Military Humanitarian Civic Assistance Programs:
Can the provision of care ever be wrong?

An examination of the biomedical ethical challenges faced by military healthcare providers during deployed operations.

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Abstract

Military humanitarian civic assistance programs are short-duration medical missions during which military healthcare providers provide medical treatment and assistance to a civilian population. Created to provide medical care to populations in need, these programs have also been utilized as a tool to support broader geopolitical and military aims. The inherent structure of these programs can exacerbate or create situational vulnerabilities in the patient population. Further, this structure may challenge the ability of military healthcare to adhere to the four guiding principles of biomedical ethics: respect for autonomy, nonmaleficence, beneficence, and justice. In examining these programs through a biomedical ethical lens, it is believed that many of the challenges present in these programs can be mitigated through enhancements to pre-deployment training and education for healthcare providers in vulnerability and biomedical ethics, greater partnerships with local healthcare providers, and a re-examination of program-specific policies and doctrine within senior government and the military.

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Disclaimer

The opinions expressed in this academic thesis are those of the author and do not necessarily reflect the official policy or position of the Government of Canada, the Department of National Defence/Canadian Armed Forces, or the Canadian Forces Health Services Group.

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Motivation

I chose to write about humanitarian civic assistance programs for both personal and professional reasons. As a long time public health practitioner in the Canadian Armed Forces (CAF), all of it spent within the Canadian Forces Health Services Group, I have had the opportunity to participate in a variety of CAF deployments overseas, including war fighting missions, peacekeeping missions and humanitarian missions. To provide some detail, in 2005, I spent 2.5 months in Pakistan (post-earthquake), deployed with the CAF Disaster Assistance Response Team (DART) as one of two uniformed Canadian public health practitioners. During that period, I was fortunate to have the opportunity to both work collaboratively with humanitarian Non-Governmental Organizations and participate in CAF-led small-team 'village medical outreach' missions. Prior to that, I spent 2.5 months in Turkey (post-earthquake), also with the DART. These experiences, coupled with deployments to Afghanistan, Albania, and Bosnia, have allowed me to contribute to population health-focused reconstruction efforts in war- and disaster-affected countries. These same experiences have also allowed me better appreciate that while humanitarian civic assistance missions can be beneficial to the global community, through both the provision of medical care and training, they are not without their biomedical ethical challenges. It is my belief that policy makers - both inside government and the military - can improve these humanitarian-focused programs through mitigation of the potential biomedical ethical challenges faced by military healthcare providers.

Abbreviations and Acronyms

ACO – Allied Command Operations

ACT – Allied Command Transformation

AJP – Allied Joint Publication

AMA – American Medical Association

CAF – Canadian Armed Forces

CFDS – Canada First Defence Strategy

CF H Svcs Gp – Canadian Forces Health Services Group

COCOMS – Combatant Commands

COIN – Counterinsurgency Operations

DART – Disaster Assistance Response Team

DND – Department of National Defence [Canada]

DoD – Department of Defense [U.S.]

DODI – Department of Defense Instruction [U.S.]

DRO- Disaster Response Operations

GAC – Global Affairs Canada

GES – Global Engagement Strategy

GHE – Global Health Engagement

HADR – Humanitarian Assistance Disaster Relief

HSS – Health Services Support

HO – Humanitarian Operations

HODRO – Humanitarian Operations Disaster Response Operations

ISAF – International Stabilization Assistance Force

MC – Military Committee

MEDCAP – Medical Civic Action Program

MEDRETES – Medical Readiness and Training Exercises

NATO – North Atlantic Treaty Organization

NGO – Non-Governmental Organizations

SACEUR – Supreme Allied Commander Europe

SACT – Supreme Allied Commander, Transformation

SCR – Strategic Concepts Report

UNAMA – United Nations Assistance Mission Afghanistan

UNESCO – United Nations Educational, Scientific and Cultural Organization

USAID – United States Agency for International Development

USPACOM – United States Pacific Command

USSOUTHCOM – United States Southern Command

U.S.C. – United States Codes

VEO – Violent Extremist Organization

WMA – World Medical Association

WoG – Whole of Government

Introduction

Humanitarian civic assistance programs are short-duration medical programs that utilize military medical personnel to provide medical assistance to a population affected by war, conflict or disaster. Humanitarian civic assistance programs are not new programs - the military has been conducting humanitarian civic assistance missions since the Vietnam War - and over the passage of time, the authority for the military to conduct humanitarian civic assistance programs has been incorporated into military doctrine and government regulations and policy. Currently, the U.S. military and the Canadian Armed Forces (CAF) conduct humanitarian civic assistance programs around the globe.

Academics, researchers, and in some instances, military healthcare providers, have long held the position that there are ethical challenges inherent within military humanitarian civic assistance programs. Some critics have claimed that humanitarian civic assistance programs negatively impact the affected population's expectations regarding the capabilities of their national health services (Cameron 210). Other critics believe that humanitarian civic assistance programs are effectively "parachute programs" and that their short duration renders them unable to improve an individual's health status in a meaningful way (Loh et al. 3). Finally, some critics have even suggested that humanitarian civic assistance programs represent U.S. hegemony and the militarization of aid to achieve global dominance (Adams 280).

What has often been lost in these academic discussions and debates, however, is a clear indication of what exactly these ethical challenges are, and what ethical frameworks [if any] they are benchmarked against. A particularly neglected area of scholarship is the critical discussion of the biomedical ethical issues that military healthcare personnel may face in the delivery of patient care during these missions. Due to the apparent paucity of academic research into this

niche area of biomedical ethics, this author felt that further academic inquiry could shed light onto an existing grey area in the literature.

Military healthcare providers possess both the desire and the requisite skills to provide necessary medical aid to a vulnerable population. Too often, however, they are challenged by operational constraints in their environment. These constraints can include a lack of time, a lack of equipment, and in some instances, a lack of interpreters. These and other constraints may adversely affect the ability of military healthcare providers to deliver healthcare to local civilians in a manner that supports alignment with the moral obligations implicit within the principles of biomedical ethics.

I argue that tensions exist between the core principles of biomedical ethics and the military humanitarian civic assistance program. Specifically, the utilization of these programs as both a national security instrument and an adjunct to further geopolitical gains, rather than for purely humanitarian reasons, may negatively influence the ability of military healthcare providers to ensure that the principles of biomedical ethics are applied when delivering patient care in deployed operations. Further, and as significantly, I maintain that these programs may exacerbate or create situational vulnerabilities[1] within the very patient population that they are intended to assist.

I do not believe that these programs should be discontinued. Rather, I hope that through recognition and acknowledgement of the challenges inherent within these programs, and through adding to the body of academic research in this under-resourced area, that these programs can be improved.

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[1] Rogers and colleagues define situational vulnerability as vulnerability that is "caused or exacerbated by the personal, social, political, economic, or environmental situation of a person or social group" (24).

This thesis commences with an examination of military global health engagement policies and doctrine in the United States of America, Canada, and within the North Atlantic Treaty Organization. Next, the three core military programs conducted under the auspices of humanitarian civic assistance programs are reviewed: The Medical Civic Action Program (MEDCAP), the Medical Readiness and Training Exercises (MEDRETES) program, and the Humanitarian Assistance Disaster Response (HADR) program. After having identified the aims and strategic intent of each of these programs, the concept of patient vulnerability in the humanitarian civic assistance program environment is discussed. This is particularly important as situational vulnerability is common among the patient population these programs target. Following that, Beauchamp and Childress' principles of biomedical ethics are examined, each of the four guiding principles is covered in turn, with elaboration on how the humanitarian civic assistance program environment may challenge the ability of military healthcare providers to apply these principles. This thesis concludes by acknowledging the biomedical ethical challenges inherent to the humanitarian civic assistance program and presenting potential measures to mitigate these challenges.

Chapter 1

Military Capabilities and Geopolitical Aims

In order to understand what drives and sustains a nation's global health engagement activities – to include humanitarian civic assistance programs - it is first necessary to review the policy instruments, including the various strategies, policies and guidance documents that shape and prioritize a nation's defence program. This examination will enable the reader to view a nation's humanitarian civic assistance activities through the lens of that nation's defence and diplomacy strategy. To that end, this chapter examines the key defence policies and strategies that shape military and health engagement activities in the United States of America, Canada, and within the North Atlantic Treaty Organization (NATO).

The current global military superpower[2] (Global Firepower), the United States (U.S.), is the first country profiled. As the U.S. is Canada's closest ally, interoperability between the U.S. military and the Canadian Armed Forces (CAF) is of critical importance to both nations. In addition, CAF members regularly participate in U.S. led missions, including humanitarian civic assistance programs. Thus, an awareness and understanding of the policy instruments and military doctrine that shape U.S. health engagement activities is necessary for better understanding both U.S. and Canadian military operations in the humanitarian sphere. To facilitate this awareness and understanding, both the U.S. *National Military Strategy* and several

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[2] Global Firepower ranks the military powers of the world annually. A complex and detailed assessment, each nation's 'Power Index' is calculated using over 50 factors. Of the 126 countries ranked in 2016, the top three were (1) United States (2) Russia (3) China. In 2016, Canada ranked 22/126, behind Iran (21) Thailand (20) and Taiwan (19) (Global Firepower).

policy instruments driving U.S. Department of Defense[3] (DoD) global health engagement activities are critically examined.

Subsequently, the *Canada First Defence Strategy* and Canada's *Global Engagement Strategy* are reviewed. Unlike the U.S., Canada does not have a standalone global health engagement strategy, rather, health engagement activities [when they occur], occur primarily under the auspices of the Global Engagement Strategy. The rationale behind this policy omission is clear. Canada's military health services cadre, the Canadian Forces Health Services Group, consists of approximately 5000 personnel, both military and civilian (Salisbury and English 3). As such, military health engagement activities are, by necessity, incorporated into broader global engagement activities, which, as noted, often include partnering with the U.S. military and participating in U.S.-led humanitarian civic assistance activities. The third and final Canadian-specific publication reviewed is the *Humanitarian Operations and Disaster Relief Operations* manual, an internal CAF manual promulgated by the Canadian Forces Joint Doctrine Board.

Finally, an overview is conducted of the two key NATO publications that shape NATO-led humanitarian civic assistance activities. It is important to acknowledge the NATO doctrine that guides humanitarian assistance activities since Canada is [and has been historically] an active participant in NATO missions. In the last two decades, CAF members have participated in NATO missions in Bosnia, Kosovo, Afghanistan and Ukraine. In the near future, the CAF will lead a multi-national brigade in Latvia as part of a NATO task force. During these missions, although Canadian law takes primacy, the CAF will follow standardized NATO agreements and doctrine, including the two discussed herein. The first of the two key publications covered is NATO Standard AJP-3.4.3, *Allied Joint Doctrine for the Military Contribution to Humanitarian*

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[3] In deference to U.S. style preferences, when referring specifically to U.S. defense activities, policy, or doctrine, *defense* will be spelt with an *s* and not a *c*.

Assistance. The second is the NATO Directive *Allied Command Operations Guidance for Military Medical Services Involvement with Humanitarian Assistance and Support to Governance, Reconstruction and Development.* It is this Directive that guides military medical services' humanitarian civic assistance activities on NATO operations. Thus, this Allied Command Operations Directive – observed by all NATO partners – has significant impact in shaping the military medical services contribution to humanitarian civic assistance missions in NATO operations.

1.1 United States of America

In July of 2016, the population of the U.S. was approximately 324 million (U.S. Census Bureau). A truly mighty military force, the total number of active duty personnel in the U.S. Department of Defense[4] (DoD) in 2016 was approximately 1,300,000 (Defense Manpower Data Centre), with an additional 1,100,000 personnel serving as active reservists (GlobalFirepower). This combination of approximately 2.4 million military personnel serving in either a full-time or a part-time capacity, coupled with robust land, air and naval materiel and equipment assets (e.g., tanks, armoured fighting vehicles, rotary- and fixed-wing aircraft, submarines, aircraft carriers, frigates) support the ability of the U.S. military to conduct health engagement activities around the globe, virtually unhindered by personnel and resource constraints.

National Military Strategy. The *2015 National Military Strategy of the United States of America* provides both an overview of the challenges faced by the U.S. military conglomerate and a brief outline of how U.S. military forces will be utilized to ensure the "protection and advancement of U.S. national interests" (DoD "National Military Strategy" i). The source documents for the National Military Strategy are the *National Security Strategy* and the *National*

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[4] The Department of Defense consists of the five branches of the U.S. military: The Army, Air Force, Navy, Marine Corps, and Coast Guard.

Defense Strategy, which are promulgated downwards through the U.S. Military chain of command. The National Security Strategy, which originates at the Office of the President of the United States of America (the U.S. military's Commander in Chief), informs the National Defense Strategy. The National Defense Strategy, developed by the Secretary of Defense (the head of the DoD), subsequently informs the National Military Strategy, which is promulgated by the Chairman of the Joint Chiefs of Staff (i.e., the service chiefs of the Army, Navy, Air Force and Marines). Thus, the National Military Strategy follows the overarching direction provided by the Commander in Chief and the Secretary of Defense (Burkett and Perkins 507).

Within the National Military Strategy (hereafter referred to within this section as simply the Strategy), globalization, diffusion of technology and demographic shifts are identified as key factors affecting the current strategic environment (1). These factors, coupled with the rise in state challenges – for example the pursuit of nuclear technology in Iran and North Korea, Russia's military action in Ukraine – and the concurrent rise in Violent Extremist Organizations (VEOs), including al Qaida and the Islamic State of Iraq and the Levant (ISIL), combine to form what the Strategy refers to as a "complex strategic security environment" (3).

The Strategy identifies six key National Security Interests[5]. These interests prioritize and shape U.S. military missions - "our military supports diplomatic, informational, and economic activities that promote our enduring national interests" (DoD "the Strategy" 5). To ensure that the six National Security Interests are upheld, the Strategy identifies three key guiding National Military Objectives: "1) To deter, deny and defeat state adversaries; 2) To disrupt, degrade, and defeat VEOs; and 3) To strengthen our global network of allies and partners." (6). Of these three

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[5] The six U.S. National Security Interests are: 1) The survival of the Nation 2) The prevention of catastrophic attack against U.S. territory 3) The security of the global economic system 4) The security, confidence and reliability of our allies 5) The protection of American citizens abroad 6) The preservation and extension of universal values.

objectives, it is the latter two that shape the U.S. military's humanitarian civic assistance programs.

The Strategy ascertains that in order to effectively defeat VEOs – the aim of the second military objective - the affected civilian populace must be provided with both security and economic opportunities (8). The Strategy identifies that the U.S. military, working in close collaboration with relevant humanitarian actors, international organizations, and local governments, can provide these opportunities, while simultaneously also working to identify and address the root causes of the conflict (DoD "The Strategy" 8). The Strategy posits that humanitarian civic assistance programs contribute to a reduction in suffering and importantly, the restoration of hope (8) - the desired effect being a net reduction in the control and power of the VEO, and an increase in stability for the affected population. This desired effect [reduction in VEO control and power] is worthy of note, as it demonstrates the application of humanitarian civic assistance programs as a national security instrument.

The third military objective - Strengthen our global network of allies and partners - identifies the U.S. military's goal of enhancing existing partnerships and building new ones. The strength of America's existing global network of partnerships and allies is presented in the Strategy as a vital foundation for security and stability (9). Enhancing these partnerships through capability and capacity building initiatives, including "training, exercises, security cooperation activities and military-to-military engagement", will allow the U.S. to maintain a "global stabilizing presence" while simultaneously ensuring the collective ability of all partners to "deter aggression and defeat extremists" (DoD "The Strategy" 9).

The Strategy outlines twelve mission priorities (Joint Force Prioritized Missions[6]) for U.S. military forces. While all are critical in achieving the three key objectives, the following four in particular relate to humanitarian civic assistance programs: Mission 4: Provide a global, stabilizing presence; Mission 9 – Conduct military engagement and security cooperation; Mission 10 – Conduct stability and counterinsurgency operations; and Mission 12 – Conduct humanitarian assistance and disaster response (DoD "The Strategy" 11).

The remainder of the Strategy describes how the objectives and mission sets in the Strategy will be resourced. Three key resource pillars are identified as having the greatest impact: People - "our greatest advantage" (17); Processes – "agile, efficient and focused" (17); and Programs – "sustaining the quality edge" (18).

Recognizing that the intent of the Strategy is as a high-level strategic document, it provides neither concrete action plans nor measurable outcomes. Instead, the Strategy abounds with vague and abstract statements such as "we are exploring our personnel policies and promotion practices to leverage 21st century skills" (14). While it is vital to explore and subsequently modernize personnel policies to reflect the current employment climate, this statement, and the myriad of similar others within the Strategy, are too abstract to provide the reader with a comprehensive understanding of what the Strategy aims to achieve. Conversely, it is also possible that the Strategy is intentionally abstract. This lack of concrete guidance may afford the Commanders responsible for its implementation greater flexibility in operationalizing the Strategy to meet the

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[6] The twelve mission priorities are as follows: 1) Maintain a secure and effective nuclear deterrent 2) Provide for military defense of the homeland 3) Defeat an adversary 4) Provide a global, stabilizing presence 5) Combat terrorism 6) Counter weapons of mass destruction 7) Deny an adversary's objectives 8) Respond to crisis and conduct limited contingency operations 9) Conduct military engagement and security cooperation 10) Conduct stability and counterinsurgency operations 11) Provide support to civil authorities 12) Conduct humanitarian assistance and disaster response.

needs of their unique environments. This flexibility would perhaps not be possible, were the Strategy a more prescriptive document.

Global Health Engagement. The National Military Strategy informs DoD Global Health Engagement (GHE) activities. At the strategic level, U.S. policy on health engagement is an incredibly complex portfolio that is generated by no less than four stakeholders: Office of the Secretary of Defense for Policy, Office of Stability and Humanitarian Affairs, Assistant Secretary of Defense for Health Affairs, and Joint Staff Surgeon. In addition, non-DoD input is provided by the Departments of Health and Human Services, Homeland Security, Agriculture, and Energy (Cullison et al. 55).

Further shaping DoD GHE activities are two key Department of Defense Instructions (DODI): DODI 3000.05, *Stability Operations*; and DODI 6000.16, *Military Health Support for Stability Operations*. These two Instructions, developed during the U.S. military's missions in Iraq and Afghanistan, are widely considered the primary guidance documents for deployed commanders participating in health engagement activities (Cullison et al. 55). Finally, a 2013 Secretary of Defense cable titled *Guidance of DoD Global Health Engagement* outlines the responsibility, scope and funding mechanisms for DoD assets conducting GHE activities. While acknowledging that this cable has significantly enhanced existing documentation, both identifying and delineating GHE activities and their respective scope and funding envelopes, Cullison and colleagues believe that greater guidance regarding "personnel requirements, monitoring and evaluation" is required (55). This is an important point, as historically, the relative success of humanitarian civic assistance programs has been determined by easily measured metrics such as the number of patients treated or the number of prescriptions issued (Bollen et al. 259; Baxter and Beadling 1237; Hicks 11). This quantitative assessment provides

little in the way of information on improved patient health outcomes as a result of the program. Further, it may encourage medical personnel participating in the program to increase the number of patients assessed or treated in order to increase their statistics, and subsequently, the positive evaluation of their efforts.

As is clear by the diversity and number of departments providing input and conducting external reviews of U.S global health engagement policies and programs, the U.S. GHE portfolio involves much more than defense assets. Global health engagement is a key pillar of U.S. defense policy and utilizes not only a Whole-of-Government (WoG) approach, but in many cases, assistance from and liaison with domestic and international partner agencies, Non-Governmental Organizations (NGOs), and other military partners, including Canada.

Smith describes GHE as a "powerful national security instrument that supports U.S. government efforts around the world" (4). The following text, and in particular the conclusion, illustrates perfectly the crux of GHE.

