Nursing by Another Name: Nursing Science Impact on Special Forces Clinicians in Prolonged Evacuation Situations

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Faculty Disclosure

Faculty Name:	Kate Rocklein Kemplin, DNP, RN, MSN, BNSc, CCEMTP
Conflicts of Interest:	Served as research & development advisor for remote critical care monitoring device acquisitioned by the United States Special Operations Command (US SOCOM)
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Goals and Objectives

- Session Goal:
  - Stimulate discourse on nursing science influences on Special Forces (SF) medics' care delivery for critical care in prolonged care contexts
- Session Objectives:
  - Contextualize geopolitical factors contributing to prolonged field care, SF medics' practice, & outcomes conundrums
  - Present the development of prolonged field care (PFC) as based in nursing science translation & application

Caveats

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The Archetypes

- "Special Operations"
  - United States (US) Army Special Forces (SF) ['The Green Berets']
  - Special Forces Operational Detachment – Delta ('Delta Force')
  - Naval Special Warfare (Sea, Air, Land 'SEALs')
  - US Army Rangers
  - US Air Force Pararescue Jumpers ('PJs')
  - Marine Special Operations ('MARSOC')
- All teams have an assigned medic

The Reality

- Practice at level of advanced critical care RN (Rocklein, 2014) or 1st-year surgical resident (Graham, 1994)
- Medics' school: lower acceptance & higher attrition than Harvard
- 8+ years military medical experience
- Fluent in host-nation language (Pashto, Arabic, Tagalog, French, Spanish, Russian, etc)

SF medic students in advanced airway & ventilation

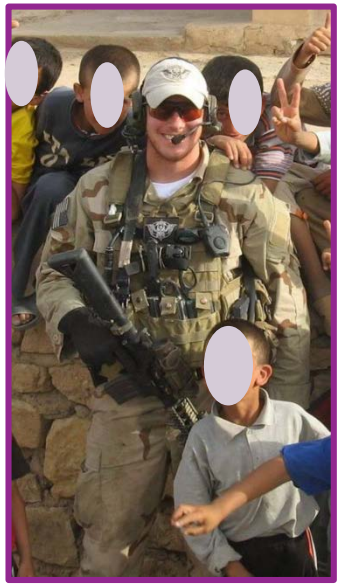
SF medic applies junctional tourniquet to abdominal trauma

