations:
- Improve healthcare professionals that are deployable:
  - Limit the number of consecutive assignments to non-deployable positions; limit non-deployable profiles to deployable positions
  - Adjust the requirements for high demand Areas of Concentration
  - Long-term civilian contracts for army-trained subspecialists
- Change the battalion surgeon position:
  - Standardized, short-term training before deployment
  - Utilize more PA’s (and assess NP’s for that role)
  - Consider the position a permanent position with part time work in Military Training Facilities
Staffing/Modeling/Planning

- Improve Predictability – cut orders earlier
- Standardize deployment/non-deployment periods (reset/train, ready, available)
- Use National Backfill Programs to staff military treatment facilities (MTF’s)
- Reassess skills on re-deployment
Retention

- Air Force Rand Study of Retention in 1985 was conducted and among the findings is that surgeons were particularly influenced by salary.

- Army Analysis of Physician Retention*:
  - Combat deployments
    - Length, frequency, equity – weighs heavily
    - PROFIS – 6 months; Field surgeons and operational medical specialists – 12 months (and up to 15 months)
    - May affect women’s decisions more than men’s
  - Administrative Burdens
    - Military EMR is very burdensome (AHLTA)
  - Pay – re-examine incentives, that have not been significantly modified for some time.

*Edgar EP. Physician Retention in the Army Medical Department, Strategy Research Project, US Army War College, 2009
Retention – all 3 branches of military

- Benjamin Mundell, 2010
- Examined all 3 branches of the military
- Pay discrepancy is 15-60%
- Deployment length during the initial service obligation decreased retention; but did not during subsequent service obligations.

- Medical environment is important to physicians. Medical center experience is favored, especially in procedural specialties.
  - May provide an opportunity to expand military/civilian collaboration on residency positions.
Better surgical workforce

- W. Schwab addressed the organizational needs, training, potential for retention and other aspects of the military health system, which he presented in his Scudder oration in 2014.
- 28 item questionnaire in conjunction with EAST’s Military Ad Hoc Committee.
- Military Health System: readiness and beneficiary care
- Surgeons and the Trauma Combat Casualty Care teams are responsible for readiness. Very few senior surgeons are focused on readiness.
  - Need core competencies→national training pre-deployment training programs.
Better surgical workforce

- Joint Trauma System (JTS) established to guide policy and surgeon development.
- 10% of DOD budget is allocated to 9+ million people
- Retaining surgeons:
  - Almost universal support for civilian academic medical and trauma centers as full-time surgical faculty and staff; trainers for rotating military trauma teams.
  - High volume penetrating, training, mentoring, team training
- Concerns about training and adequacy of surgical and trauma teams
- Rand Report suggested an expanded model
Possible sites for civilian military centers

- 2500 Admissions & 175 GSW
- Other Possible Centers and Civilian Trauma Theaters.
Models for Medical Center Experience/Collaborations

- C-STARS – Center for Sustained Trauma and Readiness Skills
- SMART – Sustained Medical and Trained System
- Military-Civilian Collaboration: Senior Visiting Surgeon Program (AAST and ACS COT collaboration)
  - General/trauma surgeon; vascular and orthopedic
  - Landstuhl, Germany
  - Assisted in care of injured soldiers
  - Participated in PI; grand rounds
Preparing Surgeons For War

- US and NATO partners work together in areas of conflict: goal to standardize preparation for combat.
- US Army Active Duty: 100 general surgeons (15-20 trauma surgery and CC +/- burn fellowship)
- US Army Reserves: 208 surgeons
- US Air Force, Active Duty: 78 general surgeons
- US Air Force, Reserve: 15 general or trauma surgeons
- US Navy, Active Duty: 100 general surgeons
- US Navy, Reserves: many specialists
- Canadian Forces Health Services: 8 surgeons
- UK (Army, Royal Navy and Air Force)

Many benefits of joint collaboration using a volunteer medical team

- Joint military forces theater trauma system
- Team system director, nurse coordinators deployed to address trauma system components, deficiencies, trauma PI, Joint Theater Trauma Registry (JTTR), M&M, Op Reports, CPI, develop optimal resources book for the care of combat casualties, prevention (pre-deployment training and PPE)
- Developed standardized documentation; mortality decreased from 16.5% (VW) to 8.8% in the Iraq/Afghanistan war
- Research: MTP; Whole blood; utilization of TXA
- Coagulopathy detection

Thank You
Questions
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