> DoD GHE comprises health and medical related actions and programs undertaken by the DoD to improve foreign armed forces' or foreign civilian authorities' health system capacity; and to promote and strengthen their human and/or animal health systems *in support of national security objectives* (Global Health Working Group, qtd. in Smith 5) (emphasis added).

When viewing GHE through the lens of national security, it is perhaps not surprising that the three buzzwords commonly used to describe GHE outputs are *stability*, *cooperation* and *capacity* (Smith 4.). Smith writes that GHE activities improve stability through positively impacting social well-being and health, economics and security. Cooperation is enhanced through GHE activities that establish and build collaboration with foreign governments. Finally, GHE activities aimed at

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increasing partner self-reliance develop partner capacity and capability (4). Again, it is clear that U.S. GHE activities [to include humanitarian civic assistance programs] are less about the delivery of medical care, and more about enhancing defence and diplomacy efforts.

GHE is operationalized by regional combatant commanders who identify and shape GHE efforts in their region through formal theater security cooperation plans – a component of the greater theater campaign plan (Cullison et al. 55). Critics of this approach, including Cullison and colleagues, argue that when enacted at the regional combatant commander level, GHE activities may fall victim to piecemeal implementation (55). In such instances, the amount and type of GHE delivered is often a reflection of the commander's priorities rather than an objective reflection of host nation needs. Cullison and colleagues acknowledge this deficiency, and identify U.S. Pacific Command (USPACOM) as an example of what can be achieved (55). In USPACOM, in addition to the overarching Command Theatre Security Cooperation Plan, the Command Surgeon has developed a Health Theater Security Cooperation Plan. This subordinate plan includes health engagement guidance and prioritized health-focused lines of effort for each country within the Command, while ensuring that health-focused efforts align with the greater Theater Campaign Plan objectives (Cullison et al. 55). Therefore, this example from USPACOM illustrates that host nation priorities and U.S. military GHE activities can be aligned through a careful and deliberate planning process.

Over and above the desire to enhance national security and promote human and animal health, a necessary component of U.S. DoD global health engagement activities - in particular those formally designated as humanitarian civic assistance missions - is the provision of valuable medical training to DoD medical services personnel. The requirement for a training component within humanitarian and civic assistance missions is clearly articulated in the U.S. Department of

State's United States Codes (U.S.C.) *Title 10 – Armed Forces, Chapter 20 – Humanitarian and Other Assistance, Section 401 – Humanitarian and civic assistance provided in conjunction with military operations.* U.S.C. Title 10 provides the legal authority for the U.S. DoD to engage in humanitarian civic assistance missions[7] during deployed operations and/or as a component of overseas training missions. Section 401 of Title 10 permits a military department to conduct humanitarian civic assistance missions during authorized military operations and in conjunction with the armed forces of that country, if the U.S. Secretary of Defense determines the following:

> The activities will *promote* A) the *security interests* of both the United States and the country in which the activities are to be carried out; and B) *the specific operational readiness skills* of the members of the armed forces who participate in the activities. (U.S.C., S.401, Para (a)(1), 216) (emphasis added)

Consistent with the other policy instruments reviewed, within Title 10 of the U.S.C., the promotion of U.S. security interests remains paramount. Further, in addition to the provision of medical care, there is a clearly identified requirement to incorporate an education and/or training component [in order to develop the operational readiness skills of U.S. military personnel] into humanitarian and civic assistance activities conducted under the authority of U.S.C. Title 10.

To conclude, the U.S. views health engagement, to include humanitarian civic assistance programs, as a powerful strategic national security instrument and a critical adjunct to facilitate nation-to-nation relationship building. GHE activities are also utilized as a valuable training tool for U.S. military healthcare practitioners through clinical experience with unique diseases and medical conditions not routinely seen in North America. Unfortunately, improved population

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[7] U.S.C., Title 10 defines humanitarian and civic assistance missions as "Missions that provide medical, dental or veterinary care in areas that are rural or are underserved by either medical and surgical personnel, dental personnel, and/or veterinarians and include the provision of education, training and technical assistance in addition to the provision of care" (U.S.C., (e)(1), 216).

health outcomes, although of obvious benefit to the host nation, are not the primary driver for U.S. GHE activities. Therefore, I suggest that this emphasis on national security, and not health outcomes, may be ethically problematic in the GHE environment.

1.2   Canada

In January 2016 the population of Canada was just over 36 million (Statistics Canada). With a population approximately one-tenth that of the U.S., it is no surprise that Canada's military population is also significantly less than that of the U.S. military. Department of National Defence (DND) figures indicate the CAF presently consists of approximately 68,000 Regular Force [full time] personnel and 27,000 Reservists [part time personnel] (National Defence "FAQ"). In addition to significant differences in overall military population strength, the CAF have considerably fewer land, air and naval assets than their U.S. counterparts. The CAF, for example, does not possess a single aircraft carrier, while the U.S. military fields 19 (GlobalFirepower). As a result of these personnel, equipment and materiel constraints, the CAF does not have the same capacity [as the U.S. military] to conduct global health engagement activities.

Canada First Defence Strategy. The *Canada First Defence Strategy* (CFDS) is Canada's equivalent to the U.S. National Military Strategy. As with the U.S. National Military Strategy, the CFDS is a high-level strategic guidance document that outlines the Canadian government's expectations and intent regarding the capabilities, missions and roles for the CAF. The CFDS aligns with the Canadian Government's national and foreign policy objectives, and was released in 2008 under former Prime Minister Stephen Harper's Conservative government. Similar to the U.S. National Military Strategy, the CFDS acknowledges the significant changes in recent years to the global security environment (National Defence "CFDS" 10), stating that "ethnic and

border conflicts, fragile states, resurgent nationalism and global criminal networks continue to threaten international security" (National Defence "CFDS" 6).

These changes to the global security environment have informed and influenced the six core military missions the CFDS assigns to the CAF (National Defence "CFDS" 10):

> 1) Conduct daily domestic and continental operations, including in the Arctic and through NORAD;
>
> 2) Support a major international event in Canada, such as the 2010 Olympics;
>
> 3) Respond to a major terrorist attack;
>
> 4) Support civilian authorities during a crisis in Canada such as a natural disaster;
>
> 5) Lead and/or conduct a major international operation for an extended period; and
>
> 6) Deploy forces in response to crises elsewhere in the world for shorter periods.

The CFDS identifies that the CAF should be prepared [i.e., trained, equipped and ready] to conduct all six core missions concurrently.

In recognition of the strain that conducting these core missions would place on one or more of the four pillars which support and inform military capability – *personnel*, *equipment*, *readiness* and *infrastructure* (National Defence "CFDS" 5) – a key mitigating component of the CFDS is a 20-year procurement and modernization strategy, including a long-term funding framework which outlines significant funding increases for defence procurement (National Defence "CFDS" 11).

While the CFDS is a robust strategy, the 2015 change in federal leadership from a Conservative government to a Liberal government under Prime Minister Justin Trudeau is likely to result in significant changes in the Government of Canada's strategic direction to the CAF and

the Defence Team[8] as a whole. At the time of this writing, the Canadian military is undergoing a

'Strategic Defence Review' under Minister of National Defence Sajjan. In addition to the

potential for changes in strategic direction as a result of this Defence Review, change to the

CFDS was all but confirmed in a report released by the Mackenzie Institute, an independent

Canadian think tank. Their report identified that Minister Sajjan was instructed by Prime

Minister Trudeau to develop a new defence strategy that would replace the "outdated" CFDS

(Rae). This impending revision [or replacement] of the CFDS, coupled with the Strategic

Defence Review, suggests the potential exists for significant change to both the six core missions

and the capital procurement strategy.

Global Engagement Strategy – Strategic Guidance. The *Global Engagement Strategy*

(GES) - Strategic Guidance document, released in April 2015, was developed by the DND to

inform and guide defence diplomacy[9] activities and prioritize resource allocation (National

Defence "GES" 2). The GES outlines Canada's seven strategic defence interests, identifies the

parameters for assigning engagement priorities, and subsequently sets key objectives by

geographic region[10]. All senior leaders within the Defence Team are expected to be familiar with

the GES. In addition, they are expected to ensure that department-level engagement activities

align with the interests and priorities identified within the GES, thereby ensuring that Canada's

GES activities are "coherent, effective, and together serve the objectives of the defence

institution" (National Defence "GES" 2).

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[8] The *Defence Team* refers to both the Canadian Armed Forces [the military] and the Department of National Defence [a civilian workforce].

[9] *Defence diplomacy* refers to "focused and tailored engagement undertaken by the Defence Team with partner countries and organizations around the world in order to build and maintain cooperative relationships" (National Defence "CFDS" 4).

[10] The geographic regions are as follows: Americas, Asia-Pacific, Europe, Middle East, and Africa (National Defence "CFDS" 3).

To ground and inform the reader as to why defence diplomacy and global engagement is important to Canadians, the GES first identifies four objectives that are enabled by defence diplomacy: "1) Defend Canada; 2) Defend North America; 3) Contribute to international peace and security; and 4) Support broader government priorities" (4). The first three of these four objectives align with the six core military missions articulated in the Canada First Defence Strategy. The fourth objective acknowledges the role of the Defence Team – in conjunction with other government departments - in supporting and enabling a Canadian WoG approach to achieving national security, foreign policy and trade objectives (National Defence "GES" 4).

Building upon these four objectives, the GES subsequently articulates seven key strategic interests, falling within the categories of either "Government of Canada Priorities" or "Defence Specific Needs and Modalities" (National Defence "GES" 5, 7). These seven strategic interests "drive Canada's global engagement objectives and guide prioritization efforts" (National Defence "GES" 5):

Government of Canada Priorities

1) Canadian Sovereignty

2) Canadian Prosperity

3) Regional and International Security

4) Primacy of Rules-based International Order

Defence-Specific Needs and Modalities

5) Network of Defence Partners

6) Mobility and Reach

7) Access to Advanced Capabilities

Of these seven strategic interests, it is number 3 – Regional and International Security –

that has the greatest impact on Canada's defence-related activities abroad, and thus, is the

greatest driver of Canada's humanitarian civic assistance programs. The descriptor for strategic

interest number 3 states in part, "Contributions to regional and international stability provide

Canada the opportunity to project leadership abroad and collaborate with key partners and

allies… participating in peace support operations… fostering regional approaches to conflict

prevention and post-conflict peace building" (National Defence "GES" 6). As the U.S. is

Canada's closest defence ally (National Defence "The Canada - U.S. Defence Relationship"),

strategic interest number 3 - Regional and International Security, is particularly important. Of the

seven strategic interests, it aligns most closely with U.S. defence strategy, which gives primacy

to national and international security. Therefore, strategic interest number 3 serves to signal to

Canada's greatest defence partner that regional and global security are both a Canadian priority

and a shared interest.

The GES acknowledges that while the seven strategic interests guide defence diplomacy

activities, the development of feasibility metrics [referred to within the GES as engagement

priorities] is vital to ensure that potential resource constraints, harms, and risks are assessed,

thereby ensuring the greatest effect (National Defence "GES" 8). The feasibility metrics

identified within the strategy include both internal and external considerations, for example,

resource availability (internal) and partner nation relationships (external) (National Defence

"GES" 8).

As with the Canada First Defence Strategy, the Global Engagement Strategy - Strategic

Guidance was promulgated prior to the change in leadership from a Conservative-led federal

government to a Liberal-led federal government. Thus, it too has the potential to undergo

significant change under the leadership of Prime Minister Trudeau [and certainly this Strategy will be a component of Minister of National Defence Sajjan's ongoing Strategic Defence Review]. Perhaps due to the pre-election timing of the April 2015 release of the GES, and in anticipation of a possible change in government, within the GES it states that while "designed to be enduring; it [the GES] will be revisited following a major change to government policy or dramatic shift in the strategic context" (National Defence "GES" 10).

In addition to the potential for change to the GES due to the ongoing Strategic Defence Review, there are significant changes currently occurring within the global security environment. In his 'Doorstep Statement' at NATO's July 2016 Warsaw Summit, NATO Secretary General Jens Stoltenberg announced that four multi-national battalions will be stood up in the Baltic States. Stoltenberg confirmed that these battalions are intended to send a clear message to Russia, "that an attack on one Ally will trigger the response from the whole Alliance" (Stoltenberg). In an interview following the NATO summit, General Vance, Canada's Chief of the Defence Staff, commented on the strategic intent of the multi-national Task Force, "What deterrence looks like is that it raises the threshold of risk (for Russia). It may be slight, but it is definitely there" (qtd. in Brewster). Prime Minister Trudeau's July 2016 announcement of Canada's open-ended commitment of 450 CAF members to this NATO task force ensures that, for the foreseeable future, 450 CAF members will rotate into and out of Latvia every six to nine months (Brewster). If previous CAF missions are any indication, there is a strong possibility that Canadian military medical personnel will participate in humanitarian civic assistance programs and activities while deployed in Latvia.

Humanitarian Operations and Disaster Relief Operations Manual. Released in 2005, the National Defence publication *Humanitarian Operations and Disaster Relief Operations Manual*

was promulgated by the Canadian Forces Doctrine Board. This publication outlines the CAF role in the provision of humanitarian civic assistance in permissive environments[11]. The Manual identifies its primary intended audience as Commanders at the strategic and operational level, the Joint Staff at National Defence Headquarters, the Disaster Assistance Response Team (DART) and the various CAF command and staff colleges (National Defence "HODRO|" ii).

A robust publication, the Manual first walks the reader through the various types of disasters and emergencies. It defines the many policy instruments, frameworks and legislation that guide the CAF in humanitarian and disaster relief operations. In addition, it outlines the post-disaster roles of the CAF in concert with other key actors, including the United Nation's Office for the Coordination of Humanitarian Affairs (OCHA), and the Government of Canada.

The Manual readily acknowledges that the CAF is "not designed for" humanitarian operations or disaster relief operations [referred to within the Manual as HO and DRO respectively] (2-9). It concedes, however, that the CAF's rapid response capability and other [unidentified] attributes may enable it to fulfill a supporting role in both HO and DRO, which can serve to complement the overall relief effort. When supporting the main humanitarian coordinator, the Manual further states that as soon as is reasonably practicable, these CAF-conducted tasks be handed over to "competent, responsible civil actors" (2-10). These are important statements as they emphasize to readers that the CAF is not [and should not be] the lead actor in humanitarian assistance activities. In summary, for readers within the CAF and/or other government departments (e.g., Public Safety Canada, Global Affairs Canada), this Manual serves as an excellent introductory overview of the CAF's limited and supporting role and responsibilities in HO and DRO, both domestically and overseas.

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[11] The Manual defines 'Permissive Environments' as follows, "The host nation government has control such that law and order are upheld in the intended area of operations, and the government has both the intent and capability to assist" (National Defence 1-3).

1.3 North Atlantic Treaty Organization (NATO)

The origins of NATO can be traced back to the signing of the North Atlantic Treaty [commonly referred to as the Washington Treaty] on 4 April 1949 (NATO "NATO A-Z Pages" 1). At its genesis, NATO consisted of 12 founding members, of which Canada was one. Today, there are 28 members within the NATO alliance, all of which are sovereign countries (NATO "NATO A-Z Pages" 1). As both a political and military alliance, NATO's primary raison d'être is to "safeguard the freedom and security of its members through political and military means" (NATO "What is NATO"). While the inner workings and bureaucratic organization of NATO are outside the scope of this paper, some background information is beneficial in order to provide necessary context for the two NATO documents that will be discussed herein. As a joint military and political organization, NATO has two key branches within its working structure - NATO Delegations, and Military Representatives (NATO "What is NATO"). It is the Military Representatives branch that is the focus of this section.

Comprised of the Chiefs of Defence within member countries, the senior military authority within NATO is the Military Committee (MC). As the senior military authority, the MC plays a key role in transforming political guidance and intent into military language. Therefore, it is the MC that leads the development of NATO policy and provides advice and guidance to the Commanders of NATOs two Strategic Commands: Allied Command Operations (ACO) and Allied Command Transformation (ACT) (NATO "NATO A-Z Pages" 57). ACO and ACT are led by the Supreme Allied Commander of Europe (SACEUR) and the Supreme Allied Commander, Transformation (SACT), respectively (NATO "NATO A-Z Pages" 569). The aim of ACO is to "maintain the integrity of Alliance territory, safeguard freedom of the seas and economic lifelines and preserve or restore the security of its members" (NATO "NATO A-Z

Pages" 579). To that end, it is ACO that is responsible for the planning and subsequent execution of NATO operations (NATO "NATO A-Z Pages" 579).

In reference to NATO's role in humanitarian operations, two NATO guidance documents will be reviewed in this section, an Allied Joint Publication (AJP) and an Allied Command Operations (ACO) Directive. The NATO Logistics Handbook describes *Allied Publications* as "an official NATO standardization document which some or all NATO nations agree to use as a common implementing document and which is distributed down to user level." *Directives* are described within the Handbook as "military communication in which policy is established or a specific action is ordered" (NATO "Logistics Handbook"). Both the AJP and the ACO Directive address NATO's position on the provision of humanitarian assistance. However, the AJP is addressed to all military members within NATO, regardless of occupation, while the intended audience for the ACO Directive is members of military medical services.

NATO Standard Allied Joint Publication (AJP) 3.4.3. NATO Standard AJP-3.4.3, *Allied Joint Doctrine for the Military Contribution to Humanitarian Assistance*, was promulgated without reservations[12] and subsequently approved by the NATO nations within the Military Committee Joint Standardization Board in October 2016. As identified in the preface of AJP-3.4.3, the publication is "intended for use by operational-level Allied joint force and subordinate commands" (IX).

Chapter 1 of the AJP draws attention to the NATO-approved definition for humanitarian assistance. This definition is important, as it highlights that NATO's role is not to lead, but rather to support, civilian actors in their humanitarian assistance activities.

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[12] NATO functions as a 'consensus-based organization. Prior to the promulgation of a NATO Allied Joint Publication (AJP), it is standard practice for all members of NATO to review the document and record any reservations. AJP-3.4.3 was reviewed by all NATO members and promulgated without reservation.

Humanitarian Assistance: As part of an operation, the use of available military

resources to assist or complement the efforts of responsible civil actors in the

operational areas or specialized civil humanitarian organizations in fulfilling their

primary responsibility to alleviate human suffering (NATO "AJP 3.4.3" 1-1).

The AJP identifies four guiding humanitarian principles that NATO militaries should apply

when contributing to humanitarian assistance activities, namely, *Humanity, Impartiality,*

Neutrality, and *Independence* (1-1). Importantly, the AJP acknowledges the challenges that

military forces may experience with ensuring adherence to these guiding principles in times of

crisis. Three of the four guiding principles (Impartiality, Neutrality and Independence) are noted

as particularly difficult to apply should NATO forces be engaged in combat operations in the

region of concern (1-2).

NATO Directive Number 83-2. NATO Directive Number 83-2, *Allied Command*

Operations (ACO) Guidance for Military Medical Services Involvement with Humanitarian

Assistance and Support to Governance, Reconstruction and Development [unclassified] was

released in March 2010 during NATO's Afghanistan campaign and, until rescinded, applies to

all current and future NATO operations (4). The purpose of this ACO Directive is clear and

worthy of citation:

…to set out principles for the provision of healthcare support for humanitarian

reasons in *emergency situations* where there is *no civilian alternative* …This

Directive also emphasizes the fundamental principle when military medical services

are engaged in Medical Outreach activity that these must primarily address health

needs, be *appropriate to the level of care that can be realistically and competently*

sustained within the Host Nation (HN)[13], and support the HN health development

programme (2) (emphasis added).

Thus, during NATO operations, the delivery of healthcare to civilians by military medical

personnel may only be conducted in emergency situations, and critically, the level and type of

healthcare provided must be sustainable by host nation healthcare providers. Importantly, and

unlike the U.S. guidance reviewed, the Directive does not make reference to the use of healthcare

as a powerful national security instrument, or its use as an adjunct to nation- and/or relationship-

building.