SEAL medic provides veterinary care

SF medic practices diagnostic ultrasound

SF medic preps to perform surgery w/nerve block

Special Operations Rescue Team (SORT) medics

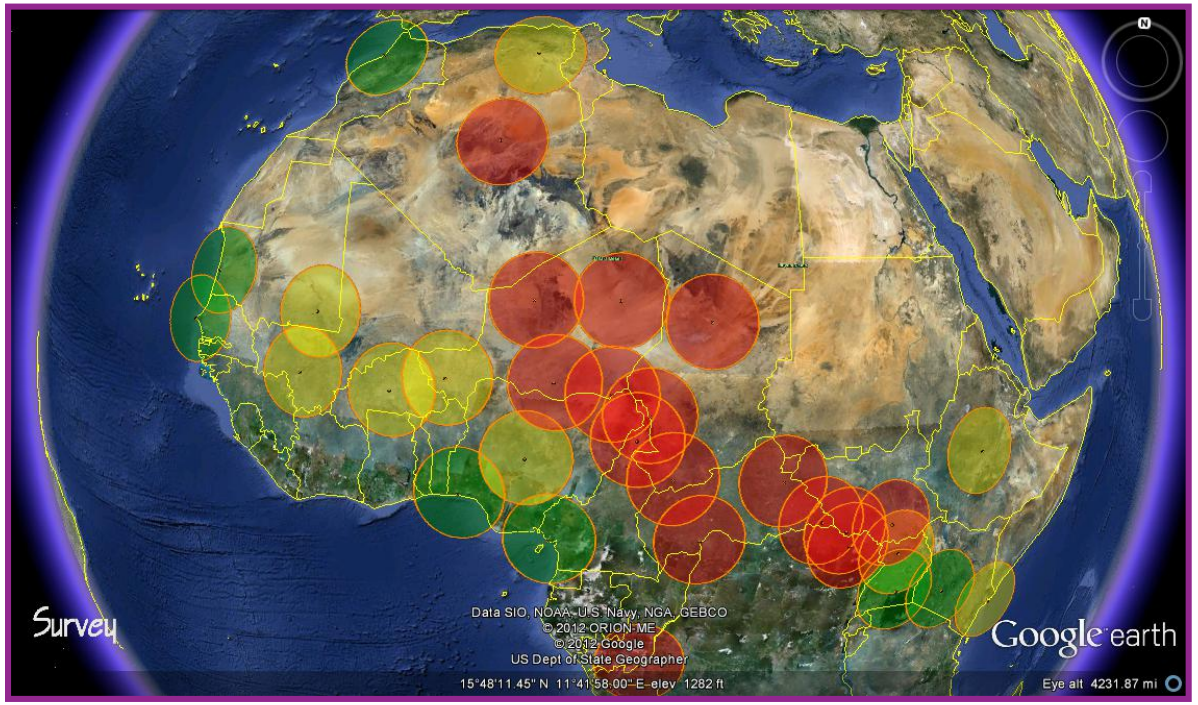


SF medic who really wanted to be included in this presentation

SF medics provide pediatric care (and reassurance) in village stability operations

PJ medics prepare for rotary-wing evacuation

Geopolitical Context



Photos provided by COL M Givens, MD, US Army Special Forces Command

The Problem

- Evacuation platforms assume the "Golden Hour" exists
  (Blackbourne et al., 2012; Hetzler & Risk, 2009; Risk & Hetzler, 2009)
- "Survivability" poorly operationalized
- Without evacuation, medics *de facto* nurses
  - Nursing care without nursing science
- SF operate in "special" areas & are excellent resuscitators
  - Liberators of the oppressed, not purveyors of aggression (Bank, 1986; Prados, 2015)

Medical supplies for a team, village, and contingencies

All-in-one treatment area, OR, ICU, resuscitation bay

Wound care & respiratory assessment from the back of a truck

Photos provided by Naval Special Warfare Medic Noel Sons, Sea, Air & Land (SEAL) Unit Two

The Solution

- Canadians & North Atlantic Treaty Organization (NATO)
  - Field medical care, applied beyond ‘doctrinal planning time-lines’ by an NSOCM (NATO Special Operations Combat Medic), in order to decrease patient mortality and morbidity.
  - Utilizes limited resources, and is sustained until the patient arrives at the next appropriate level of care
- Nursing: 90.4% female (Budden et al., 2013)
- Reexamine extant knowledge, assumptions, and concepts
- Discard all environmental “knowns” about critical care resources
- Give profound thanks for nursing science

