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UNIVERSITY OF CALIFORNIA, SAN DIEGO SAN DIEGO STATE UNIVERSITY

Applied Health Diplomacy: Advancing the Science, Practice, and Tradecraft of Global Health Diplomacy to Facilitate More Effective Global Health Action

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy

in

Public Health (Global Health)

by

Matthew David Brown

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	2016	

TABLE OF CONTENTS

Signature Page	iii
Table of Contents	iv
List of Supplementary Materials	vi
List of Figures	. viii
List of Tables	ix
Acknowledgements	x
Vita and Publications	xii
ABSTRACT OF THE DISSERTATION	. xvi
CHAPTER 1: INTRODUCTION	1
OVERVIEW	1
BACKGROUND	2
Evolution of Global Health Diplomacy	4
How the U.S. Government Served as Leader for the Development of Global Health Diplomacy	5
Health Attachés and the Practice of Global Health Diplomacy	8
What this Research Adds	9
OVERARCHING STUDY AIMS	9
CHAPTER 2: BRIDGING PUBLIC HEALTH AND FOREIGN AFFAIRS; THE TRADECRAFT OF GLOBAL HEALTH DIPLOMACY AND THE ROLE OF HEAL ATTACHÉS	
ABSTRACT	
INTRODUCTION	
Global Health Diplomacy: Foundational Definitions and Concepts for the 21 ^s Century	st
Health Attachés and Their Qualifications	20
Roles of U.S. Health Attachés	22
Tradecraft Model of Health Attachés in the U.S. Government	23
Non-U.S. Global Health Diplomacy Practitioners in Washington, D.C	26
CONCLUSION	28
ACKNOWLEDGEMENTS	28
REFERENCES	33
CHAPTER 3: MAPPING FOREIGN AFFAIRS AND GLOBAL PUBLIC HEALTH COMPETENCIES: TOWARDS A CORE COMPETENCY MODEL FOR GLOBA	L
HEALTH DIPLOMACY	
ABSTRACT	35

BACKGROUND	. 37
METHODS	. 41
Stage 1: Literature Review	. 42
Stage 2: Analysis of Competency Models	. 43
Stage 3: Developing an Initial Competency Model for GHD	. 44
RESULTS	. 44
Foreign Affairs Aggregate Model	. 46
Global Public Health Aggregate Model	. 47
Global Health Diplomacy Core Competency Model	. 48
DISCUSSION	. 49
CONCLUSION	. 55
ACKNOWLEDGEMENTS	. 56
REFERENCES	. 62
CHAPTER 4: APPLIED GLOBAL HEALTH DIPLOMACY: PROFILE OF HEALT	ТН
DIPLOMATS ACCREDITED TO THE UNITED STATED AND FOREIGN GOVERNMENTS	66
ABSTRACT	
INTRODUCTION	
METHODS	
Participant Selection	
Study Procedures	
DATA ANALYSIS	
RESULTS	
The Role and Position of Health Attaché	. 77
What Makes a Health Attaché?	
Health Diplomacy in Action	. 80
The Future of Global Health Diplomacy	. 83
DISCUSSION	. 85
CONCLUSION	. 89
ACKNOWLEDGEMENTS	. 90
REFERENCES	. 93
CHAPTER 5: DISCUSSION	. 96
OVERVIEW	. 96
Bridging Public Health and Foreign Affairs: the Tradecraft of Global Health Diplomacy and the Role of Health Attachés	. 97
Mapping Foreign Affairs and Global Public Health Competencies: Towards a Core Competency Model for Global Health Diplomacy	

Applied Global Health Diplomacy: Profile of Health Diplomats Accredite	
United States and Foreign Governments, A Qualitative Study	100
LIMITATIONS	102
RECCOMENDATIONS AND FUTRURE RESEARCH NEEDS	106
CONCLUSIONS	109