The Directive acknowledges that "there is a clear place for military medical support" in

humanitarian relief activities (5). Armed conflict in particular is often acutely detrimental to a

fragile state's healthcare system, and frequently results in increased civilian casualties in a region

where the healthcare system itself is either non-existent, or at best, under severe strain. The

Directive notes that military healthcare providers will often feel compelled to assist in the

development of the healthcare system of a fragile state, and similarly, to provide healthcare to

civilians in need, adding that this is "a function of their vocation" (5). Any such activities, the

Directive states, "must only be conducted with the agreement of the appropriate authorities, this

will usually be the national government" (5) and should align with the following seven

principles[14]:

> a. Do no harm [to patients, other aid agencies, or host nation healthcare providers]
>
> b. Clinically appropriate [consider capabilities of the host nation healthcare system]

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[13] NATO defines the term *Host Nation* as "A nation which, by agreement, receives forces or materiel of NATO or other nations operating on, from or transiting through its territory, or allows materiel or NATO organizations to be located on its territory, or provides support for these purposes" (NATO "ACO Directive" 14).

[14] These NATO principles are based on the UN Office for the Co-ordination of Humanitarian Affairs (UN OCHA) guidelines on the use of military and civil defence assets to support UN humanitarian activities in complex emergencies (NATO "ACO Directive" 5)

c. Culturally sensitive [note host nation gender sensitivities and gender roles in healthcare]

d. Coherent [any intervention should consider all aspects of development]

e. Sustainable [the intervention must be sustainable when NATO forces withdraw]

f. Co-ordination [host nation must be aware of and should support medical engagement]

g. Civilian primacy [intervention must be coordinated with host nation or other civil agency] (5)

Military medical engagement activities that meet these seven principles are therefore deemed acceptable under the NATO ACO Directive. The reality, however, is that meeting each one of these seven principles is incredibly challenging during an armed conflict in a fragile state.

The NATO ACO Directive concludes by recognizing that the provision of humanitarian assistance and military medical engagement will continue to be necessary on NATO operations (12). Further, as long as such engagements are conducted in accordance with the seven principles, they can have a meaningful impact on the immediate healthcare needs within the host nation (12).

The NATO ACO Directive is a clear and comprehensive document that coherently outlines the requirements for military health engagement activities during deployed [NATO] operations. The timing of the Directive's release, however, is important, and worthy of comment. The Directive was released in March 2010, at what was the tail end of major NATO combat operations in Afghanistan[15]. The timing of the release suggests that the Directive may have been promulgated in order to alleviate host nation and humanitarian actor concerns surrounding NATO's use of military medical engagements as a strategic tool. As will be discussed, the use of

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[15] For example, Canada's war-fighting operations in Afghanistan concluded in 2011.

military medical engagements as a strategic war fighting tool is a significant source of concern amongst military medical personnel, humanitarian actors, and academics.

1.4 Chapter Summary

In conclusion, Smith, writing about U.S. defense GHE activities, argues that GHE is "not in the category of nice things to do, it is something we must do… and do right" (31). In reviewing the myriad of regulations, policies, strategic guidance documents and directives relating to GHE programs, it is clear that the strategic benefits realized [to the U.S. or Canada] as a result of GHE are the primary driver for GHE activities and programs. Thus, the "…*something we must do*" could refer equally to either supporting national security interests or to improvements in patient health outcomes – as both are potentially realized as a result of health engagement activities. Smith's final words, "*something we must do and do right*" give more pause for thought, as 'to do something right' requires clear evaluation parameters.

Virtually absent from all of the regulations, policies and strategic guidance documents discussed in this chapter, is the mention of evaluation metrics to measure improvements to patient health outcomes as a result of GHE activities. Only the NATO Directive references the need for outcome measures, referred to within the Directive as *measures of effectiveness* (11). The Directive recommends the use of qualitative and not quantitative outcome measures, indicating that when assessing health benefit-related outcomes, qualitative measures will often be more meaningful (11). As the Directive does not expand upon this line of reasoning, it is impossible to know either why qualitative measures are preferred by NATO, or what type of qualitative measures NATO recommends. In their critique of U.S. DoD GHE activities, Cullison and colleagues highlight the omission of evaluation metrics in GHE policy documents and they suggest that greater guidance on evaluation metrics and feasibility is warranted (55). Their

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recommendation, which is equally applicable to Canada's GHE activities, is valid, as without robust metrics to evaluate GHE activities, it is challenging to assess either the health benefits to the population served or to make meaningful changes to GHE program delivery.

In addition to the dearth of evaluation metrics, a fundamental challenge for militaries conducting humanitarian civic assistance missions is ensuring adherence to the fundamental principles of host nation sustainability and civilian primacy. As espoused in NATO doctrine, [and specifically NATO Directive 83-2], the level and type of military healthcare provided must be coordinated with the host nation, and in addition, must be realistically and competently sustainable by the host nation. As will be discussed in Chapter 2, these principles are not fully elucidated - or even necessarily required - within existing humanitarian civic assistance program frameworks.

Chapter 2

Humanitarian Civic Assistance Programs

Following from the previous chapter, which examined the policy instruments and military doctrine that guide and shape military humanitarian civic assistance programs, this chapter introduces the three key medical programs that fall under the umbrella of humanitarian civic assistance programs: The Medical Civic Action Program (MEDCAP); the MEDCAP's evolutionary offshoot, the Medical Readiness and Training Exercises (MEDRETES); and the Humanitarian Assistance Disaster Response (HADR) program. While each of these programs are unique, they each involve the provision of medical care by military medical personnel to civilians. As a result, there are commonalities in program delivery and, as critically, the biomedical ethical challenges potentially faced by military medical personnel. All of these medically-focused outreach programs [MEDCAPs, MEDRETEs and HADR] are regularly conducted by the U.S., Canada and NATO, either independently, i.e., U.S. forces or the CAF working in isolation, or as part of a joint task force.

This chapter provides an overview of the history, characteristics and some of the criticisms of these programs, beginning with the MEDCAP and MEDRETES programs, and concluding with the HADR program. The reader will note that MEDRETES program has been classified within the MEDCAP category. This is intentional as the MEDRETES program is an evolution of the MEDCAP, and thus can be considered as a subordinate program falling under the MEDCAP model. Further, and as will be discussed, both of these programs share many similarities including the population served [typically rural and under-serviced] and the compressed time spent in location [ranging from 1 day to two weeks].

2.1 The Medical Civic Action Program (MEDCAP)

The Medical Civic Action Program (MEDCAP)[16] is a U.S. military-designed outreach program that involves the use of military medical personnel to provide short-term medical care to local civilians within a defined area of operations. In the military context, MEDCAPs are also referred to colloquially by other names, including Village Medical Outreach (VMO), Mobile Medical Team (MMT), Medical Stability Operations (MSO), or simply Medical Engagements. However, the generic term MEDCAP will be used throughout this paper to facilitate consistency.

The MEDCAP model utilizes a traditional 'walk-in clinic' format (referred to within the military as 'Sick Parade'), whereby local civilian patients attend the clinic, are triaged upon arrival, and then wait to see a military healthcare provider. Thus, comparisons can be made to a small walk-in clinic in any North American community. Unlike a Canadian or U.S. walk-in clinic, however, healthcare providers working on a MEDCAP do not have referral capabilities to access specialized diagnostic equipment such as diagnostic imaging or laboratory testing – all of which are usually readily accessible to a Canadian or U.S. physician.

A typical MEDCAP has minimal staff and is composed of one or two physicians, perhaps a physician's assistant, possibly a nurse, and usually several medical technicians.[17] In some instances, and more common to the U.S. MEDCAP model than to the CAF MEDCAP model, specialist physicians, such as internal medicine physicians, may also participate and provide care (Rice and Jones 51).

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[16] NATO defines MEDCAP as "Short term, and commonly "one-off" deliberate direct patient care interventions intended to deliver medical care to HN civilians" (NATO "ACO Directive" 15).

[17] Medical technicians – often referred to as 'Medics' - have a comparable scope of practice to a civilian paramedic. Unlike physicians, physician's assistants or nurses, however, they do not hold an independent license to practice. Instead, they work under the military physician's license.

The medical supplies and equipment brought on a MEDCAP will be limited by both the location selected for the MEDCAP, and what the team can transport to the site. As a result, the amount and type of medical equipment and supplies brought on a MEDCAP are heavily influenced by the mode of transportation available to the team. In Afghanistan, for example, armoured vehicles were typically used to transport the MEDCAP team into/out of location. Transportation notwithstanding, the standard equipment and supplies commonly brought to a MEDCAP includes medication[18] (e.g., over-the counter medication and antibiotics) and wound dressings (e.g., bandages and splints). Existing local infrastructure within the target community [such as schools or other similar buildings] is typically used in support of the MEDCAP (Rice and Jones 51).

MEDCAPS: A historical overview. The U.S. military first introduced the concept of MEDCAPs during the Vietnam War (Gross 198). Considered as 'highly successful', these MEDCAPs ultimately treated over 40 million Vietnamese civilians (Gross 198). What is often not discussed in concert with the successes of the Vietnamese MEDCAPs, however, is the critical role that MEDCAPs played in the U.S. military's campaign to "win the hearts and minds" of the South Vietnamese people (Gross 21; Hicks 2). The MEDCAP model was a key component of the U.S. military's "medical stability operations" in Vietnam (Gross 21). Spurgeon Neel, a former surgeon with the U.S. Military Assistance Command in Vietnam, describes medical stability operations as follows:

> Medical stability operations concentrate on the pre-insurgency phase of operations in order to produce maximum results with minimum resource investment [and] employ medical treatment programs for immediate impact… (qtd. in Gross 200).

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[18] While the medication carried varies from MEDCAP to MEDCAP, typically healthcare providers will carry antibiotics, antifungals and non-prescription pain medication (Baxter and Beadling, 1235)

The broader strategic intent of medical stability operations in Vietnam, therefore, was" to quell hostilities in the countryside while simultaneously building political support for the South Vietnamese government" (Gross 21). Thus, Gross argues that the U.S. military employed MEDCAPs – and by extension medicine - as a de facto tool of war (21).

By their very design, the MEDCAPs conducted during the Vietnam War focused on providing short-term basic medical care. Gross identifies that patient medical records were not kept by the U.S. military, and surgeries were rarely either scheduled or conducted. Importantly, due to the short duration of the MEDCAPs, providers were typically unable to provide follow-up with their patients, or monitor compliance with a treatment regimen (201). These deficiencies were not considered critical, however, as the primary intent of the MEDCAP was not to deliver high-quality primary medical care, but rather, to gather intelligence and garner community support for the U.S. military (Gross 201).

MEDCAP application. Today, as in Vietnam, the U.S. military uses MEDCAPs as a tool to facilitate information gathering, to gather intelligence, and to garner community support (win 'hearts and minds') and subsequently gain influence over the local population (Rice and Jones 47). Indeed, the military community, as a whole, continues to recognize the strategic importance of MEDCAPs. An internal report released in 2011 from NATO's International Stabilization Assistance Force (ISAF) [in Afghanistan] noted that MEDCAPs are used to facilitate "engagement with the local community through the direct provision of healthcare in order to win the 'hearts and minds' of the civil population" (qtd. in Bollen et al., 259). The reader will note, that even in the NATO report, the stated aim of the MEDCAP is not to improve individual health outcomes.

In addition to the U.S. military, the CAF, although considerably smaller in number than their U.S. counterparts, has also utilized the MEDCAP model in counterinsurgency (COIN) operations[19], most recently in Afghanistan (Moore 20). Thus today, as in Vietnam, the MEDCAP model remains a key component of military operations[20], and is routinely used in U.S., CAF, and NATO theatres of operation worldwide. The use of MEDCAPs in COIN operations is particularly concerning. In these operational environments, the provision of medical care is subordinate to the gathering of intelligence and information. When viewed in this context, and without consideration of any potentially positive mitigating factors, such as the quality of medical care provided, this MEDCAP application may put military healthcare providers in an ethically tenuous position.

MEDCAPs: The military healthcare provider experience. As is standard in any walk-in clinic, during a MEDCAP, a patient's encounter with the physician is brief. In a Canadian walk-in clinic, a brief consultation may not be tremendously concerning [to either the provider or the patient] due to the provider's ability to review the patient's medical records, or to refer the patient for specialist care, however, this is not the case during a MEDCAP. During a MEDCAP, the patient is unknown to the healthcare provider, either through medical records, or through a historical patient-physician relationship. Consequently, critical patient information such as any drug allergies and most importantly, the patient's past medical history, are unknown to the healthcare provider. Compounding the difficulty of conducting a rapid – but necessarily thorough - medical assessment on an unknown patient is the potential language barrier. English

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[19] In Joint Publication 3.2.4, Counterinsurgency, the U.S. military defines counterinsurgency as "a comprehensive civilian and military effort designed to simultaneously defeat and contain insurgency and address its root causes." (DoD "Joint Publication 3.2.4" 10).

[20] For example, the U.S. Department of Defence Instruction 3000.05 *Stability Operations* (2009), identifies stability operations – to include medical engagements - as "equivalent in priority" to combat operations (Hicks 4; Baxter and Beadling 1234).

is rarely the first language of the majority of patients attending a MEDCAP. While local translators are often used, challenges exist with both the transmission and receipt of appropriate and accurate patient medical information.

The following excerpt from Rice and Jones, both U.S. military physicians, puts the reader in the position of a patient attending a MEDCAP, and brilliantly captures the experience of both patient and provider.

> …Imagine having chest pain, a cough, or bloody urine; try to explain these symptoms to a foreign physician (who speaks no English, but only has one shared and harried interpreter); imagine the physician performing a physical exam, correctly diagnosing the problem (without any diagnostic equipment), and then imagine him formulating an effective treatment plan – all within three minutes! (51).

During U.S. operations in Iraq, the duration of a typical MEDCAP was four hours (Rice and Jones 55). During these short clinics, it is not unusual for a physician to assess hundreds of new patients. As an example, one of the U.S. MEDCAPs conducted in Iraq saw 200 patients in four hours. This particular MEDCAP team consisted of one U.S. physician and several U.S. medics. Distilling these numbers down, the lone physician on the team was ultimately responsible for the evaluation and care of 50 patients per hour (Rice and Jones 55).

What is not captured in the MEDCAP described above is the lack of a mechanism for follow-up care and/or repeat appointments. Assuming that the physician is able to make an accurate diagnosis and formulate an effective treatment plan during a one- to three-minute patient consult, there is no opportunity to follow up with the patient. Upon completion of the MEDCAP, the medical supplies and equipment are packed up, and the healthcare providers return to their base. For security reasons, MEDCAP healthcare providers are unlikely to return to

the same geographic region. This inability to provide follow-up medical care is particularly

problematic when patients present with chronic conditions such as diabetes, cancer, significant

war wounds (e.g. amputations) or mental health issues.

Due to the MEDCAP model's inherent inability to support patient follow-up or even to

conduct basic diagnostic testing, it is challenging to identify metrics to assess the relative success

or failure of the MEDCAP and the quality of medical care provided. Consequently, Higher

Commanders [non-medical personnel] typically evaluate the success of a MEDCAP based on the

number of patients seen in clinic and the number of prescriptions filled; the higher the numbers

within each of these categories, the greater the MEDCAP's perceived level of success (Bollen el

al. 259; Baxter and Beadling 1237; Hicks 11).

Healthcare providers describe frustrations with the use of solely a numbers

treated/prescriptions issued rubric. Some physicians have expressed these frustrations publicly,

expressing belief that the MEDCAP model "violates basic ethical standards of medical care"

(Malish et al. qtd. in Bollen et al. 259). The following excerpt describes an unidentified British

military physician's thoughts surrounding MEDCAPs he participated in while deployed in

Kabul, Afghanistan in 2006:

> Medically I was out of my depth seeing many children with little more than a
>
> stethoscope for diagnostics… Patients were not registered; no record keeping took
>
> place… Prescriptions were issued but recorded only the sex of the patient or age of
>
> the child… I do not know how dosing instructions were given or understood in a
>
> country where over 80% of the population are illiterate. (qtd. in. Cameron 209).

It is perhaps not surprising then that Oravec and colleagues' 2012 study of 667 Active-

Duty U.S. military physicians identified that while the majority of physicians believed that

MEDCAP missions were beneficial to U.S. international relations and to themselves, significantly fewer felt that the missions were of benefit to the target population (6).

   MEDCAPs: The 'Academics' perspective. Researchers in this field broadly believe that the MEDCAP model has produced sub-optimal health outcomes (Loh et al. 3; Eagan-Chamberlin). Loh and colleagues refer to MEDCAPs as "parachute programs" (3), reporting that MEDCAPs in Haiti following the 2010 earthquake contributed to post-disaster chaos rather than alleviating it (3). Eagan-Chamberlin reports that physicians participating in MEDCAPs have felt "constrained by the conditions, limitations and context of their environment." It is perhaps this observation by Eagan-Chamberlin that best reflects the depth of the ethical challenges faced by military healthcare providers participating in MEDCAPs. Williamson takes a different but equally unfavorable position, contending that the cost of integrating humanitarian assistance into 'hearts and minds' campaigns in counterinsurgency strategies has been ineffective, with the costs far outweighing any benefits (1057). Finally, with a uniquely Canadian perspective, Williams-Jones and colleagues note the many challenges faced by Canadian military healthcare providers during international deployments, including gender conflicts, inequity, and resource scarcity.

   MEDCAPs: The Humanitarian Actors' position. "The military doesn't do these humanitarian things for humanitarian reasons. We do it because we're trying to achieve military objectives. And I [make] no secret about that. That's the game we're in" (Vance[21], qtd in Alexander 37). Perhaps in recognition of viewpoints like that of General Vance, humanitarian and development actors have long held the belief that international military forces should not have a role in humanitarian activities (Arcadu). A 2009 letter to NATO, drafted by the

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[21] At the time of Alexander's interview, General Vance was the senior Canadian military officer in Afghanistan. He is currently the senior Canadian military officer and holds the position of Chief of the Defence Staff. In the Alexander interview, General Vance was referring to the use of 'hearts and minds' projects by the CAF to defeat the Taliban.

International Rescue Committee and signed by 16 NGOs providing humanitarian assistance in Afghanistan, clearly reflects the view of the international NGO community with respect to military involvement in the humanitarian sphere:

> Military forces should not use relief or development activities to win people's hearts and minds for tactical, counter-insurgency or other military objectives, and that the military should refrain from relief activities when there are civilian actors capable of delivering assistance (qtd. in Williamson 1044).

In Afghanistan in particular, NGOs working in healthcare delivery programs have long expressed the belief that partnering with military forces raises the security risks to both their staff and their facilities. Importantly, these concerns are not isolated to only those NGOs working directly with military forces; humanitarian NGOs working in close geographic proximity to military forces have raised similar concerns (Arcadu). The fears expressed by the NGOs are not unfounded. The United Nations Assistance Mission in Afghanistan's (UNAMA) 2010 Annual Report on the Protection of Civilians in Armed Conflict[22] identifies that targeted attacks – to include killings and abductions – on international and national aid and development workers increased in 2010 in Afghanistan (iii). The report associates the increase to a belief by "Anti-Government Elements" that aid workers were engaged in espionage and activities supportive to the government and international militaries (iii).