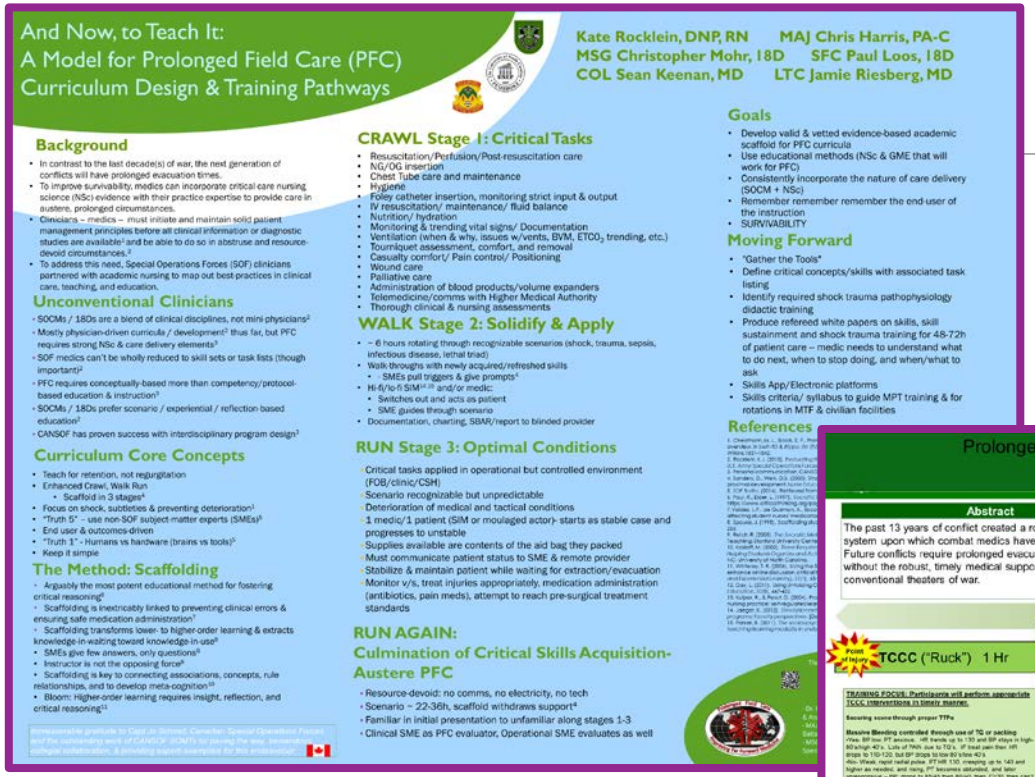
The Obstacles

- Command structure: all physicians
- Special Forces: all male & alpha male – and enlisted soldiers
  - Sexism?
- Cure vs care dichotomy: physicians cure, nurses care (Weaver, 2013)
  - Fix vs maintain
- Exited entrenchment from under physicians & sought academic nursing

The Approach

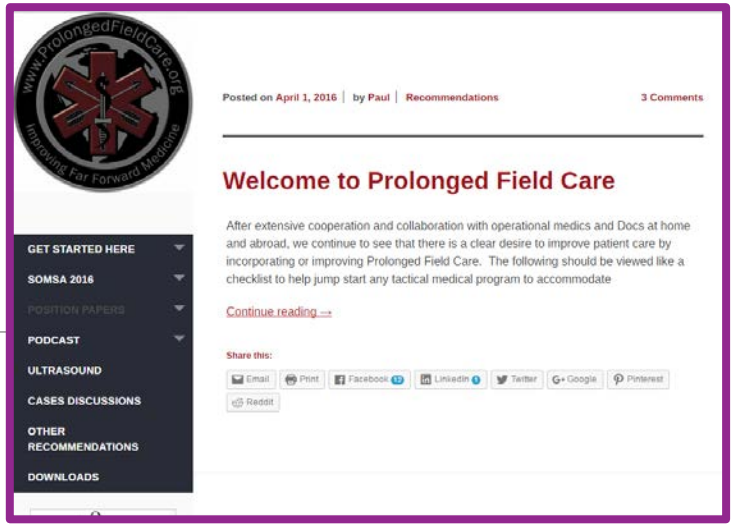
- Philosophical: Critical pedagogy - Constructivist epistemology
  - Medics' knowledge acquisition not empirical: is contextual & practice is complex (Rocklein, 2011)
  - Kuhn (1962): scientific [clinical] problems instigate revolutions in scientific practice & paradigm shifts
- Foucault: *'pouvoir-savoir'* (Springer & Clinton, 2015)– medics powerless to maintain life due to lack of knowledge
  - Foucauldian discourse methods to translate nursing knowledge to affect survivability
  - Nursing has patterns of knowing foreign to other professions (Carper, 1978 as cited by Springer & Clinton, 2015)
- Theoretical
  - Approach includes Vygotskian theory: zone of proximal development & scaffolded curriculum (Pea, 2004), subtracts technology
  - Disruptions in health via catastrophic events (Newman, 1997)
  - Care of systems constantly changing from baseline (Neuman, 2011b as cited in Fawcett & DeSanto-Medeya, 2013)
  - Care emphasizing nutrition, hygiene, comfort, and sanitation (Davies, 2012; Nightingale, 1858; Nightingale, 1860)
- Clinical Evidence Translation
  - Systematic & Integrative review methodology (Whittemore & Knafl, 2005) – fresh whole blood transfusions, fluid resuscitation, hemodynamic stabilization, critical care transport (Galvagno et al., 2014), monitoring
  - Collaborative model to promote knowledge translation (Baumbusch et al., 2008) & care along a continuum: ruck – truck – house – plane → hospital

The Product: Prolonged Field Care (PFC)