LIST OF SUPPLEMENTARY MATERIALS

Appendix A: Foreign Affairs and Global Public Health Competency Models

Appendix B: Semi-Sutured Interview Guide for Profile of Health Diplomats Accredited

to the United States and Foreign Governments

LIST OF FIGURES

Figure 1.1: The Continuum of Global Health and Foreign Policy11
Figure 1.2: Executive Branch Agencies Supported by the President's Emergency
Plans for AIDS Relief and Relationship to the Office of Global Health Diplomacy 12
Figure 2.1: Pyramid of Global Health Diplomacy: Cascade of Actors, Definitions, and
Tools
Figure 2.2: The Tradecraft Model of Global Health Diplomacy and U.S. Health
Attachés
Figure 3.1: Pyramid of Global Health Diplomacy: Cascade of Actors, Definitions, and
Tools
Figure 3.2: Study Inclusion and Exclusion Framework
Figure 3.3: Global Public Health and Foreign Affairs Competency Comparison 60

LIST OF TABLES

Table 2.1: Location and Title of Current and Former HHS Health Attachés; and Other
Health Representatives32
Table 3.1: Global Public Health and Foreign Affairs Institutions with Published
Competency Models and Training Mandates
Table 3.2: Foreign Affairs Institutional Competencies and Domain Descriptors 59
Table 3.3: Global Public Health Competencies by Foreign Affairs Domain Descriptors
60
Table 3.4: Comparison of Domains Between Foreign Affairs and Global Public Heath
Competency Models61
Table 3.5: Global Public Health Diplomacy Initial Core Competency Model 61
Table 4.1: Diplomats in Washington, D.C., Accredited to the United States with
'Health' in Their Diplomatic
Table 4.2: U.S. Health Attachés Assigned Abroad by the United States Department of
Health and Human Services91
Table 4.3: Eight Health Attachés Accredited to the United States and Five Health
Attachés Accredited to Foreign Governments, Who Participated in the Global Health
Diplomacy Study, 2012-201491
Table 4.4: Foreign and U.S. Health Attachés Reporting relationship to Ambassador
and Domestic Health Authority, and Section Size

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Chapter 2, in full, is a reprint of the material as it appears in Science & Diplomacy, Brown MD, Mackey TK, Shapiro CN, Kolker J, Novotny NE: Bridging Public Health and Foreign Affairs: The Tradecraft of Global Health Diplomacy and the Role of Health Attachés. Science & Diplomacy. 2014;3(3). (published online on Sept 2014). Matthew Brown was the primary investigator and author of this paper.

Chapter 3, is a reprint of material submitted to Global Health Governance.

Brown MD, Bergmann JN, Mackey TK, Eichbaum Q, McDougal L, Novotny TE. This

Chapter is dedicated to all professionals who replace themselves - by helping people
to see one, do one, and teach one, mentoring competency in others. Matthew

Brown was the primary investigator and author of this paper.

Chapter 4, in full, is in preparation for submission to Global Health Science and Practice. This work is dedicated to all of the Health Attachés who participated in this study of health diplomacy, and to all Health Attachés who are currently or have served on the front lines of health diplomacy, giving form to this field, and helping to make this word a better place by joining nations and intuitions around common public health challenges. Brown MD, Bergmann JN, Novotny TE. Matthew Brown was the primary investigator and author of this paper.

VITA AND PUBLICATIONS

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- 2. Brown M. China's Role in Global Health Diplomacy: Designing Expanded U.S. Partnership for Health System Strengthening in Africa. *Global Health Governance* 2013; Summer 2013.
- 3. Brown M, Mackey TM, Liang BA. Global health diplomacy and management mechanism of US-China public heath collaborations in China: Lessons for emerging markets. *Journal of Commercial Biotechnology.* 2012; Volume 18(Number 4):44-50.
- 4. Beatty ME, Hunsperger E, Brown, M, et al. Mosquitoborne infections after Hurricane Jeanne, Haiti, 2004. *Emerging Infectious Diseases*. 2007;13(2):308-310.
- 5. Sharapov MB, Favorov MO, Brown, M, et al. Acute viral hepatitis morbidity and mortality associated with hepatitis E virus infection: Uzbekistan surveillance data. *BMC infectious diseases*. 2009;9(1):35.