Security fears aside, it is the belief of many humanitarian actors that when a military force conducts humanitarian- or development-focused activities, it challenges the ability of an outsider [for example, a non-allied fighter, an insurgent or local civilians not intimately involved in the conflict] to differentiate between the work conducted by military forces and the work conducted by humanitarian actors (Arcadu). Finally, there is a belief among humanitarian actors that the

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[22] The UNAMA report was written in partnership with the Afghanistan Independent Human Rights Commission.

failures inherent within the military's healthcare delivery model (i.e., the MEDCAP), including

the routine lack of coordination with local or national healthcare services, do more harm than

good to the local healthcare system. This routine lack of coordination – and/or involvement -

with the local healthcare system is an area of particular concern. There is evidence suggesting

that MEDCAPs may result in host nation patients preferentially seeking 'first world' healthcare

for what ails them, resulting in displacement and/or marginalization of local healthcare providers

(Rice and Jones 53; Avery and Bradley 74).

The Medical Readiness and Training Exercises (MEDRETES) program. An evolution of

the MEDCAP model, the MEDRETES model was first introduced in Latin America in 1989,

when General Thurman, Commander of U.S. Southern Command, perhaps seeing an opportunity

to increase U.S. interoperability [and by extension, U.S. military power] and enhance

international relations, proposed engaging with partner nations through the provision of

humanitarian assistance (Adams 278).

Similar to MEDCAPs, MEDRETES utilize a walk-in clinic format to deliver short-term

medical care to under-served populations. A significant difference, however, is that while

MEDCAPs are performed in both permissive environments and in war-fighting operations,

MEDRETES are always conducted in a permissive environment and in partnership with the host

nation government and military service. In addition, while a MEDCAP mission ranges from

several hours to one day in duration, a MEDRETES clinic will typically remain in location for at

least a two-week period. During the two-week clinic, U.S. military medical personnel will

provide host nation residents with public health education, primary medical care, pediatric care,

immunizations and pharmacy services (Adams 280). The following citation, from U.S. Air Force

Southern Command's MEDRETES fact sheet, demonstrates the shared benefits [to both the U.S. military and the host nation] that the MEDRETES model was designed to provide:

> The most valuable part of MEDRETES for units deploying is that it gives them real deployment and readiness experience, as well as experience operating in austere environments. For the host nation, MEDRETES provide health education, disease prevention training, and personal and professional exchanges (qtd. in Adams 292).

The reader will note that as with MEDCAPs, the primary purpose of MEDRETES is not the provision of care – that is a secondary benefit. The primary purpose is the provision of valuable training and operational experience for U.S. military medical personnel.

The U.S. military's authority to conduct humanitarian civic assistance programs as a means of readiness training[23] is firmly entrenched in U.S. government policy. U.S.C. Title 10, Armed Forces, Sect. 401 – *Humanitarian and Civic Assistance provided in conjunction with military operations*, authorizes the U.S. military to conduct humanitarian and civic assistance activities in conjunction with overseas training missions. The two caveats are that the activity must both promote the security interests of the U.S., and enhance the operational readiness skills of U.S. forces (U.S.C. 10, 401). The MEDRETES model, with its built-in training component, easily meets these two requirements. As with the MEDCAP, the overarching strategic intent of the MEDRETES program is political and not humanitarian. Former U.S. Southern Commander Admiral Stavridis, when discussing his views on the MEDRETES program stated, "I can think of few better ways to spread U.S. goodwill… The MEDRETES are a fundamental part of our mission to engage with the region." (qtd. in Adams 279). Differentiating MEDRETES from MEDCAPs is the fact that MEDRETES often return to the same theatre of operations [or host

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[23] The term 'readiness training' is commonly used within the military context to denote pre-deployment training in the member's field of employment.

nation] for subsequent MEDRETES. As a result, the MEDRETES program has the theoretical potential to provide some degree of follow-up care to host nation patients.

Currently, the U.S. military conducts MEDRETES missions around the globe. With their built-in training component, MEDRETES are increasingly used by both the U.S. National Guard and the U.S. military reserves to provide pre-deployment training and skills enhancement opportunities prior to deployment into theatres of operation (Adams 323). While the CAF does not independently conduct MEDRETES missions, CAF healthcare providers regularly participate in U.S-led MEDRETES missions.

As with the MEDCAP, critics believe that MEDRETES undermine local healthcare providers and the host nation health system through displacement or marginalization of local healthcare providers, coupled with heightened patient expectations regarding 'first world' healthcare (Rice and Jones 53; Avery and Bradley 74). As significantly, many believe that the MEDRETES reinforces U.S. hegemony and desire for continued global military dominance (Adams 280). Adams believes that the U.S. military's use of MEDRETES – thus in effect, the provision of medical care – in developing countries to meet strategic U.S. aims serves to affirm the "subtle complexities of the war machine around the world" (280).

As with the MEDCAP, humanitarian actors and healthcare providers alike have expressed concerns with the effect of MEDRETES on the local healthcare system. Abigail Adams participated in two U.S. military MEDRETES in South America – most recently in 2008. During both MEDRETES, she was employed as a translator. In her first-person account of her employment, Adams observes that while MEDRETE doctrine (to include U.S.C. Title 10 – Armed Forces) identifies that MEDRETES are to be conducted in 'underserved rural areas', this was not her experience. In both of the MEDRETES Adams participated in, the medical clinics

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were established in close proximity to an urban area (Adams 289). This close proximity, coupled

with the extensive use of local media to promote the clinics, resulted in significant numbers of

both patients and onlookers – many more in fact than it was possible for the U.S. team to assess

(Adams 289). Adams notes that following these clinics, military medical personnel expressed

concern that many of the clinic's patients had waited for the clinic and the free care that it

afforded – rather than seek care at a local clinic earlier (289). The detrimental effects of this

practice are twofold: the first, that by preferentially seeking care with the U.S. military, the local

healthcare system is undermined – and unpaid; the second, that while waiting for free U.S.

healthcare, the patient's condition could potentially deteriorate, rendering follow-up care [within

the local healthcare system] both more complicated and more expensive.

Summary. In conclusion, and as demonstrated in the military doctrine reviewed in Chapter

1, the primary motivation for military forces to conduct MEDCAP and MEDRETES missions is

not the provision of medical care. The motivation for conducting these programs is to further

geopolitical aims, to facilitate enhanced operational readiness training for military medical

personnel, and as an adjunct to military stability operations (Avery and Bradley 64). While it

could be argued that medical care is medical care, and that assistance is assistance, as will be

discussed, the inherent structure of these programs raises biomedical ethical concerns.

2.2   Humanitarian Assistance Disaster Response (HADR) missions

Humanitarian Assistance Disaster Response (HADR) missions are conducted in permissive

environments, in response to disasters of an order of magnitude higher than the affected nation's

capacity to respond to and recover from the disaster. In the last three decades, HADR missions

have been conducted by both the U.S. and CAF in response to disasters such as earthquakes,

tsunamis, landslides and floods (Moroney et al. 1; National Defence "The DART"). The

rationale for deploying a military force to respond to a disaster is multifactorial. In the U.S. military, for example, in addition to a tremendous number of human assets that can be used in support of humanitarian assistance and disaster (HADR) missions, the U.S. military possess substantial materiel and equipment assets. These assets include air and sea lift capabilities, engineering equipment, and medical resources. Coupled with these robust personnel and materiel resources, is the geographic distribution of U.S. forces into six unified combatant commands (COCOMS). These COCOMS include U.S. Pacific Command (USPACOM) in the Asia-Pacific region, and U.S. Southern Command (USSOUTHCOM) responsible for operations in Central America, South America and the Caribbean. The geographic dispersal of these six COCOMS facilitates the U.S. military's rapid response capability virtually anywhere in the world. In Canada, while the CAF lacks comparable human and materiel resources, the CAF has a dedicated Disaster Assistance Response Team (DART) that can be deployed on short notice for HADR missions anywhere in the world.

An HADR mission can only be conducted upon the request of the affected government. In simple terms, this means that regardless of the scope of the disaster, if the affected nation does not request assistance through formal government-to-government channels, [military] assistance will not be provided. In both the U.S. military and the CAF, the initial review of and approval for host nation requests for HADR occurs within the federal government, and not within the military command structure. In the U.S., the decision to deploy military assets is made by the U.S. Agency for International Development Office of Foreign Disaster Assistance (USAID/OFDA) (Moroney et al. 3). In Canada, it is both Global Affairs Canada (GAC) – formerly known as the Department of Foreign Affairs, Trade and Development (DFATD) – and the Department of National Defence that determines whether deployment of the DART is appropriate (National

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Defence "HODRO" 4-1). In both countries, after receiving the advice and recommendations of these stakeholders, the government will determine which national assets can best meet the needs of the affected nation. In the event that it is determined that a military response is appropriate, an HADR mission is conducted. As with humanitarian civic assistance programs, U.S. HADR missions are conducted under the legislative authority of the U.S. Codes, specifically, U.S.C. Title 22, *Foreign Relations and Intercourse*, and U.S.C. Title 10, *Armed Forces* (Serafino 1). The duration of an HADR will depend upon the magnitude of the disaster, the situation on the ground, and the host nation's ability to recover from that disaster. Within the CAF, however, a typical HADR mission ranges in length from 40 to 65 days (National Defence "DART").

The U.S. military conducts frequent HADR missions. Moroney and colleagues identify that in the last two decades, the U.S. military has conducted over 40 HADR missions in USPACOM alone (1). In contrast, the CAF has conducted seven HADR missions since 1998 (National Defence "The DART"). While the scope of U.S. and Canadian HADR activities differs, the basic components of both countries HADR missions are similar. Construction engineering assets are typically utilized to provide assistance with road clearance and debris removal, water engineers produce and provide potable water for the affected community(ies), and medical assets provide medical care to citizens affected by the disaster (National Defence "The DART"; USSOUTHCOM).

There is little doubt that HADR missions provide much needed services, including medical care and the provision of potable water, to individuals and communities impacted by disaster. For example, following the October 2005 earthquake in Pakistan, during Operation PLATEAU – an operation which lasted slightly less than two months – the CAF's DART produced and distributed almost 4 million litres of potable water and provided medical care to almost 12

thousand people (National Defence "The DART"). In April of 2015, in response to a devastating earthquake in Nepal, the CAF's DART deployed on Operation RENAISSANCE. During this one-month deployment, the CAF DART facilitated the distribution of potable water to over 3400 people and provided medical care to approximately 700 individuals. In addition, CAF engineering assets removed over 3000 cubic metres of rubble in their area of operations, providing critical access to affected areas for both residents and humanitarian actors (National Defence "The DART").

Critics of HADR missions believe that the use of the military in HADR both encourages the "militarization of aid" and facilitates "military expansion and dominance" (Fukushima et al. 2). In support of their hypothesis, Fukushima and colleagues note that following the USPACOM's robust response to the 2011 Japanese earthquake, which allegedly cost the U.S. $80 million dollars, the Japanese government formally endorsed the historically contentious U.S. military bases located in Okinawa, and extended their [host nation] support for a continued U.S. military presence in Okinawa for a further two years [thereby extending their bilateral agreement from three to five years] (2). However, not all Japanese citizens were happy about their government's increased support for the U.S. military. Fukushima et al., citing the Okinawa Times' [a local newspaper] describe the U.S. government's actions, post-disaster, as "political exploitation of the earthquake disaster." (2). Similar examples of U.S. geopolitical maneuvering can be found following other disasters. Following Typhoon Haiyan, which devastated parts of the Philippines in November 2013 – and resulted in HADR missions on the part of both the U.S. military and the CAF DART – the U.S. government, touting the success of the HADR mission, sought an agreement with the Philippines in support of greater military cooperation between the two nations (Fukushima et al. 2).

In addition to concerns surrounding the potential militarization of aid, critics of HADR believe that HADR missions – similar to MEDCAPs and MEDRETES - adversely impact the local healthcare system. Avery and Bradley report that the 2005 U.S. HADR mission in Pakistan, post-earthquake, effectively decimated a "functioning" local healthcare system in the U.S. area of operations (74), with local healthcare workers unable to compete with the free-of-charge 'first world' healthcare offered by the U.S. military (Avery and Bradley, 74). While the CAF is not mentioned by Avery and Bradley, the CAF's DART also deployed to Pakistan in 2005 and thus could have contributed to the damage to what was previously a functional healthcare system. This deleterious effect on the local healthcare system was noted again in Indonesia following the 2004 tsunami. Both the U.S. military and the CAF conducted HADR missions in that region post-tsunami. The influx in the availability of free [western] healthcare was, again, directly attributed to the closure of many local health clinics (Schultz qtd. in Avery and Bradley 75).

2.3 Chapter Summary

The humanitarian civic assistance programs discussed in this Chapter can bring much needed medical care to individuals and communities that may lack healthcare resources. HADR missions, in addition to medical care, bring potable water and engineering assets to communities adversely affected by disaster. The MEDCAP model - used both in permissive environments and in times of war and conflict - presents perhaps the greatest biomedical ethical challenges for healthcare workers. This is in large part due to its 'one-day clinic' model, which leaves healthcare providers with absolutely no opportunity to follow patients through the course of their illness or injury. Coupled with this lack of ability to follow-up, is the fact that the motivation driving MEDCAPs has historically been to garner support for the military force [conducting the MEDCAP], and not the provision of medical care to civilians.

The MEDRETES program, conducted in permissive environments and with host nation support, while by no means perfect, is an improvement on the MEDCAP model. Under the MEDRETES program, clinics are typically conducted in one location for a two-week period, and in many instances, the U.S. military returns to the same countries annually or bi-annually, potentially facilitating follow-up care. Despite this increased potential ability for healthcare provider follow up, as discussed herein, MEDRETES have been shown to displace local healthcare providers. In addition, and as with MEDCAPs, MEDRETES are not motivated by altruism – in the form of the provision of medical care – but by politics and the potential strategic gains [to include the training benefits for U.S. military healthcare providers] realized by the U.S. military.

Finally, this chapter examined the HADR program, the longest in duration of the programs discussed [HADR missions typically last between one to two months]. Healthcare providers on a HADR mission experience many of the same challenges posed by both MEDCAPs and MEDRETES. Cultural and linguistic challenges, for example, are common in the HADR mission environment. When serving on an HADR mission in Pakistan in 2005 with the CAF DART, this author experienced first-hand the subordination of women in that country. Women were consistently relegated [by the local males] to the back of the triage queue, and once in a treatment bay, were accompanied by a male relative and only 'allowed' to be examined by a female healthcare practitioner. Overlaid upon the various cultural and linguistic challenges faced during HADR missions, the [relatively] short duration of the HADR mission adversely affects the ability of healthcare providers to treat chronic conditions. In addition, an unintended consequence of HADR missions, like the MEDRETES program, is the displacement and/or

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marginalization of local healthcare providers. Finally, and as covered herein, many critics

believe that HADR missions represent the politicization and militarization of aid.

In conclusion, this chapter described the three programs falling under the umbrella of

humanitarian civic assistance programs. It is hoped that the descriptions of these programs

enabled the reader to appreciate some of the structural and operational constraints inherent to

these programs. It is these very structural and operational constraints that affect the delivery of

quality medical care, potentially increase situational vulnerability, and as importantly, challenge

the ability of military healthcare providers to fully apply the guiding principles of biomedical

ethics.

Chapter 3

Vulnerability

By their very nature, medically-focused humanitarian civic assistance programs, require the interaction of military medical personnel with vulnerable members of society. They are vulnerable in some instances because they live in a war or conflict zone [MEDCAP model], in others, because their community has just experienced a natural disaster [HADR program, e.g., DART]. In still other cases, they may live in a developing country with an under-resourced healthcare system [MEDRETES program]. Overlaid upon these situational vulnerabilities is the asymmetrical power balance between the healthcare provider and the patient [with the healthcare provider in possession of the medical knowledge that the patient seeks, and thus the balance of power] (Goodyear-Smith and Buetow 450).

Regardless of their personal circumstances, patients seeking medical care by military healthcare providers typically seek that care because [in most instances] it is not readily available elsewhere. This is the crux of humanitarian civic assistance programs. Were medical care readily available, intervention - in the form of a humanitarian civic assistance mission - would be neither necessary nor justifiable. Thus, any biomedical ethical inquiry into the military provision of healthcare to civilians under the auspices of humanitarian civic assistance programs, must also include an examination of the incorporation [within these programs] of the concept of vulnerability.

This chapter presents the concept of vulnerability, with a view towards identifying the potential factors that impact individual- and population-level vulnerability within the humanitarian civic assistance programs' patient population. To facilitate this presentation, a review of existing biomedical ethical frameworks will first be conducted to examine how these

frameworks incorporate the concept of vulnerability. This will be a vulnerability-focused review only; a comprehensive overview of these biomedical ethical frameworks will be conducted in the next chapter. Following this framework review, the social determinants of health will be examined. The social determinants of health are routinely used by public health professionals to identify vulnerable individuals or groups within a community (Mikkonen and Raphael 9). Subsequently, UNESCO's *Universal Declaration on Bioethics and Human Rights*, with its emphasis on human vulnerability, will be discussed. The chapter concludes with an assessment of the incorporation of the concept of vulnerability into military doctrine.

Existing biomedical frameworks and vulnerability. The concept of vulnerability, while often not mentioned explicitly, is infused throughout biomedical ethics frameworks and principles. In fact, Rogers and colleagues identify the concept of vulnerability as central to the bioethical inquiry (12). They suggest that the concept of vulnerability was formally introduced into bioethical frameworks – and in particular research ethics - with the release of the Nuremburg Code and later, the Declaration of Helsinki (14). These frameworks, which introduced the requirement for informed consent, were developed to protect vulnerable members of society from harm during research trials (14). The Belmont Report expanded upon this concept of vulnerability [and also informed consent] through the identification of core vulnerable groups. The Report identified that "racial minorities, the economically disadvantaged, the very sick, and the institutionalized" were worthy of special consideration due to their potentially limited ability to provide informed consent (Rogers et al. 14). The Belmont Report's conceptualization of universal vulnerability within certain population groups (e.g., the blanket categorization of racial minorities as vulnerable), while presumably derived from a position of altruism, is problematic for many reasons. I suggest that the Report's linkages between socio-

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economic status, race, and health, to potential difficulties in providing informed consent, are potentially racist and overly paternalistic.

The reader will note that the biomedical ethical frameworks presented herein are medical research ethics frameworks. The inclusion of these frameworks is not accidental. In many respects, the medical care delivered under the auspices of humanitarian civic action programs, including the associated vulnerabilities within the patient population, shares commonalities with a clinical research trial. This will be discussed in greater detail in Chapter 4.

The social determinants of health. In the public health context, Flaskerud and Winslow define vulnerable populations as "social groups who have an increased relative risk of susceptibility to adverse health outcomes" (70 qtd. in Rogers et al. 17). The particular social groups with an increased risk of poor health outcomes are not identified by Flaskerud and Winslow. However, within the public health sphere, it is the social determinants of health [often also referred to as 'key' determinants of health] that are typically used to identify vulnerable members of society. Although there are many models and frameworks that identify the social determinants of health, Mikkonen and Raphael's framework, developed in 2002, is broadly used in Canada (Mikkonen and Raphael 9). Mikkonen and Raphael's 14 social determinants of health (identified in figure 1) have been shown to have a greater impact on an individual's overall health status than the adverse effects associated with smoking, excessive alcohol intake, or a lack of physical activity (9). When reviewing Mikkonen and Raphael's 14 social determinants of health, it is clear that the effects of conflicts, wars and natural disasters will result in large segments of the affected population becoming adversely impacted by one or more of these determinants. For example, in a nation affected by civil war or disaster, housing may be damaged - or worse, become inaccessible, loss of income and employment is possible, education may be

put on hold, food insecurity is likely, as is a decline in the nation's social safety net and the provision of health services. All of these factors combine to introduce both individual- and population-level vulnerabilities where previously neither may have existed. Consequently, while in the pre-war or pre-disaster state the affected population may not have been vulnerable, the adverse effects of war, conflict or disaster may serve to render them vulnerable (Mikkonen and Raphael 9):

Figure 1. Mikkonen and Raphael's 14 Social Determinants of Health (9)

Aboriginal status	Gender
Disability	Housing
Early life	Income and income distribution
Education	Race
Social exclusion	Employment and working conditions
Food insecurity	Social safety net
Health services	Unemployment and job security

Rogers and colleagues[24] ascribe the term "situational vulnerability" to situation- or context-specific vulnerability (24). Expanding upon the concept of situational vulnerability, Rogers et al. note that situational vulnerability is "caused or exacerbated by the personal, social, political, economic, or environmental situation of a person or social group" (24). Situational vulnerability may be variously short-term or long-term, or in some instances, permanent (Rogers et al. 24). In a war-torn country like Afghanistan, for example, an individual may be left vulnerable across

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[24] Rogers et al. note that Dunn, Clare and Holland have also utilized the term "situational vulnerability" when referring to context-specific vulnerability (33).

their life span due to the adverse effects of decades of war. Conversely, for an affluent Indonesian male [or female], the effects of that country's tsunami may result in short-term situational vulnerability. While the individuals described above have experienced completely different life events, these events have both resulted in situational vulnerability. Importantly, both of these individuals belong to population groups that are the focus for humanitarian civic assistance programs. It is therefore reasonable to categorize the primary patient population targeted by humanitarian civic assistance programs as vulnerable.