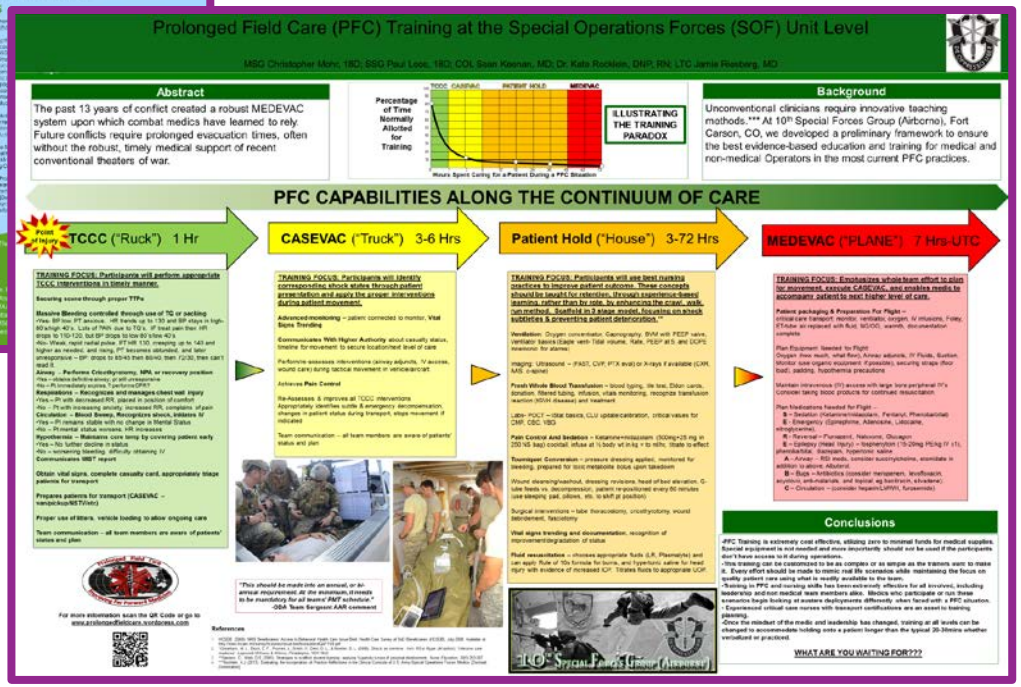


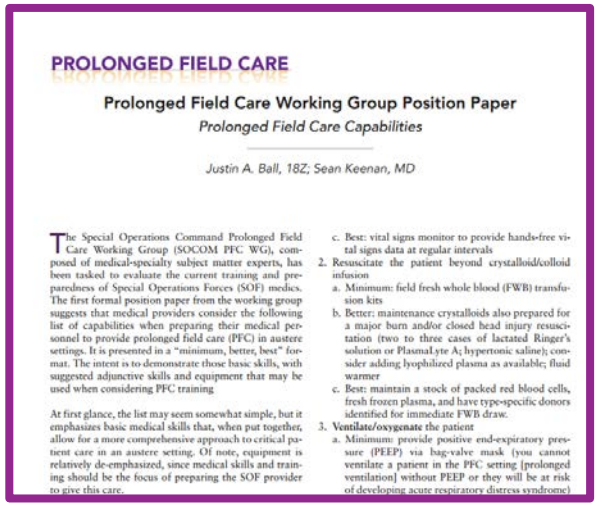
PFC Posters – International Military Medical Conference (Rocklein, Harris, Mohr, Loos, Keenan, & Riesberg, 2014; Mohr, Loos, Keenan, Rocklein, & Riesberg, 2014).