The patients of a humanitarian civic assistance program, however, are not the only individuals that may experience situational vulnerability. As previously discussed, it is broadly believed that humanitarian civic assistance programs can have a deleterious effect on local healthcare providers. While many critics have suggested that these programs may result in the displacement of local healthcare providers, potentially as damaging is Rice and Jones' argument that these programs may inhibit skill development in local physicians (53). To counter this potential effect, Rice and Jones recommend providing incentives (e.g., training programs) for local physicians to augment and develop their skills. It is their position that a capacity-building approach will have a greater long-term positive effect on the local health care system than simply the provision of medical care (53).

The approach proposed by Rice and Jones aligns with Rogers and colleagues' recommendations for mitigating situational vulnerability. Rogers and colleagues favour an approach that enables agency, suggesting that any intervention aimed at reducing vulnerability should engage – as much as is possible – the agency and participation of the affected individuals and/or groups (25). Working with local physicians to develop their skills and augment their experience neatly aligns with the recommendations of enhancing agency and increasing

participation proposed by Rogers and colleagues (25). In addition, when viewed through a broader lens, by reducing the situational vulnerability of the local physician through both skills enhancement and retention in the community, this approach would result in a parallel mitigating effect on the situational vulnerability of the community as a whole.

The UNESCO Declaration. "Vulnerability is caused or exacerbated by a lack of means and of the capacity to protect oneself" (UNESCO para 9). UNESCO indirectly acknowledges the effects of conflict on vulnerability in Article 8 of their *Universal Declaration on Bioethics and Human Rights*. Article 8, *Respect for human vulnerability and personal integrity*, identifies that,

> In applying and advancing scientific knowledge, medicine practice and associated technologies, human vulnerabilities should be taken into account. Individuals and groups of special vulnerability should be protected and the personal integrity of such individuals respected.

Within Article 8, UNESCO identifies two categories of individuals and/or situations requiring greater attention. The first, individuals with "special (temporary or permanent) disabilities, disease and limitations imposed by the stages of human life" (para 12). The second, "social, political and environmental determinants: for example, culture, economy, relations of power, natural disasters" (para 12). It is this second category that emphasizes the effects of conflicts, war or natural disaster on vulnerability. The UNESCO Declaration speaks to the potential detrimental effects of social, political and environmental determinants when it notes that "many individuals, groups and populations nowadays become especially vulnerable because of factors created and implemented by other human beings, in many cases in blatant violation of fundamental human rights" (para 14).

While as human beings, we are all potentially vulnerable, there are many segments of our global population that, by virtue of their individual, societal or environmental situations, are more vulnerable than others. The effects of war, conflict or disaster, when superimposed upon existing inherent vulnerabilities, can exponentially increase these existing vulnerabilities. The UNESCO declaration calls for governments, institutions and individuals to exercise "greater vigilance in protecting the well-being of every human being…" and to ensure that the principle of *Respect for vulnerability and personal integrity* is incorporated into existing biomedical ethics principles (para 9).

Military policy and guidance. Of the policy instruments and military doctrine reviewed in Chapter 1 of this thesis, it is only NATO Standard AJP-3.4.3, *Allied Joint Doctrine for the Military Contribution to Humanitarian Assistance*, that addresses - even peripherally – the concept of vulnerability. This publication identifies four guiding principles that should shape military contribution to humanitarian assistance: Humanity, Impartiality, Neutrality and Independence. It is the principle of humanity that references vulnerability, specifically, "Human suffering must be addressed wherever it is found, with particular attention to the most vulnerable in the population, such as children, women and the elderly" (1-1). While NATO's acknowledgment [albeit limited] of human suffering and vulnerability is a move in the right direction, this single reference to vulnerability is insufficient. Regardless of gender or age, arguably all citizens of a conflict- or disaster-affected state will be adversely affected - and therefore made increasingly vulnerable – by the conflict or situation which initially resulted in NATO's involvement. As the self-described aim of this NATO publication is to "describe the overarching guidelines and fundamentals for commanders and staff officers in planning and providing support to humanitarian assistance" (IX), it is disappointing that the concept of

vulnerability does not feature more prominently. I argue that this deficit could be remedied within NATO doctrine by specifically addressing the concept of situational vulnerability and the concomitant guidance to commanders of potential mitigation measures during humanitarian operations, such as those presented herein.

Summary. Rogers and colleagues argue that there is a "moral and political obligation" to both support those who are vulnerable and to reduce the risk faced by others from transitioning from temporary into permanent vulnerability (25). This raises the question, do humanitarian civic assistance programs reduce an individual's situational vulnerability? At first glance, the answer is a resounding 'yes'. The provision of medical care to an individual in need of aid certainly reduces aspects of vulnerability. When delving a little deeper however, the answer is not that clear. By displacing local healthcare providers, the downstream effect being the shuttering of local health clinics, humanitarian civic assistance programs could be equated to putting a sling on an arm that has been fractured in multiple places - while the sling may temporarily reduce the pain, it will not heal the fractures. Certainly, vulnerable individuals will receive short-term medical care through the humanitarian civic assistance program, but when the military equipment is packed up, and the military healthcare providers have left the community, the displacement of local healthcare providers will have created a capability gap in the community that didn't previously exist. As a result, the community as a whole has become more vulnerable.

There can be little doubt that the population served by humanitarian civic assistance programs is a vulnerable population. Policy makers, operational planners and military healthcare providers need to be both educated about and cognizant of the mission-specific vulnerabilities that may affect their target population, and the potential adverse effects of these vulnerabilities on both patient health and community outcomes. The inclusion of vulnerability-centric

information in humanitarian civic assistance program doctrine [to include policy and guidance documents] and in pre-mission training sessions would serve to educate and inform healthcare providers. This would be a positive step towards ensuring that the medical care provided is sustainable by the host nation post-mission, and as importantly, that the situational vulnerability experienced by the target patient population does not transition from short-term into permanent vulnerability as a result of the humanitarian civic assistance mission.

Chapter 4

Biomedical Ethics

The codification of medical ethics predates many contemporary ethical frameworks (e.g. deontology, consequentialism). The 4th century physician/philosopher Hippocrates is credited with the sage words directing physicians "to help and do no harm" (*Epidemics* 1780 qtd. in McCormick). In order to appreciate how biomedical ethics have evolved to their contemporary state, it is instructive to review some of the historical markers in the field of biomedical ethics. This section commences with an acknowledgement of what is believed to be the first published comprehensive biomedical ethics text, Dr. Thomas Percival's *Medical Ethics*, and then reviews both the *Nuremburg Code* and the *Declaration of Helsinki*. Next, and building upon the requirement for informed consent identified in both the Nuremburg Code and the Declaration of Helsinki, the *Belmont Report*, and the genesis for its development, the Tuskegee Syphilis Study, will be covered. Finally, the reader is introduced to the *Canadian Forces Health Services Group Code of Ethics*. The inclusion of the Code is particularly important since it outlines the biomedical ethics framework guiding CAF military healthcare providers.

4.1   The Evolution of Biomedical Ethics

As mentioned briefly in Chapter 3, the reader will note that the frameworks presented in this section include both medical research ethics frameworks and clinical medicine frameworks. The incorporation of ethical frameworks for medical research and clinical medicine was driven by two factors. The first factor, is that the inclusion of medical research frameworks highlights the historical evolution of the four guiding principles that were subsequently adapted for clinical medicine: *Respect for Autonomy* [with particular focus on the requirement for informed consent], *Nonmaleficence*, *Beneficence*, and *Justice*. The second factor is that in many respects, the

medical care delivered under the auspices of humanitarian civic action programs shares

commonalities with a clinical research trial. As a result, the patients that seek care during a

MEDCAP, MEDRETES or an HADR, are similar in many respects to the participants in a drug

trial. For example, both the patient seeing a healthcare provider and the research trial participant

are motivated by the desire for a 'miracle' cure for their medical condition. In the case of the

patient, this may stem from a belief that western medicine can provide the cure or treatment that

their national healthcare system cannot. In addition, [and dependent upon the design of the drug

trial] both the patient and the participant may have only one encounter with the physician or

researcher. Finally, and as discussed in Chapter 3, both the patient and the participant may fall

into what is considered a vulnerable group.

   Medical Ethics. What is thought to be the first comprehensive biomedical ethics text was

published in 1803 (Beauchamp and Childress 13). The text, *Medical Ethics*, written by British

physician Thomas Percival, emphasized the importance of *beneficence* and *nonmaleficence* in

the practice of clinical medicine. Interestingly, and perhaps simply a societal reflection of his

time, Percival ranked both *beneficence* and *nonmaleficence* as higher in priority for the physician

than either *respect for autonomy* or *justice* (Beauchamp and Childress 13). Today, Percival's text

is heralded as the archetype for the American Medical Association's first code of ethics,

published in 1847 (Beauchamp and Childress 13).

   The Nuremberg Code. In 1946, as part of the greater Nuremberg Trials, what became

known as 'the Doctors' Trial' commenced in Nuremberg, Germany. The Doctors' Trial was held

in judgement of 23 German defendants, 20 of whom were physicians, "accused of murder and

torture in the conduct of medical experiments on concentration camp inmates" (Shuster 1437).

Thus, the charges were for war crimes and crimes against humanity during World War II

(Shuster 1437; Bulger 81). At the end of the seven-month long trial, sixteen of the 23 defendants were found guilty – sentences ranged from death by hanging, to life in prison, to imprisonment for 25, 15 or 10 years - the remaining seven were acquitted (Shuster 1437). During the Doctors' Trial the Nuremburg Code was drafted in 1947 by two American physicians, Leo Alexander and Andrew Ivy (Shuster 1436). Formally released in 1948, Shuster argues that the Nuremburg Code is "the most important document in the history of the ethics of medical research" (1436). The Code was the first international document to codify standards for research on human subjects – in particular, the requirement for *voluntary* informed consent (Bulger 81; Shuster 1436). Consisting of 10 principles, all aimed at ensuring the protection of human research subjects participating in biomedical research, the Code is still used by medical researchers today (Shuster 1437). Unfortunately, the Code was not then, nor has it since been, ratified into law by the international community (Shuster 1439; Bulger 81). Despite this, Shuster posits that the Nuremberg Code – and, in particular, the requirement for voluntary informed consent - has had a significant positive effect on protecting the rights of human research subjects, and advancing the fields of both human rights law and biomedical ethics (1439).

    The Declaration of Helsinki. In June 1964, at their meeting in Helsinki, the World Medical Association (WMA) formally released the final draft of the *World Medical Association Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Subject*s (Carlson et al. 695). While the Nuremburg Code is widely acknowledged as the source document for the Declaration, it is the Declaration that has since been described as "the most widely recognized source of ethical guidance for biomedical research" (Macklin qtd. in Carlson et al. 695).

In the 52 years since its original release, the Declaration has undergone seven amendments, the most recent of which occurred in 2013 at the 64th WMA General Assembly in Brazil, and the addition of two Notes of Clarification (WMA 2191). The original Declaration of Helsinki, consisting of slightly over 700 words, was a concise document, the intent of which was to provide a set of basic ethical guidelines or principles for doctors[25] working in medical research. Many of the guiding principles within the Declaration, while primarily intended for the physician-researcher, are equally as applicable to the family physician. For example, General Principle Number 4 states:

> It is the duty of the physician to promote and safeguard the health, well-being and rights of patients, including those who are involved in medical research. The physician's knowledge and conscience are dedicated to the fulfillment of this duty (WMA 2191).

Over the years and with each subsequent amendment, the contents of the Declaration increased, to its present length of slightly under 2000 words. As with any framework or code, the Declaration is not without its critics. Researchers and ethicists alike have raised concerns regarding various amendments made to the Declaration. In their historical review of the amendments made to the Declaration of Helsinki, Carlson and colleagues highlight as particularly controversial, the incorporation of ethical requirements for placebo-controlled trials[26] at the 48rd WMA General Assembly [held in 1996 in South Africa] (700).

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[25] The term 'doctor(s)' was used within the Declaration of Helsinki until 1983, at which time it was replaced with 'physician(s)' (Carlson et al. 697).

[26] In 1996, the reference to placebo use was contained in Paragraph 29 of the Declaration. Three amendments later, the "Use of Placebo" falls under Paragraph 33 of the current Declaration (Carlson et al. 700; WMA 2193).

Today, the Declaration of Helsinki and the Nuremburg Code are considered two of the best known, and certainly most significant, guidance documents relating to bioethics in medical research (Carlson et al. 706).

The Belmont Report. The release of the Belmont Report in 1979 by America's National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research is another significant marker in the history of biomedical ethics (Bulger 81). The Belmont Report identified the principles of *Respect for Persons, Beneficence* and *Justice* as the bioethical principles particularly applicable to biomedical and behavioral research (Bulger 81). Although released in 1979, the tragic impetus for the Belmont Report – the Tuskegee Syphilis Study – occurred much earlier.

The Tuskegee Syphilis Study ran from 1932-1973 and will undoubtedly be remembered in history as one of the United States government's most significant exploitation of a vulnerable group and greatest violations of informed consent. This study, the aim of which was to study untreated syphilis in the "Negro Male" (Centers for Disease Control "The Tuskegee Timeline"), had the support of the U.S. Centers for Disease Control, the American Medical Association and the National Medical Association. It did not, however, have the informed consent of the study participants (Centers for Disease Control "The Tuskegee Timeline"). Conducted by the U.S. Public Health Service in Tuskegee, Alabama, in conjunction with the Tuskegee Institute, the study ran from 1932 through to 1973 (Bulger 82-83). Six hundred African-American males from low-income households were recruited for the study. Free medical care and medicine, free lunches, and transportation to and from medical appointments were promised to the study participants – 399 of whom were unaware that they were infected with syphilis (Bulger 82; Beauchamp and Childress 139). As syphilis is transmissible through sexual intercourse, many of

the participant's sexual partners and/or wives became infected with syphilis, subsequently, several partners also gave birth to children born with congenital syphilis (Bulger 83).

The cure for syphilis for much of the study period[27] – and still today – was the readily available antibiotic penicillin (Centers for Disease Control "The Tuskegee Timeline"). However, study participants were typically unaware that they had syphilis, and furthermore were denied the opportunity by the medical establishment for this readily available cure. If participants somehow found out that they had syphilis, they were treated with ineffective placebo medication (Bulger 83). Participants who sought medical care from physicians outside of the study group fared no better. In such instances, study researchers would intervene, and treatment would be prevented (Bulger 83).

Despite questions and concerns regarding the ethics and morality of the study, many of which were raised by physicians within the Public Health Service, the study continued until 1973 with the continued support and endorsement of the U.S. Centers for Disease Control, the American Medical Association and the National Medical Association (Bulger 83; Centers for Disease Control "The Tuskegee Timeline"). In 1972, Dr. Peter Buxton, a physician within the Public Health Service, frustrated after several failed attempts to halt the study on moral grounds, wrote an exposé which was subsequently published in both the Washington Star and the New York Times in July 1972 (Bulger 83). Not surprisingly, the public outcry that followed was immense, and resulted in the formation of an advisory panel to examine the study. The panel found the study to be "medically unjustified" and the study was finally halted in 1973 (Bulger 83).

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[27] Penicillin is identified as the 'treatment of choice' for syphilis in 1945 (Centers for Disease Control "The Tuskegee Timeline).

As a direct result of the Tuskegee Syphilis Study, in July 1974 the National Commission for the Protection of Human Subject of Biomedical and Behavioral Research was formed. The subsequent Belmont Report, promulgated at the Smithsonian Institute's Belmont Conference Center was released in 1979 (U.S. Department of Health and Human Services). The three core principles of biomedical ethics that the Report endorsed [Respect for Persons, Beneficence and Justice], have been ascribed as "the genesis of what has now evolved into the moral approach of Principlism" (Bulger 83).

The Canadian Forces Health Services Group Code of Ethics. In recognition of the unique challenges faced by military medical personnel, the Canadian Forces Health Services Group promulgated the *Canadian Forces Health Services Group Code of Ethics – A Framework for Ethical Decision-Making*. Formally released in 2007, under the leadership of former Surgeon General Jung, the Code remains unchanged today. The stated mission of the Code, is "to guide Canadian Forces Health Services Group personnel in choosing conduct that is consistently ethical" (Canadian Forces Health Services Group "Code of Ethics" 2).

The Code endorses Beauchamp and Childress' four guiding principles of biomedical ethics and outlines their application for Canadian Forces medical personnel. Annex A of the Code, *Ethical Dilemma Cases*, provides readers with Health Services Group-specific case studies, designed to facilitate group or team dialogue. Annex B, the final section of the Code, contains a glossary of ethical terms [e.g., military ethos, harm dilemma, doctrine of double effect] intended to educate and assist the reader when working through the case studies.

Unfortunately, the greatest challenge facing the Code is that its existence is not widely known within Health Services Group. Although employed as a public health advisor, this author also fills the position of Health Services Group Headquarters 'Ethics Coordinator'. In that

capacity, regular ethics briefings and training sessions are provided to Health Services Group

members of the Defence Team, to include physicians, nurses, pharmacists and medical

technicians. To date, not one member that has been briefed [n~100] has been aware that the

Health Services Group Code of Ethics exists. This lack of awareness of the existence of the Code

[and as a result, the principles that it espouses] amongst Health Services personnel represents

both a challenge and an opportunity for the leadership of the Health Services Group. If military

medical personnel – the majority of whom are not physicians and therefore may not have

received formal training in biomedical ethics – are not provided with either the tools or the

guidance to conduct their duties ethically, one should not be surprised if they falter when

situations prove ethically challenging.

  Summary. Each of the biomedical ethical frameworks and codes presented herein, whether

developed as a medical research frameworks or a clinical medicine framework, built upon and

further advanced the field of biomedical ethics and the guiding principles of respect for

autonomy, nonmaleficence, beneficence and justice. Dr. Percival's *Medical Ethics* text in 1803,

the prototype for existing clinical medicine codes, emphasized the importance of beneficence

and nonmaleficence in clinical medicine. The 10-principle *Nuremburg Code*, still used by

biomedical researchers today, emphasized the requirement for informed consent. The

Declaration of Helsinki, applicable to both physicians and researchers, identified the duty of the

physician to promote and safeguard the health, well-being and rights of patients (WMA 2191).

The Belmont Report endorsed the principles of respect for persons [autonomy], beneficence, and

justice, and has been described by some academics as the genesis for Beauchamp and Childress'

principlism approach (Bulger 83). Finally, the *Canadian Forces Health Services Group Code of*

Ethics endorses Beauchamp and Childress' approach, and identifies their four guiding principles as the ethical approach that Health Services personnel will follow in the conduct of their duties.

4.2   Beauchamp and Childress' Principles of Biomedical Ethics

1500 years after Hippocrates' immortal words of "to help and do no harm", and two years before the Belmont Report was released, the first edition of Beauchamp and Childress' *Principles of Biomedical Ethics* went to press in 1977. Drawing from existing ethical frameworks, theories, and principles espoused in philosophy, biomedical research and clinical medicine, their 'principlism approach' to bioethics has become one of the most widely known ethical frameworks for clinical medicine (McCormick; Bulger 85). In the almost forty years and seven editions since initial publication[28], the four non-hierarchical guiding moral principles that their text explicates have remained fundamentally unchanged: *Respect for Autonomy, Nonmaleficence, Beneficence, and Justice*. Beauchamp and Childress acknowledge that their guiding principles are derived from the ten universal norms [also referred to as common morality] shared by all persons, for example, do not kill, do not steal, and tell the truth (3). They note that the biomedical ethics literature acknowledges the merit of these universal norms, identifying that while debate about their exact meaning or scope may occur, debates about their inclusion and acceptability as universal norms do not (3). Therefore, it is their conclusion that their approach, and the resultant four guiding moral principles derived from the common morality, forms a "suitable starting point for biomedical ethics" (13).

A critique of Beauchamp and Childress' principlism approach. Perhaps not surprisingly in light of its status as the "most developed" of the principlist accounts, the principles of biomedical ethics promulgated by Beauchamp and Childress have been the subject of much

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[28] The seventh edition of Beauchamp and Childress' *Principles of Biomedical Ethics* was published in 2013. It is this seventh edition that is utilized herein.

criticism and academic debate within the bioethics community (Gert et al. 100). In their paper,

Critique of Principlism, published in 1990, Gert and Clouser argue that Beauchamp and

Childress have effectively substituted the term 'principlism' [and the four principles it entails]

for either moral theory or moral rules (219). Gert and Clouser further argue that the principles

proposed by Beauchamp and Childress cannot function as "guides to action" as they are merely a

collection of four tenuously related ideals, which in many instances conflict with each other

(219).

There is validity to the concerns raised by Gert and Clouser, as principlism draws on

aspects of several distinct and unrelated ethical theories. In her examination of Beauchamp and

Childress' *Principles of Biomedical Ethics*, Erig Osario de Azambuja notes that their principles

channel Kantian theory [respect for autonomy], utilitarian theory [beneficence], Rawlsian theory

[justice] and Gert's own common morality theory [nonmaleficence] (635). Thus, as Gert and

Clouser charge, it is difficult to imagine that a single "unified moral theory" could be built upon

the framework of four individual – and theoretically disparate – ethical theories (219). Gert and

Clouser believe that without this unifying underpinning, the four principles cannot function as an

autonomous guide. Indeed, they believe that under critical examination, the four principles [and

by extension, the path to right action] may in fact conflict (qtd. in Erig Osario de Azambuja 635).

It is precisely this potential conflict that forms the heart of the criticisms directed towards

the work of Beauchamp and Childress. While each of the principles stands up on their own merit,

there is no underlying fabric that binds them together as one coherent theory. The result, as Gert,

Culver and Clouser lament, is that in effect, the reader is left with the option to "choose the

theory, maxim, principle, or rule that best suits you" (110). In what can only be described as a

gentle defence of the four principles, Erig Osario de Azambuja notes that when examined in

isolation, the principles themselves are clear, but concedes that when examined collectively, and under the guise of principlism, problems with the framework are apparent (635).

Undoubtedly, in response to these [and other] criticisms, since the publication of the 4th edition in 1994, each successive edition of the *Principles of Biomedical Ethics* has aligned itself more closely with common morality theory. In the 7th edition published in 2013, Beauchamp and Childress state,

> We do not claim that our four clusters of principles form the conceptual heart of the common morality in a way that other principles, rules, rights, and virtues do not. Our claim is merely that we draw from the common morality to formulate the principles of biomedical ethics in our book (421).

This alignment marks a significant change from earlier editions of this text, which prior to the 4th edition, did not make mention of common morality or the common morality theory (Erig Osario de Azambuja 637).

Despite regular – and ongoing – criticism of Beauchamp and Childress' principlism approach, Gert and colleagues acknowledge that the work of Beauchamp and Childress has shaped the field of bioethics and is "the very best the position has to offer" (100). On the rear jacket cover of Beauchamp and Childress' 7th edition of the *Principles of Biomedical Ethics*, Gert gives credit to the authors for continuing to listen and respond to the work of critics [Gert acknowledges that he is one], and for adjusting their book accordingly. Gert concludes by maintaining that while he still "has problems with the theory of principlism"; he has nothing but admiration for the work of Beauchamp and Childress (qtd. in Beauchamp and Childress, rear jacket cover).

Rationale for the selection of Beauchamp and Childress' approach. In light of the concerns expressed by Gert and colleagues and others, the reader may wonder why this author has chosen to utilize Beauchamp and Childress' principles of biomedical ethics approach to assess the biomedical ethical challenges facing military healthcare providers in the provision of medical care to civilians. There are three reasons that Beauchamp and Childress' approach was chosen.

The first is that the principlism approach to bioethics is arguably the most studied and the most entrenched of the bioethical approaches to clinical medicine in the western world (Gert et al. 100; Erig Osario de Azambuja 632; McCormick; Bulger 85). Therefore, this analysis of the biomedical ethical challenges faced by military healthcare providers on humanitarian civic assistance programs will be both familiar to - and understood by - clinicians and academics alike.

The second reason is that while the criticisms of this approach are valid, as noted by Erig Osario de Azambuja, when examined in isolation, each of the four principles is clear and capable of standing on its own merit (635). This ability to examine each of the principles in isolation facilitates the analysis, both independently and collectively, of the biomedical ethical challenges posed by the provision of medical care under the auspices of the humanitarian civic assistance program.

The third and final reason for the selection of this approach is that the principlism approach to biomedical ethics has been adopted by the Canadian Forces Health Services Group [this author's employer]. The internal publication "*Canadian Forces Health Services Group Code of Ethics – A Framework for Ethical Decision Making*" endorses the principles posited by Beauchamp and Childress and recommends their use in clinical decision making.

Every member of the CF H Svcs Gp community is responsible for treating those who turn to us for help with equal concern and respect. The CF H Svcs Gp code of ethics reflects this responsibility, and our commitment to having our practices and daily conduct reflect the values and beliefs of our organization. We consider the following guiding principles to be central to the task of creating a healing environment: Autonomy; Nonmaleficence; Beneficence; and Justice (Canadian Forces Health Services Group "Code of Ethics" 2).

Thus, for Canadian Forces Health Services Group personnel, Beauchamp and Childress' principlism approach is the de-facto approach to be utilized when faced with biomedical challenges. To that end, Beauchamp and Childress' account is an appropriate lens under which to assess the biomedical challenges faced by military healthcare providers during humanitarian civic assistance programs.

4.3   The Four Guiding Principles.

This section delves into the four guiding principles, examining each in turn. An overview of each principle and the moral obligations pertaining to that principle will be provided. Subsequently, a discussion of the application of each principle in the context of humanitarian civic assistance programs will occur. It is within this discussion that the potential challenges, and where possible, potential mitigation measures, will be presented.

***The Principal of Respect for Autonomy*.** "Personal autonomy encompasses self-rule that is free from both controlling interferences by others and limitations that prevent meaningful choice, such as inadequate understanding" (Beauchamp and Childress 101). The principle of respect for autonomy provides the moral foundation for the concept of 'informed consent' (McCormick). Beauchamp and Childress write that "normal choosers" act autonomously when they "act

intentionally, with understanding, and without controlling influences" (104)[29]. They note that

while the first condition [act intentionally] - is binary [the act is either intentional or

unintentional]; the other two conditions [with understanding and without controlling influences]

can be conceptualized as a matter of degree (105). An individual's degree of understanding, for

example, may be impaired by communication difficulties. Beauchamp and Childress emphasize

that the principle of respect for autonomy, although the first of their four guiding principles, does

not have a "moral priority" over the other three guiding principles (101). However, they do note

that in the profession of health care, the principle of respect for autonomy is not only a guiding

principle, it is also a "professional obligation" (110).

   Respect for Autonomy in the context of a humanitarian civic assistance mission. In an

environment where medical provider and patient speak different languages, the ability to

accurately communicate complex medical information – and thereby ensure patient

understanding – may be difficult, regardless of whether an interpreter is used. In addition to

linguistic barriers, cultural and religious challenges are also common. In the Muslim faith, for

example, gender concordant care is typically preferred (Padela et al. 711-712). As a result,

female patients may preferentially seek care from a female healthcare provider. This preference

for like-gendered healthcare providers can be challenging to operationalize. Both the U.S.

military and the CAF are predominantly male[30]. This gender imbalance may reduce the potential

for female patients to receive treatment from female healthcare providers. The experience of U.S.

forces conducting MEDCAPs in Tarin Kowt, Afghanistan, highlights that region's cultural and

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[29] It is acknowledged that Beauchamp and Childress present a Western view of Autonomy. In many non-western
cultures, familial autonomy - wherein the family makes healthcare-related decisions as a group - may be as prevalent
as the concept of individual autonomy Beauchamp and Childress present (Kara 628).

[30] Approximately 84% of U.S. military personnel are male (DoD "2014 Demographics" 6). In the CAF the rate is
comparable, with males comprising approximately 85% of the Regular force (National Defence "Women in the
CAF").

religious preferences for like-gendered healthcare providers. Sergeant Preston recounts that U.S. MEDCAPs conducted in Tarin Kowt in 2004, while considered successful, consistently provided medical care to significantly more male patients than female patients (Preston). The U.S. healthcare providers in this region quickly realized that due to existing cultural norms, women were strongly discouraged - and in some cases, forbidden - from attending their MEDCAP clinics [where both male and female healthcare providers worked]. In response, the U.S. military created an all-female healthcare provider team to conduct two MEDCAPs in Tarin Kowt. Highly successful, these all-female MEDCAPs ultimately treated over 200 Afghan women (Preston).

In addition to gender and cultural sensitivities, healthcare providers often struggle when determining appropriate treatment modalities and patient care plans. The available literature shows that many of the patients seeking care during a humanitarian civic assistance mission believe that the treatment received is not sufficient if medication has not been prescribed (Rice and Jones 53; Adams 289). These patient expectations may result in pressure on the healthcare provider to prescribe a therapeutic placebo. Linking all of these challenges together is the overarching difficulty of garnering the patient's informed consent in the humanitarian civic assistance mission environment.

Respect for Autonomy and linguistic barriers. The inability to communicate effectively hampers an individual's capacity to understand the information presented, to make an informed and reasoned decision, and subsequently, provide their informed consent. The Canadian Forces Health Services Group emphasizes the importance of patient-provider communication in their 2015 Strategic Concepts Report (SCR), identifying that the inability of a patient to communicate effectively with a healthcare provider – referred to as "Patient-provider language discordance" - adversely impacts the level of care a patient is likely to receive. The report further identifies that

language discordance "limits access, erodes trust, and may lead to inaccurate diagnosis and/or treatment" (Health Services Group "SCR" 1).

While local civilians are often utilized on humanitarian civic assistance programs to provide translation and interpretation services, this approach does not entirely resolve the communication and linguistic challenges faced by providers and patients. A Canadian Forces Health Services Group curricula survey of medical schools in Canada and the U.S. revealed that the majority of academic institutions provided no formal training for medical students on how to work effectively with a translator (Canadian Forces Health Services Group "SCR" 8). In the absence of formal training in this area, it is reasonable to assume that translators will not be utilized to the full advantage of either patients or providers, thereby further hampering effective decision-making processes.

Respect for Autonomy and therapeutic placebo use. The American Medical Association (AMA) defines placebo as "a substance provided to a patient that the physician believes has no specific pharmacological effect upon the condition being treated" (AMA). While an accurate description, in the interest of providing greater depth to the subject, Beauchamp and Childress (and others) have separated placebos into two categories: 'pure' and 'impure' placebos. They define "pure placebos" as substances that are "pharmacologically inactive", citing the prescribing of sugar pills as an example (Beauchamp and Childress 128). "Impure placebos" on the other hand, are "active medications" that have no effect on the condition being treated, for example, the prescription of antibiotics to treat a viral infection (e.g., the common cold). (Beauchamp and Childress 128).

The use of placebo prescriptions has become so widespread that in 2006, the AMA addressed the issue in Opinion 8.8083 of the AMA Code of Medical Ethics. This AMA Opinion

identifies that placebos may only be used as a treatment modality if the patient is both informed that a placebo is being prescribed, and has agreed to its use (AMA). The AMA Opinion further states that a physician must not prescribe a placebo as a means of pacifying a "difficult patient", concluding that physician use of a placebo, without informing the patient, may erode patient trust in the physician, harm the patient-physician relationship, and as importantly, potentially lead to medical harm .

Citing Tilbert and colleagues' 2008 national study of U.S. internists and rheumatologists, Beauchamp and Childress identify that approximately half of the study participants reported that they regularly prescribed placebo treatments (128). While the most common placebos prescribed by study participants were self-reported as over-the-counter medications and vitamins, approximately 10% of the specialist physicians participating in the study also indicated that they had prescribed antibiotics and sedatives (129). Beauchamp and Childress believe that the use of placebo in place of appropriate medication undermines patient autonomy, stating that the use of therapeutic placebos typically involves "lack of transparency, incomplete disclosure, or even intentional deception" (128).

Rice and Jones describe numerous occurrences of therapeutic placebo use in U.S. MEDCAPs conducted in Iraq. Reports of healthcare providers distributing antibiotics "without restraint" are attributed to unrealistic patient expectations and a pressure [from patients] to "do something" (Rice and Jones 53). The desire to receive free medication motivates many patients receiving care under the humanitarian civic assistance program, many of whom would have to pay for medication received from their national health care service. Physician reports of patients negotiating to receive medication are common (Rice and Jones 50). One such report describes a patient with a bilateral below knee amputation, which the physician described as healing well.

Consequently, the physician's care plan was to send the patient home with instructions to keep the area clean and wash the area regularly with soap and water. The patient, unhappy with this proposed treatment plan, ultimately departed with four tubes of [unnecessary] ointment (Rice and Jones 50). Still other physicians describe patients who are healthy but curious; many of these 'healthy' patients depart the MEDCAP with vitamins supplied by the MEDCAP healthcare providers (Rice and Jones 51; Hicks 11).

Given the increased placebo prescribing by family medicine practitioners in developed countries, it is not surprising that this practice has carried over into the practice of medicine in developing countries. The use of placebo prescriptions within the humanitarian civic assistance program environment is perhaps more detrimental, however, due to the follow-on effects it cannot help but create. Rice and Jones believe that the provision of unnecessary medication in the MEDCAP environment both undermines local health care providers and institutions, and critically, promotes a dependence on foreign health care assets (53).

Respect for Autonomy and informed consent. Traditional bioethical definitions of *informed consent* have focused on two key elements. The first element is information [the patient must both receive and understand the information presented], the second element is [voluntary] consent [following the patient's receipt and comprehension of the information] (Beauchamp and Childress 124). In their text, Beauchamp and Childress present a more robust framework for informed consent. This framework, which they indicate is widely used in legal, philosophical and medical literature (124), has five critical elements: competence; disclosure; understanding; voluntariness; and consent (124).

During a humanitarian civic assistance mission, meeting all five of these criteria for informed consent could prove challenging. For example, the healthcare provider's ability to

ensure patient understanding may be adversely impacted by both the necessity to utilize

translators [or family members] as a communication adjunct and the limited patient-provider

time available. This potential for diminished patient understanding may negatively impact the

patient's ability to provide his or her fully informed consent. In addition, and specific to

MEDCAPs, the patient's voluntariness may be an area of concern. In describing voluntariness,

Beauchamp and Childress explain "…a person acts voluntarily if he or she wills that action

without being under the control of another person…" (138). The experiences of Sgt Preston and

his MEDCAP team in Tarin Kowt, Afghanistan, demonstrate some of the challenges faced by

women seeking medical care in that region, and highlight that for many, voluntariness may be a

luxury they do not possess.

The limited amount of time available to healthcare providers also presents challenges in

garnering [fully] informed consent. Rice and Jones estimate that during U.S. MEDCAPs

conducted in Iraq, healthcare providers treated approximately 50 patients per hour (55). It is

important to note that this is with the aid of an interpreter. Using Rice and Jones' estimate of 50

patients per hour, a physician would have to see one patient every 1.2 minutes (53). One notable

"successful" U.S. MEDCAP treated 400 Iraqi civilians in 3 hours (Rice and Jones 53). With

these statistics in mind, imagine the physician seeing a new patient for the first time. While a

generalization, the physician's actions would typically occur as follows: seek an oral patient

history; conduct a physical examination; formulate a treatment plan; discuss the proposed

treatment plan with the patient; answer any questions they may have; garner their informed

consent; and finally, provide the treatment. All of these actions while utilizing the services of a

translator, and all in approximately two minutes. Based on these statistics, it appears self-evident

that garnering informed consent under the five-element framework of informed consent is unachievable in the humanitarian civic assistance mission environment.

Respect for Autonomy – Summary. Application of the biomedical principle of respect for autonomy is particularly challenging for healthcare providers during a humanitarian civic assistance mission. Informed consent, arguably the key pillar of this principle, is especially difficult to obtain. In a clinical environment, where patients are typically lined up waiting for care from the time the doors open to the time they close, and the team of healthcare providers are evaluated - by their non-medical commanders – based upon how many patients they see each day, the ability of healthcare providers to meet the five elements of informed consent is severely challenged. Further complicating the ability of healthcare providers to obtain informed consent during a humanitarian civic assistance mission is the high potential for patient-provider language discordance. A potential mitigating measure for the challenges incurred as a result of patient-provider language discordance, could include the addition of a training session in effective communication for healthcare providers who will be working with a translator. This could be built into the existing pre-deployment training matrix.

Finally, in this environment, where many patients truly believe that 'western medicine' can fix the medical issues that their healthcare system could not, the healthcare provider's use of therapeutic placebos has been shown to increase. These challenges are complex, with seemingly no easy path to mitigation. Indeed, the structural constraints inherent to humanitarian civic assistance programs, for example, their short duration / high patient volume model, perpetuate these challenges.

The Principle of Nonmaleficence. The central obligation within the principle of nonmaleficence is to avoid inflicting harm, or in words familiar to any physician, "above all [or

first] do no harm" (Beauchamp and Childress 150). Beauchamp and Childress, presenting

Frankena's work in this area, acknowledge that some philosophers have chosen to combine the

principles of nonmaleficence and beneficence into one guiding principle[31] (151). However, it is

their view that these two principles are sufficiently disparate to remain independent. In

presenting their rationale for this two-principled approach, they note that "obligations to not

harm others are distinct from obligations to help others" (151). Their argument is strengthened

by the provision of moral rules supporting their viewpoint, for example, they suggest that the

obligation 'do not kill' [nonmaleficence] is completely distinct from the obligation to 'promote

the welfare of others' [beneficence] (151).

In addition to the central moral obligation to not inflict harm, the principle of

nonmaleficence includes "obligations not to impose *risks* of harm" (Beauchamp and Childress

154). Central to the principle of nonmaleficence is the belief that in medicine, the risk(s) to the

patient [e.g., as a result of treatment or surgery], should never outweigh the potential benefit(s) to

that patient. Thus, the principle of nonmaleficence emphasizes the need for medical competence

[do no harm] and affirms the importance of adherence to the appropriate standards of care [do

not impose risks of harm] (Beauchamp and Childress 154; McCormick).