SF Medic Curricular Changes



Prolonged Field Care Website & Podcasts



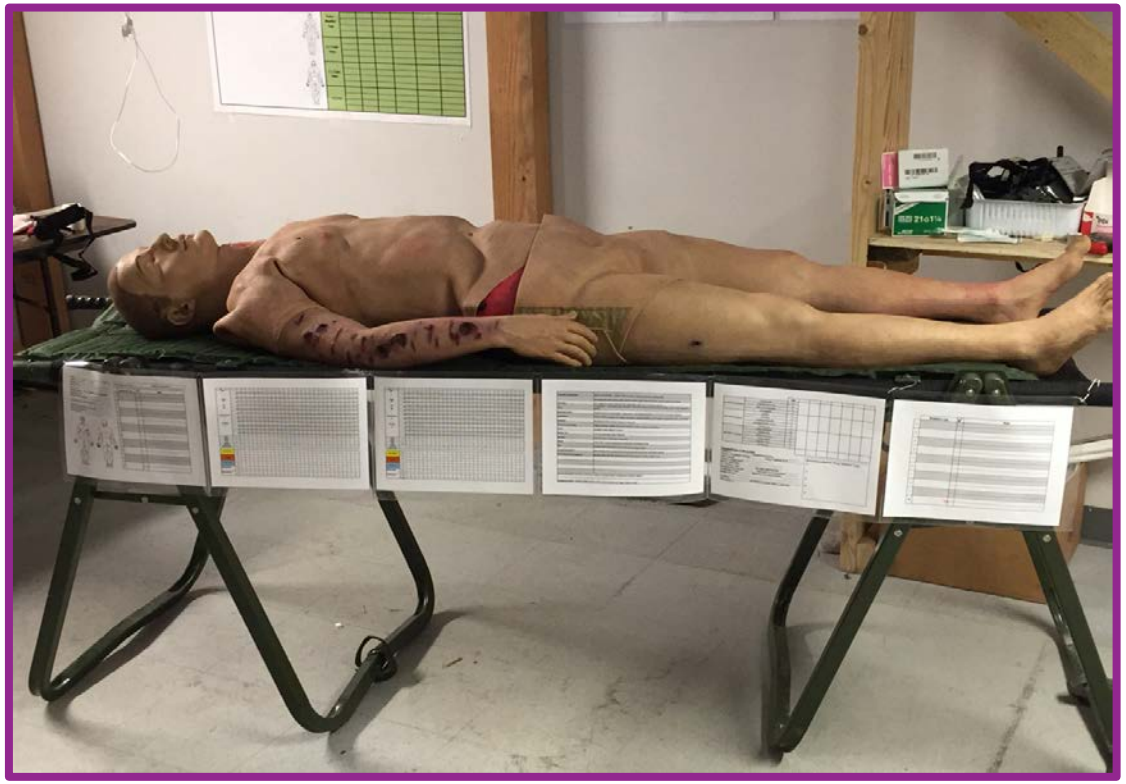


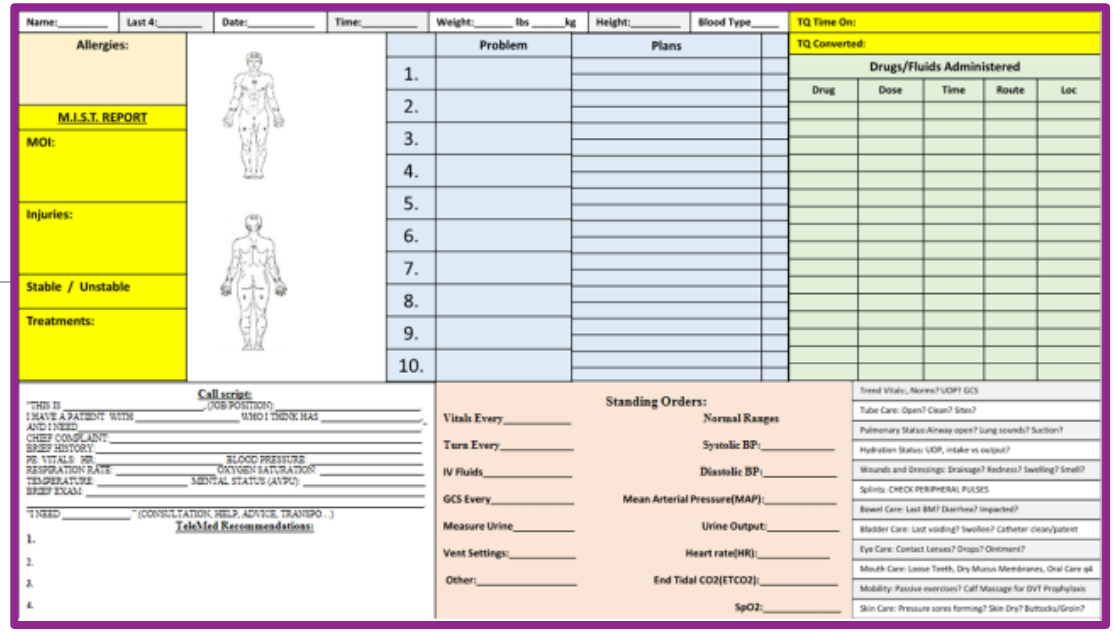
Prolonged Field Care White Papers (Ball & Keenan, 2015)