Nonmaleficence - Challenges. In the humanitarian civic assistance program environment,

well intentioned healthcare providers may struggle with the principle of nonmaleficence with

some regularity. This is by no means a suggestion that military healthcare providers would

intentionally inflict harm on their patient population. Rather, it is an acknowledgment of the

challenges posed through working in a complex and unfamiliar environment, and the potential

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[31] Beauchamp and Childress note that William Frankena incorporated the principle of nonmaleficence into his four moral obligations relating to beneficence. It is the first of these four obligations that speaks to the principle of nonmaleficence. "1) One ought not to inflict evil or harm; 2) One ought to prevent evil or harm; 3) One ought to remove evil or harm; 4) one ought to do or promote good" (Beauchamp and Childress 151)

for the infliction of patient harm that may result. Three of these challenges will be covered in this section: the provision of care to special populations, the lack of provider knowledge regarding diagnosis and treatment for unfamiliar location-specific endemic diseases or medical conditions, and the dilemma of whether to withhold or withdraw treatment.

Nonmaleficence and the provision of care to special populations. Seniors [age 65 and greater] and children [age 18 and younger] are particularly vulnerable following disaster and during war or conflict (Peek 172). In explaining this increased situational vulnerability, Peek suggests that these groups have fewer resources at their disposal, which may adversely affect their ability to prepare for disaster, and increases the potential for adverse outcomes (188). Contributing to their post-disaster situational vulnerability, seniors have lower injury thresholds and many have pre-existing chronic medical conditions (Peek 183). In children, possible separation from parents or caregivers, and the potential for emotional trauma in the shelter environment may significantly increase their situational vulnerability (Peek 188). So prevalent is this potential for emotional trauma in children, that post-traumatic stress disorder (PTSD) symptoms may affect as many as 30-50% of child survivors (Peek 176).

With this recognized potential for seniors and children to disproportionately experience situational vulnerability post-disaster or during times of conflict and war, it is important to identify that within the CAF, physicians do not routinely provide care to either of these demographics [pediatrics or geriatrics]. Unlike some militaries, CAF healthcare providers do not provide what is known as 'dependent care' [care to a military member's family]. Therefore, among CAF physicians who practice within the CAF, their scope of expertise is centered on relatively healthy men and women ranging from 17 to 60 years of age – the age range in which an adult can serve in the CAF. Consequently, for many physicians, while they certainly would

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have received training in pediatrics and geriatrics during their residency period, it will often have been many years since they have provided primary health care to either demographic.

Skill fade, important in any occupation, is particularly crucial for a physician. Pediatric and geriatric patients – at opposite ends of the spectrum from the predominantly 'healthy male' patient that most military physicians see – require a special level of expertise that must be maintained and cultivated. The bottom line is that many CAF physicians do not typically have the opportunity to maintain their expertise in the provision of care for these two unique segments of the population. As a result, healthcare providers may have limited experience with their primary patient population for that mission.

Nonmaleficence and endemic disease. Humanitarian civic assistance programs primarily occur in developing countries, often with endemic diseases and medical conditions that are either nonexistent or rare in the North American patient population (for example, Crimean Congo hemorrhagic fever, dengue fever). Consequently, military healthcare providers may lack familiarity of, or experience with, medical conditions affecting their patients (Hicks 11). As a result, the military healthcare provider may lack the knowledge [and the specialized laboratory equipment] required to correctly diagnose the medical condition (Hicks 11). One possible outcome may be misdiagnosis of the condition; another outcome may be the prescribing of a potentially harmful [or at the very least ineffective] treatment plan. Both of these outcomes impose potential risk of harm to the patient, neither are of benefit to the patient, and certainly, neither outcome meets the intent of the 'do no harm' principle of nonmaleficence.

Nonmaleficence and withholding and withdrawing treatment. Rice and Jones note that the majority of patients seen in the MEDCAP environment suffer from chronic medical problems (53). It is their position that the construct of the MEDCAP model [short duration and 'one-stop shop']

does not facilitate the provision of effective care to patients with chronic illnesses (53). Rice and Jones do identify that in rare instances, MEDCAPs patients that require more complex care may be referred to host nation medical clinics or tertiary military medical facilities for treatment. They note, however, that this is the exception, and not the rule (Rice and Jones 53). Their position and supporting arguments are equally applicable to all humanitarian civic assistance programs. In recognition of the inability of military healthcare providers to provide adequate care to patients suffering from chronic medical conditions, the ongoing academic discussions surrounding the conceptual and moral differences between withholding and withdrawing treatment are relevant. Beauchamp and Childress highlight the challenges faced by both medical providers and family in this regard, and conclude that it is easier [and more morally defensible] to withhold treatment, then to commence treatment and subsequently withdraw that treatment (158). In the humanitarian civic assistance mission environment, with both limited medical resources and a limited ability to provide ongoing treatment, military healthcare providers - faced with patients with chronic medical conditions - may face this biomedical ethics dilemma.

Nonmaleficence - Summary. The principle of nonmaleficence, to include, "obligations not to inflict harms but also obligations not to impose *risks* of harm" (Beauchamp and Childress 154), may be challenging for military healthcare providers to wholly apply in the clinical environment of a humanitarian civic assistance mission. As discussed, the challenges to application of this principle may include a lack of clinical expertise surrounding endemic diseases, limited experience providing care to pediatric or geriatric populations, and moral dilemmas surrounding whether to withhold or withdraw treatment. These challenges, however, are not insurmountable, and could in large part be mitigated through enhanced and ongoing education and training programs for military healthcare providers (e.g., maintenance of clinical

competency and skills programs, and/or embedding CAF healthcare providers in civilian medical clinics).

__The Principle of Beneficence__. It is broadly believed that the principle of beneficence is central to biomedical ethics and patient care (Beauchamp and Childress 202; McCormick). In its most basic context, the principle of beneficence embodies the moral obligation of healthcare providers to act in a way that benefits the patient and improves their welfare. This distinguishes the principle of beneficence from maleficence, which requires only that the healthcare provider act to avoid harm to the patient. Beauchamp and Childress emphasize that positively influencing a patient's health may present greater challenges than ensuring that harm is not caused (202).

Some biomedical ethical frameworks (the Belmont Report[32]) and philosophers (Frankena) have chosen to combine nonmaleficence and beneficence into one overarching moral obligation. It is perhaps for this reason that Beauchamp and Childress devote some time to fully differentiating between the two. They write that the obligations or rules of nonmaleficence present "negative prohibitions of action", whereas the rules applicable to beneficence "present positive requirements of action" (204). Further distinguishing between the two principles, they note that while the rules of nonmaleficence are impartial, the rules of beneficence may be followed impartially. For example, although a physician is morally obligated to not inflict harm [at all times], he or she is not morally obligated to, for example, enter a burning building to save the life of a child. Finally, whereas with the principle of nonmaleficence there may be significant legal ramifications for malpractice, utilizing the above example, there would not typically be legal ramifications for a physician who opted not to enter a burning building to save a child.

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[32] The principles of biomedical ethics identified within the Belmont Report are, Respect for Persons, Beneficence and Justice.

The principle of beneficence can be applied at both the individual level [the patient] and at the population level, for example, through public health-focused vaccination campaigns (Beauchamp and Childress 202; McCormick). It is through these dual lenses that the application of the principle of beneficence during humanitarian civic assistance programs is conducted.

Beneficence at the individual level. The humanitarian civic assistance program model presents challenges to both patients and healthcare providers when assessed at the patient level. As highlighted previously, many of the patients seeking care during a humanitarian civic assistance mission have complex chronic conditions that cannot be diagnosed or treated effectively during the compressed timelines available. Thus, at the patient level, the healthcare provider may experience challenges with the development of effective treatment plans and/or treatment modalities [thereby, challenging the provider's ability to act in a way that benefits the patient]. For example, in order to achieve optimal effect in the treatment of scabies[33], the Centers for Disease Control recommends that all household members and sexual contacts be treated with a scabicide (a prescription medication in ointment form) ("Scabies"). In addition to medication, the laundering (in hot water) of all clothing, bed linens and towels belonging to the patient, to household members, and to any sexual contacts is recommended (Centers for Disease Control). In the highly compressed timelines available during a humanitarian civic assistance mission, the healthcare provider will often not have either the opportunity or the ability to diagnose and treat all family members, thus an ethical dilemma results. Is it of any benefit to treat only one member of an infected household knowing that reinfection of the individual is probable? When the CAF DART was deployed post-earthquake in Pakistan, scabies was a commonly encountered

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[33] Scabies is a parasitic infestation of the skin caused by the human itch mite. Common symptoms are intense itching and a visible skin rash that often resembles pimples. Scabies is spread via person-to-person contact (Centers for Disease Control "Scabies").

condition, often affecting whole family units. For the reasons outlined above, effective treatment was notoriously difficult (author's personal experience).

Physicians who have participated in humanitarian civic assistance missions recount numerous experiences highlighting their feelings of helplessness upon realizing they cannot provide the appropriate level of care required by their patients. One U.S. physician recounts the tale of a mother who carried her young son to a MEDCAP in Iraq. The young boy was extremely thin and suffered from severe congenital deformities. With little more than a medical bag and a stethoscope, all the U.S. physician could do was provide the mother and her young son with vitamins, when what he really required was corrective pediatric surgery (Rice and Jones 51). Finally, at the individual level, the principle of beneficence conflicts with the use of a patient as a tool to facilitate readiness training, for intelligence gathering purposes, or as a vehicle for propaganda during Information Operations[34].

Beneficence at the population level. "By active or inadvertent competition with the local government, humanitarian assistance can suborn the legitimacy of the state." (Avery and Bradley 77). The academic literature is replete with examples of population-level harms caused by humanitarian civic assistance programs. On numerous occasions, the employment of a humanitarian civic assistance program has been demonstrated to reduce patient confidence in their local health services, and increase expectations regarding the 'first world' standard of care received during the humanitarian civic assistance mission (Arcadu; Rice and Jones 53; Cameron 209; Avery and Bradley 74).

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[34] The US Secretary of Defense defines Information Operations as "the integrated employment, during military operations, of information-related capabilities in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision making of adversaries and potential adversaries while protecting our own" (DoD "Joint Publication 3-13" xi).

As critical as the reduction in patient confidence in their health service and the concurrent increase in expectations regarding care, are the temporarily inflated economies created by military intervention in a host nation. During multinational military operations in Afghanistan, for example, translators working for the U.S. military were paid wages almost seven times more than a local physician would receive (Avery and Bradley 74). Consequently, skilled (and often specialized) Afghan physicians left their regular employment to work for the U.S. forces; the result was an exacerbation of the already dire shortage of physicians in Afghanistan (Avery and Bradley 74). Unfortunately, the creation of an artificially inflated economy does not appear to be an issue of concern for many military personnel. A CAF member responsible for hiring local civilians during CAF operations in Afghanistan, Bosnia and Syria expressed that the military "paid locals more than what they would have made on the local economy and that they were lucky to have the employment." (qtd. in Coulombe 29).

Despite the altruistic intentions of healthcare providers on humanitarian civic assistance missions, the unintended message these programs convey is "we have better doctors… we have better medicine" (Rice and Jones 53). Following the 2005 earthquake in Pakistan, the international military community responded by sending in military healthcare teams to provide medical assistance to local nationals (Avery 74). Faced with a higher volume of patients seeking care than anticipated (much of it chronic in nature), both the U.S. military and Canada's DART remained in Pakistan for longer than originally intended. The unforeseen consequence of this extended humanitarian response was the displacement of local healthcare providers, who were unable to compete with the "first world" care provided at no cost by U.S. and Canadian military healthcare teams (Avery and Bradley 74). A similar displacement of local healthcare providers occurred in Indonesia following the 2004 tsunami. Avery and Bradley recount that the easily

accessible, foreign 'no cost' healthcare provided by well-intended international healthcare teams resulted in the loss of employment for local healthcare providers (75).

Beneficence - Summary. Humanitarian civic assistance programs may challenge the ability of healthcare providers to consistently act in a way that benefits the patient. As has been demonstrated, these challenges may occur at both the individual level and at the population level. Within these programs it is the MEDCAP program that presents the greatest challenges through the utilization of MEDCAPs as a means to achieve greater military ends. This use of the MEDCAP to achieve a desired military end state occurs at both the individual and population level, for example, at the individual level, the use of patients for intelligence gathering purposes, and at the community level, the centrality of the MEDCAP model in military 'hearts and minds' campaigns. Finally, as has been shown, within all humanitarian civic assistance programs there is the potential for adverse downstream effects and a concurrent increase in situational vulnerability to both patients and host nation physicians.

Unlike with the principle of nonmaleficence, mitigation of these potential issues will not occur through the provision of training to military healthcare providers. These issues may be unseen by healthcare providers, and in many instances, occur downstream from the program itself (e.g., the removal of qualified local physicians as a result of the U.S. military's hiring practices). By and large these are construct-specific issues, and their mitigation will require revision of the structure of these programs and a reexamination of the political and military aims that they support.

The Principal of Justice. Beauchamp and Childress maintain that there is no one theory of justice that, in isolation, sufficiently covers health care and health policy (292). It is their belief that the magnitude of the global health problem, to include widespread inequity and inefficiency, far exceeds any other social problem facing society today (292). To that end, in the absence of a theory of justice that they believe adequately considers all facets of the global health problem, they write,

> We have proposed recognition of global rights to health and enforceable rights to a decent minimum of healthcare within a framework for allocation that incorporates both utilitarian and egalitarian standards. This perspective recognizes the legitimacy of trade-offs between efficiency and justice (292).

While this author does not disagree with the position taken by Beauchamp and Childress, it is a macro-scale position, and as a result, broader in scope than is necessary for this biomedical ethical inquiry into humanitarian civic assistance programs.

Perhaps of greatest relevance to these programs is Beauchamp and Childress' examination of the *principle of need* [distributive justice]. This principle specifies that "essential social resources, including healthcare, should be distributed according to need" (251), and that access to this need [healthcare] will be fair and equitable. Under this principle, it is understood that without this [needed] resource, an individual will suffer harm. The underlying premise of humanitarian civic assistance programs is that without military intervention (i.e., MEDCAP, MEDRETES or HADR), individuals in need of healthcare will not receive it, and consequently will suffer harm.

From a strategic perspective, it is clear that humanitarian civic assistance programs were not initially developed to meet this need for healthcare. It is this need for healthcare, however,

that drives the social contract that facilitates the continued existence of these programs. One only has to review the largely positive press releases that are borne out of a CAF DART deployment to affirm this. For example, in response to the 2015 earthquake in Nepal, the Globe and Mail reported the following,

> "The loss of life and the destruction of civilian homes and communities have been overwhelming," Chris Alexander, citizenship and immigration minister, said Saturday… "Today's announcement of the immediate deployment of additional DART elements to the affected region is *evidence of Canada's ongoing support and dedication to the relief effort*," Alexander said… "The deployment of DART will *allow Canada to continue to work with our partners to provide assistance to Canadians and the people of Nepal*," said Foreign Affairs Minister Rob Nicholson (Globe and Mail) (emphasis added).

Thus, the principle of need, within the greater principle of justice conceptual framework, is one of many principles considered by governments and military planners when determining where to utilize humanitarian civic assistance programs to achieve optimum results.

Justice - Challenges. The principle of need suggests that medical necessity should determine access to and priority of care. Under the principle of need, equity and fairness are assumed. Thus, the provision of healthcare is both equitable and fair as theoretically all persons in need [in the humanitarian civic assistance mission environment] will have the opportunity to access this care. However, it is precisely these dual concepts of equity and fairness within the principle of need that pose challenges in the humanitarian civic assistance program environment. In some cultures, and/or faiths, women are viewed as subordinate to men, and therefore may be considered ineligible, on the basis of gender, for equal care. As was discussed earlier in this

paper, military healthcare providers witnessed gender inequity first-hand in both Afghanistan and Pakistan. In a conflict zone, ensuring equity and fairness within the principle of need can become an even greater challenge for healthcare providers.

Justice in a conflict zone. While as identified above there are potential challenges with the application of the principle of need in each of the humanitarian civic assistance programs, the application of this principle, with due attention paid to equity and fairness in the provision of care, pose disproportionally greater challenges in the MEDCAP environment. Specific to MEDCAPs, application of the principle of need may be jeopardized when MEDCAP locations are determined not by medical necessity, but by military considerations such as villages friendly to allied forces, intelligence gathering potential, or as a reward for activities favourable to military forces. In addition, in a conflict environment such as Afghanistan, local civilians who do access the MEDCAP may be subjected to increased danger and/or hostile acts as retribution from individuals who are not supportive of international military forces (UNAMA 53).

Justice - Summary. When locations for humanitarian civic assistance missions are determined on the basis of need, healthcare providers face relatively little difficulty in ensuring the principles of justice [and in particular, the principle of need] are applied. While inevitably challenges will occur – as witnessed in Afghanistan and Pakistan – healthcare providers can invariably mitigate these challenges within the clinic environment. Perhaps the greatest justice-related challenge facing healthcare providers is the utilization of the MEDCAP model to achieve broader military aims, in effect, the use of patients as the means to a desired end. At the strategic and operational level, cessation of this practice would rectify this challenge. Finally, and specific to MEDRETES and HADR missions, the determination of where to deploy military healthcare

providers should be the result of a needs-based assessment, and not on the basis of advancing a geopolitical agenda (i.e., as a strategic adjunct to nation-to-nation relationship building).

4.4   Chapter Summary

This Chapter commenced with a review of historic and existing biomedical ethics frameworks. Subsequently, an introduction to Beauchamp and Childress' principles of biomedical ethics occurred. Next, this author's rationale for utilizing Beauchamp and Childress' guiding principles of biomedical ethics was presented. Finally, an in-depth review of the four guiding principles was conducted. Examples of challenges experienced by military healthcare providers during humanitarian civic assistance programs were presented for each of the four principles, and where possible, potential mitigation measures were provided. Table 1, Summary of Findings and Mitigation Measures, depicts the overarching biomedical challenges potentially faced by healthcare providers during a humanitarian civic assistance program, and the recommendations for mitigation.

Table 1 Summary of Findings and Mitigation Measures

Biomedical Ethics Principle	Moral Obligations within Principle	Potential Challenges with Application of Principle	Proposed Mitigation Measures [HCP = Healthcare Provider]
Respect for Autonomy	Facilitate patient's ability to act intentionally, with understanding and without controlling influence	• Patient-provider language discordance • Gender inequity • Therapeutic placebo use • Garnering informed consent	**Provision of HCP training:** •Working with interpreters •Culturally appropriate methods of minimizing and/or managing gender inequity **Policy Development** •Therapeutic placebo use •Management of patients with chronic illness •Informed consent
Nonmaleficence	Above all do no harm • Avoid inflicting harms • Do not impose risks of harm	• Provision of care to special populations • Endemic disease • Withholding and withdrawing treatment	**Provision of HCP training:** • Maintenance of clinical competency and skills programs • Tropical medicine course • Vulnerability training module **Enhanced HCP peer support and mentorship networks:** •Withhold/withdraw treatment
Beneficence	Act in a way that benefits the patient and improves their welfare	• Patients with complex and/or chronic medical conditions • Patient desire to receive 'first world' care subordinates local healthcare system • Creation of artificial economies	**Strategic Program Revision:** •Re-examination of use of program to support geopolitical and military aims •Ensure active participation [to include training] of local healthcare providers •Re-examine wage policy to minimize creation of artificial economies
Justice	Distribute healthcare according to need [Principle of Need]	Use of programs to achieve broader geopolitical and military aims Accessibility of program • Gender inequity • Patient safety in conflict environment	**Strategic Program Revision:** •Immediate cessation of use of MEDCAP to achieve military aims •Determination of program location solely based upon assessment of health needs

Conclusion

In conclusion, it is apparent that humanitarian civic assistance programs may challenge the ability of healthcare providers to apply the moral obligations inherent within the guiding principles of biomedical ethics. In addition, these programs can inadvertently contribute to situational vulnerability within the affected population. In short, these programs can be improved upon. Despite their potential failings, however, these programs can also provide much needed medical care to a vulnerable population in need of assistance. Further, since the global health engagement strategies of the U.S. military and military doctrine within both the CAF and NATO support the continued use of military humanitarian civic assistance programs, it would seem these programs will continue to be utilized. Accordingly, it is not the position of this author that these programs should cease. Rather, it is hoped that following some strategic and program level revisions these programs will support greater alignment with the principles of biomedical ethics.

Future Directions

While many academics would welcome a departure within the humanitarian civic assistance program from what they deem the "parachute program model of care", (Loh et al. 3), a shift from purely short-term medical engagements to longer duration medical engagements poses significant logistical and human resource challenges for military commanders. The U.S. DoD acknowledges these limitations, stating "…the joint force lacks the HSS[35] capacity to provide sustained medical care for civilians" (DoD "Stability Operations" D-5). Similar operational constraints - limited financial, personnel, materiel, and logistical capacity - also apply to the CAF. It is therefore apparent that both the U.S. military and the CAF will continue to utilize limited-duration humanitarian civic assistance programs. In recognition of this reality, and the

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[35] HSS is the military acronym for Health Services Support.

clear capacity challenges faced by these militaries, in order to garner acceptance from either the

CAF or the U.S. military community, this author believes that any proposed changes to the

humanitarian civic assistance program should be relevant to short-term medical engagements.

With that in mind, it is the opinion of this author that implementation of the four following

recommendations would significantly mitigate many of the biomedical ethical challenges faced

by healthcare providers during humanitarian civic assistance missions:

Recommendation 1. The first priority in improving the humanitarian civic assistance

program should be establishing a clear separation between the provision of medical aid and the

advancement of geopolitical and/or military aims. Geographic locations for humanitarian civic

assistance programs should be determined and prioritized based upon a formal health needs

assessment conducted in cooperation with the host nation. It is acknowledged that this formal

needs assessment occurs with the HADR program with their built-in requirement for a

recommendation from non-military departments within government (e.g. USAID and Global

Affairs Canada) to deploy military assets. This is not the case, however, with either the

MEDCAP or MEDRETES program. This will require acknowledgement of this concern, as well

as significant changes to operational doctrine surrounding humanitarian civic assistance

missions, by both senior government and senior military leadership.

Recommendation 2. Ensure host nation and community level support for the humanitarian

civic assistance program mission and partner with local community healthcare providers during

humanitarian civic assistance missions. Incorporate a 'joint venture' approach with military

healthcare providers through partnering with local healthcare providers in care delivery. This

alignment will facilitate relationship building at the grass roots level and mitigate the potential

for marginalization of local healthcare providers. Importantly, it will also ensure that the type of

medical care provided is sustainable by the host community. Finally, this requisite emphasis on host nation/community engagement will positively increase both the agency and participation of individuals, thereby potentially significantly reducing individual- and community-level situational vulnerability. These changes may best be operationalized by senior military leadership within the Task Force and the Health Services leadership.

Recommendation 3. Within the Health Services cadre, incorporate enhanced healthcare provider training and education in biomedical ethics and vulnerability. This training would bring the concept of vulnerability and the principles of biomedical ethics to the forefront, facilitate professional growth and development in these critical areas, and enhance existing peer support networks. Thus, these changes are best implemented by senior Health Services leadership.

Recommendation 4. Within the Health Services cadre, formalize regular opportunities for military healthcare providers to practice their profession in a civilian clinic environment, thereby increasing their exposure to pediatric and geriatric patients and facilitating the maintenance of clinical skills and competencies in these critical [and situationally vulnerable] patient demographics. Similar to Recommendation 3, these changes to enhancing the clinical readiness of military personnel, and thus enhancing their ability to provide care to pediatric/geriatric patients, are best operationalized by senior Health Services leadership.

Final Thoughts

This paper concludes with the immortal words of T. E. Lawrence, written in 1917 in reference to his experiences with the Bedouin peoples[36] during the Arab War:

> Do not try to do too much with your own hands. Better the Arabs do it tolerably than
> you do it perfectly. It is their war, and you are there to help them, not to win it for

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[36] Interestingly, Lawrence himself indicated that his "commandments" on how best to work with the Bedouin people were "not applicable unchanged in any particular situation." (Lawrence). Despite his assertion, Lawrence's "27 articles" and in particular this citation, are frequently used in other situations.

them. Actually, also, under the very odd conditions of Arabia, your practical work

will not be as good as, perhaps, you think it is" (Lawrence 192).

The reflections and recommendations of Lawrence, while clearly not directed at humanitarian

civic assistance program, are nonetheless in many respects applicable to these programs.

Works Cited

Adams, Abigail. "Olive Drab and White Coats: U.S. Military Medical Teams Interoperating with Guatemala." *The War Machine and Global Health: A Critical Medical Anthropological Examination of the Human Costs of Armed Conflict and the International Violence Industry*. Ed. Singer, Merrill and Derrick Hodge, AltaMira Press, 2010, ch. 9, pp. 277-302.

Alexander, Brendan. "Explaining Collaboration Failures in Canada's Mission in Afghanistan." *Canadian Military Journal*, vol. 14, no. 4, Autumn 2014, pp. 28-39.

American Medical Association. "Opinion 8.083 – Placebo Use in Clinical Practice." *AMA Code of Medical Ethics*, November 2006.

Arcadu, Maria. "Civil-Military Coordination in the Health Sector in Afghanistan: A Case Study." World Health Organization, Draft 1, September 2010, pp. 1-31.

Avery, George and Bradley Boetig. "Medical and Public Health Civic Action Programs: Using Health Engagement as a Tool of Foreign Policy." *World Medical and Health Policy*, vol. 2, no. 1, 2010, pp. 59-81.

Baxter, Michael and Charles Beadling. "A Review of the Role of the U.S. Military in Nonemergency Health Engagement." *Military Medicine*, vol. 178, no. 11, 2013, pp. 1231-1240.

Beauchamp, Tom and James Childress. *Principles of Bioethics*. 7th ed. New York: Oxford University Press, 2012.

Bollen, Myriam et al. "Military Engagement in Civilian Healthcare in Uruzgan: An Ethical Perspective." *Mission Uruzgan: Collaborating in Multiple Coalitions for Afghanistan*. Ed. Beeres, Robert, et al. Pallas Publications, Amsterdam University Press, 2012, ch. 18, pp. 251-264.

Brewster, Murray. "Canadian-led battle group will deploy to Latvia, part of NATO move to deter

 Russia." *CBC News*. CBC.ca, 8 July 2016. http://www.cbc.ca/news/politics/cananda-nato-

 baltic-troops-1.3669952 Accessed 11 July 2016.

Bulger, Jeffrey. "Principlism." *Teaching Ethics*, Fall 2007, pp. 81-100.

Burkett, Edwin and Dana Perkins. "U.S. National Strategies and DoD Global Health

 Engagement." *Military Medicine*, vol 181, June 2016, pp. 507-508.

Cameron, EA. "Do No Harm - The Limitations of Civilian Medical Outreach and MEDCAP

 Programmes Based in Afghanistan." *J R Army Med Corps*, vol. 157, no. 3, 2011, pp. 209-

 211.

Canadian Forces Health Services Group. "Addressing Language Barriers during Humanitarian

 Relief Operations (HUMRO)." *National Defence*. November 2015.

---. "*Canadian Forces Health Services Group Code of Ethics - A Framework for Ethical

 Decision-Making*." Version 6, 2007, pp. 1-17.

Carlson, Robert et al. "The Revision of the Declaration of Helsinki: past, present and future. *Br J

 Clin Pharmacol*, vol. 5, no. 6, January 2004, pp. 695-713.

Centers for Disease Control and Prevention. "Scabies - General Information." Updated

 November 2010, updated 29 March 2016. www.cdc.gov/parasites/scabies/ Accessed 5

 June 2016.

---. "The Tuskegee Timeline." Updated 19 February 2016. www.cdc.gov/tuskegee/timeline.htm.

 Accessed 27 June 2016.

 Clouser, K. Danner, and Bernard Gert. A Critique of Principlism [abstract]. *Journal of Medicine

 and Philosophy*, vol. 15, no. 2, 1990, pp. 219-236.

Coulombe, DA. "The ethical use of Canadian military assets in the delivery of humanitarian

    assistance." Canadian Forces College. JCSP 37, 2010-2011. Thesis. Master of Defence

    Studies. 2011.

Cullison, Thomas et al. "Global Health Engagement: A Military Medicine Core Competency."

    Joint Force Quarterly, 1st Quarter, 2016, pp. 54-61.

Department of Defense. "2014 Demographics: Profile of the military community." Office of the

    Deputy Assistant Secretary of Defense (Military Community and Family Policy. *2014*

    Demographics Report, pp. 1-199.

    http://download.militaryonesource.mil/12038/MOS/Reports/2014-Demographics-

    Report.pdf Accessed 19 July 2016.

---. "Counterinsurgency." *Joint Publication 3-24.* 22 November 2013.

---. "Information Operations." *Joint Publication 3-13*. 27 November 2012, Updated 2014.

---. "Military Health Support for Stability Operations." *Department of Defense Instruction*

    Number 6000.16. 17 May 2010.

---. "Stability Operations." *Department of Defense Instruction* Number 3000.05. 16 September

    2009.

---. "Stability Operations." *Joint Publication 3-07*. 29 September 2011.

---. "The National Military Strategy of the United States of America 2015. *Joint Chiefs of Staff*.

    June 2015.

Defense Manpower Data Centre. "Armed Forces Strength Figures for May 31, 2016.

    www.dmdc.osd.mil/appj/dwp/dwp_reports.jsp Accessed 16 July 2016.

Eagan-Chamberlin, Sheena. "Medicine as a Non-Lethal Weapon: The Ethics of "Winning Hearts

    and Minds"." *Ethics and Armed Forces*, vol.1, 2015, pp. 9-16.

Erig Osorio de Azambuja, Leticia and Volnei Garrafa. "The common morality theory in the work
of Beauchamp and Childress." *Rev. bioet*, vol. 23, no. 3, 2015, pp. 632-641.

Fukushima, Annie et al. "Disaster Militarism: Rethinking U.S. Relief in the Asia-Pacific."
Foreign Policy in Focus and *TheNation.com* [joint publication], 11 March 2014, pp. 1-3.
http://fpif.org/disaster-militarism-rethinking-u-s-relief-asia-pacific/ Accessed 14 July 2016.

Gert, Bernard et al. *"Bioethics: A Systematic Approach."* 2nd Ed, 2006. Oxford University Press.

Global Firepower. "Countries Ranked by Military Strength (2016)." *GlobalFirepower.com*.
http://www.globalfirepower.com/countries-listing.asp Accessed 12 July 2016.

Globe and Mail. "Canada sending DART to Nepal for earthquake relief." The Globe and Mail.
Ottawa – The Canadian Press. Saturday 2 May 2015, 3:12 pm.
www.theglobeandmail.com/news/national/canada-sending-dart-to-nepal-for-earthquake-
relief/article24231192/ Accessed 18 July 2016.

Goodyear-Smith, Felicity and Stephen Buetow. "Power Issues in the Doctor-Patient
Relationship." *Health Care Analysis*, vol. 9, 2001, pp. 449-462.

Gross, Michael. *Bioethics and Armed Conflict: Moral Dilemmas of Medicine and War*. Ed.
Glenn McGee and Arthur Caplan, Cambridge: The MIT Press, 2006.

Hicks, David. "Applying Tactical Resources Against Strategic Challenges: The Ethical Pitfalls of
MEDCAP as an Instrument of National Policy." Final. Naval War College, 2010. Web. 10
December 2015.

Kara, Mahmut. "Applicability of the principle of respect for autonomy: the perspective of
Turkey." *J Med Ethics*, vol. 33, 2007, pp. 627-630.

Lawrence, T.E. "The 27 articles of T.E. Lawrence." The Arab Bulletin. 20 August 1917.
wwi.lib.byu.edu/index.php/The_27_Articles_of_T.E._Lawrence Accessed 1 April 2016.

Loh, Lawrence, et al. "Short-term global health experiences and local partnership models: a

framework." *Globalization and Health*, vol. 11, no. 5, 2015,

https://globalizationandhealth.biomedcentral.com/articles/10.1186/s12992-015-0135-7

Accessed 15 March 2016.

McCormick, D. "Principles of Bioethics." 1 October 2013. *Ethics in Medicine: University of

Washington School of Medicine.* https://depts.washington.edu/bioethx/tools/princpl.html

Accessed 22 January 2016.

Mikkonen, Juha and Dennis Raphael. "Social Determinants of Health: The Canadian Facts."

Toronto: York University School of Health Policy and Management, 2010, pp. 1-62,

http://www.thecanadianfacts.org/ Accessed 10 July 2016.

Moore, Scott. "The Basics of Counterinsurgency." Study. US Joint Forces Command, n.d.

http://smallwarsjournal.com/blog/small-wars-pleasures Accessed 18 January 2016.

Moroney, Jennifer et al. "Lessons from Department of Defense Disaster Relief Efforts in the

Asia-Pacific Region." *Rand - National Security Research Division*, Prepared for the Office

of the Secretary of Defense, 2013, pp.1-147.

National Defence. "Canada First Defence Strategy." 2008.

www.forces.gc.ca/assets/FORCES_Internet/docs/en/about/CFDS-SDCD-eng.pdf Accessed

30 May 2016.

---. "The Disaster Assistance Response Team (DART)." 14 December 2015.

www.forces.gc.ca/en/operations-abroad-recurring/dart.page Accessed 17 July 2016.

---. "Frequently Asked Questions." Modified 18 July 2016. www.forces.gc.ca/en/about/faq.page

Accessed 17 July 2016.

---. "Global Engagement Strategy Strategic Guidance." Final Version – April 2015, pp. 1-15.

Web. 8 May 2016.

---. "Humanitarian Operations and Disaster Relief Operations." 5 May 2005. *Canadian Forces*

Joint Doctrine Board. Custodian: J7 Doctrine 2. Print. 11 June 2016.

---. "Women in the CAF." Backgrounder. 6 March 2014.

www.forces.gc.ca/en/news/article.page?doc=women-in-the-canadian-armed-

forces/hie8w7rm Accessed 19 July 2016.

---. "The Canada U.S. Defence Relationship." Backgrounder**,** 4 December 2014**.**

www.forces.gc.ca/en/news/article.page?doc=the-canada-u-s-defence-

relationship/hob7hd8s Accessed 12 July 2016.

NATO. "Allied Command Operations Guidance for Military Medical Services Involvement with

Humanitarian Assistance and Support to Governance, Reconstruction and Development."

Allied Command Operations Directive Number 83-2. Supreme Headquarters Allied Powers

Europe, 1 March 2010.

---. "Consumer Logistics." NATO Logistics Handbook. Chap 8. October 1997.

www.nato.int/docu/logi-en/logist97.htm Accessed 11 June 2016.

---. "NATO A-Z Pages." NATO Public Diplomacy Division. December 2014.

www.nato.int/cps/en/natohq/topics_118210.htm? Accessed 11 June 2016.

---. "Allied Joint Doctrine for the Military Contribution to Humanitarian Assistance." *NATO*

Standard AJP-3.4.3. NATO Standardization Office, edition A, version 1, October 2015.

---. "What is NATO?" www.nato.int/nato-welcome/ Accessed 8 July 2016.

Oravec, Geoffrey et al. "Active-Duty Physicians' Perceptions and Satisfactions with

Humanitarian Assistance and Disaster Relief Missions: Implications for the Field."

PLoSPME, vol. 8, no. 3, 2013,

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0057814 Accessed 19

January 2016.

Padela, Aasim et al. "Religious Values and Healthcare Accommodations: Voices from the

American Muslim Community." *J. Gen Intern Med*, vol. 27, no. 6, Jan 2012, pp. 708-715.

Peek, Lori. "Age." *Social Vulnerability to Disaster*. Ed. Thomas, Deborah et al., 2nd ed, ch. 7, pp.

167-198.

Preston, Matt. "Female medical team overcomes cultural, trust barriers to help Afghan women"

22 Marine Expeditionary Unit. 15 July 2004. Web. 19 July 2016.

Rae, Matthew. "Canada's Defence Policy for the 21st Century: A New Beginning or the Same

Old?" *The Mackenzie Institute*. 3 March 2016. http://mackenzieinstitute.com/4228-2/

Accessed 11 July 2016.

Rogers, Wendy, Catriona Mackenzie, and Susan Dodds. "Why bioethics needs a concept of

vulnerability." *International Journal of Feminist Approaches to Bioethics*, vol. 5, no. 2,

Fall 2012, pp. 11-38.

Rice, Matthews and Omar Jones. "Medical Operations in Counterinsurgency Warfare: Desired

Effects and Unintended Consequences." *Military Review*, 2010, pp. 47-57.

Salisbury, David and Allan English. "Prognosis 2020: A Military Medical Strategy for the

Canadian Forces." *The Operational Art: Canadian Perspectives Health Services Support*.

Ed. Allan English and James Taylor, Canadian Defence Academy Press, vol. 3, 2006, pp.

1-19.

Serafino, Nina. "The Department of Defense Role in Foreign Assistance: Major Issues and

Options for Congress." *CRS Report for Congress*, 9 December 2008, pp. 1-93.

Shuster, Evelyne. "Fifty years later: The significance of the Nuremburg Code." *New England Journal of Medicine*, 13 Nov 1997, pp. 1436-1440.

Smith, David. "Global Health Engagement Smart Power in Defense." *Brief for the Defense Health Board*, February 2015, slides 1-27. Web. 11 June 2016.

Statistics Canada. "Canada's population estimates fourth quarter." Canada's population surpasses 36 million." Released 16 March 2016. www.statcan.gc.ca/daily-quotidien/160316/dq160316c-eng.htm Accessed 18 July 2016.

Stoltenberg, Jens. "Doorstep Statement" NATO Secretary General Jens Stoltenberg – NATO Warsaw Summit. *NATO Newsroom*, 8 July 2016. www.nato.int/cps/en/natohq/opinions_133260.htm Accessed 12 July 2016.

United Nations Assistance Mission in Afghanistan (UNAMA), Afghanistan Independent Human Rights Commission (AIHRC). "Afghanistan - Annual Report 2010: Protection of Civilians in Armed Conflict." Kabul, Afghanistan, March 2011, pp. 1-58.

United Nations Educational, Scientific and Cultural Organization (UNESCO). "The principle of respect for human vulnerability and personal integrity." *Report of the International Bioethics Committee of UNESCO (IBC)*, 2013, pp. 1-54.

United States Census Bureau. "U.S. and the world population clock." 19 July 2016. www.census.gov/popclock/ Accessed 19 July 2016.

United States Department of Health and Human Services. "The Belmont Report." *Office for Human Research Protections*. 18 April 1979. www.hhs.gov/ohrp/regulations-and-policy/belmont-report/ Accessed 4 July 2016.

United States Government Publication Office. "10 U.S.C. 401- Humanitarian and Civic

    Assistance Provided in Conjunction with Military Operations." *United States Code*, 2006

    Ed., supplement 4, Title 10 - Armed Forces. 7 January 2011.

United States Southern Command. "Contingency Response | Disaster Relief | Humanitarian

    Assistance." 15 July 2016. www.southcom.mil/ourmissions/Pages/Contingency-Response-

    -Disaster-Relief--Humanitarian-Assistance-.aspx Accessed 18 July 2016.

Williams-Jones, Byrn, et al. "Ethics in the Field: The Experience of Canadian Military

    Healthcare Professionals." *Ethics and Armed Forces*, vol. 1, 2015, pp. 31-36.

Williamson, Jamie. "Using humanitarian aid to win 'hearts and minds': a costly failure?"

    International Review of the Red Cross, vol. 93, no. 884, 2011, pp. 1035-1061.

World Medical Association. "World Medical Association Declaration of Helsinki Ethical

    Principles for Medical Research Involving Human Subjects. *JAMA*, vol. 310, no. 20, 27

    November 2013, pp. 2191-2194.