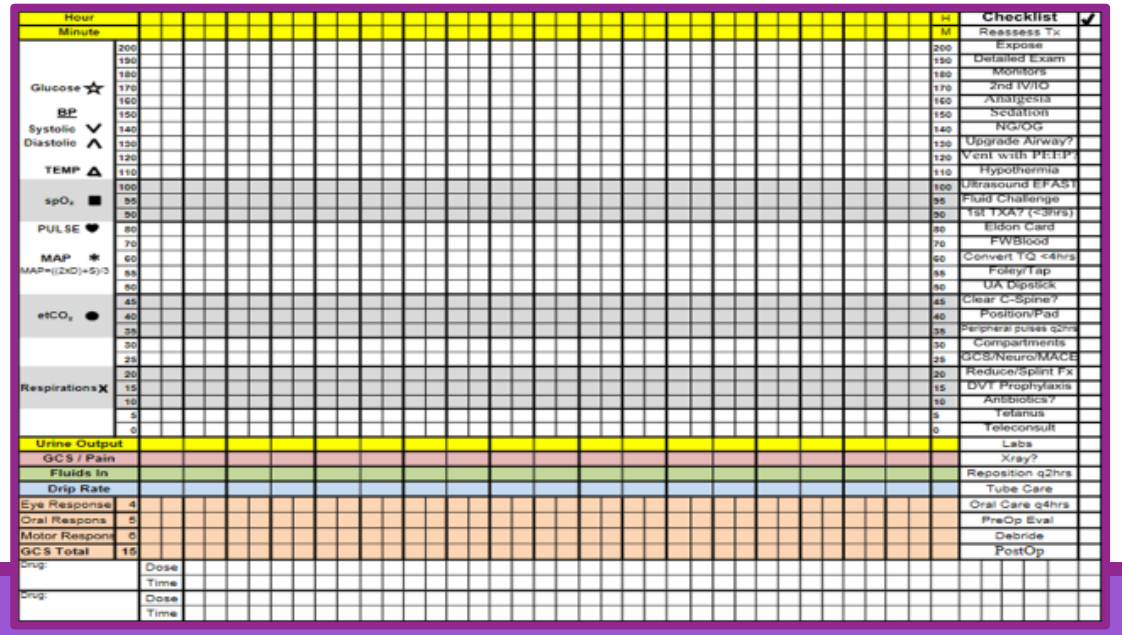
Images courtesy Kate Rocklein Kemplin & SF Medic Paul Loos, Joint Special Operations Medical Training Center

The Care Plans

"This concept has completely changed and revolutionized the way I think about medicine and treating casualties" (Loos, 2016, para 1).







Images & Photos provided by Sergeant First Class Paul Loos, US Army SF Medic
Prolongedfieldcare.org, "Create a Prioritized Care Plan"

The Future

- Joint Special Operations Medical Training Center [Medics' school] (faculty previously physicians, physician assistants, medics) has new billet for military nurse corps officer
- $48 million (USD) 2017 funding announcement from Congress to research PFC; $3 million (USD) in funding to research medics' performance in delivering combat casualty care
- In 2016, PhD RN (LTC Elizabeth Mann-Salinas, US Army) presented at Special Operations Medical Association Scientific Assembly
- Refugee & Non-governmental organizations (NGOs): resource-devoid care delivery, caring for & transporting critically ill in oppressed areas
- Translating innovations from Special Operations medics to civilian trauma/critical care nursing & medicine is unprecedented
  - Nasal core temp, capnography, freeze-dried plasma (accelerated IND), RFID monitoring to handhelds

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Questions?

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Thank you very much!