PUBLISHED ABSTRACTS

- 1. Brown M. Intersection of Diplomacy and Public Health: The Role of Health Attachés in the United States Government's Global Engagement. Paper presented at: 141st American Public Health Association Annual Meeting, (November 2-November 6, 2013) Boston, MA. 2013.
- 2. Brown M. HHS Health Attachés: Practitioners of Core Health Diplomacy, Bridging Global Health and Foreign Policy. Consortium of Universities for Global Health; 5/12/2014; Washington, D.C. 2014.
- 3. Brown M. Health Attachés and Competencies for Global Health Diplomacy. Consortium for Global Health Diplomacy (CUGH); 5/11/2016; Washington, D.C. 2014
- 4. Brown M. Bridging Public Health and Foreign Affairs: Diplomatic Tradecraft of Health Attachés and their Role in the U.S. Government's Global Health Engagement. University of California Global Health Day; 4/26/2014; Irvine, CA. 2014.
- 5. Brown M. Working in Embassies, Country Teams, and Interagency Engagement. MPH@GW Global Health Diplomacy; 10/19/2014; Washington, D.C. 2014.
- 6. Brown M. Global Health Diplomacy in the 21st Century Workshop. 2014; Workshop presented at: 143st American Public Health Association Annual Meeting (November 5, 2015) 2015.
- 7. Brown M. Applied Health Diplomacy U.S. Health Attachés and the Tradecraft of Global Health Diplomacy. Paper presented at: 143st American Public Health Association Annual Meeting (November 5, 2015) 2015.11/2/2015, 2015.

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1. Brown M, Bergmann JN, Mackey TK, Eichbaum Q, McDougal L, Novotny TE. Mapping Foreign Affairs and Global Public Health Competencies: Towards a Competency Model for Global Health Diplomacy. Global Health Governance. 2016. (submitted March 2016)

PUBLICATIONS IN PREPARATION

1. Brown M. Bergmann JN, Novotny TE. Applied Global Health Diplomacy: Profile of Health Diplomats Accredited to the United States and Foreign Governments, a Qualitative Study. 2016.

PRESENTATIONS

Peer-Reviewed Abstracts and Presentations at Scholarly Meetings *denotes oral presentation

- 2. Brown M. Intersection of Diplomacy and Public Health: The Role of Health Attachés in the United States Government's Global Engagement. Paper presented at: 141st American Public Health Association Annual Meeting, (November 2-November 6, 2013) Boston, MA. 2013.
- 3. Brown M. HHS Health Attachés: Practitioners of Core Health Diplomacy, Bridging Global Health and Foreign Policy. Consortium of Universities for Global Health; 5/12/2014; Washington, D.C. 2014.
- 4. Brown M. Health Attachés and Competencies for Global Health Diplomacy. Consortium for Global Health Diplomacy (CUGH); 5/11/2016; Washington, D.C. 2014
- 5. Brown M. Bridging Public Health and Foreign Affairs: Diplomatic Tradecraft of Health Attachés and their Role in the U.S. Government's Global Health Engagement. University of California Global Health Day; 4/26/2014; Irvine, CA. 2014.
- 6. Brown M. Working in Embassies, Country Teams, and Interagency Engagement. MPH@GW Global Health Diplomacy; 10/19/2014; Washington, D.C. 2014.
- 7. Brown M. Global Health Diplomacy in the 21st Century Workshop. 2014; Workshop presented at: 143st American Public Health Association Annual Meeting (November 5, 2015) 2015.

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ABSTRACT OF THE DISSERTATION

Applied Health Diplomacy: Advancing the Science, Practice, and Tradecraft of Global Health Diplomacy to Facilitate More Effective Global Health Action

by

Matthew D. Brown

Doctor of Philosophy in Public Health (Global Health)

University of California, San Diego, 2016 San Diego State University, 2016

Professor Thomas E. Novotny, Chair

Global Health Diplomacy (GHD) is a burgeoning field that bridges independent priorities in both global health and foreign affairs. Given the increasing need to mobilize the global community to respond to Public Health Emergencies of International Concern (PHEIC) such as Ebola or Zika, as well as forge new and expand existing collaborations to tackle public health challenges of mutual concern, effective and timely coordination and cooperation among actors is critical. Health Attachés are key diplomats who represent nation-states in these negotiations.

Despite this diplomatic mandates, they are very few in numbers and little is published about this profession, preparation, and perspectives in field of GHD. Additionally, no institution has published a GHD core competency model to help standardize recruitment, training, and preparation of personnel changed with the practice of GHD, which can lead to confusion when trying to align actors and institutions to achieve effective global health action.

Objectives: (1) Update definitions and practice models in GHD related to the development and practice of Health Attachés; (2) Create a GHD core competency model to address gaps in training for global public health, foreign affairs, and other professionals; and (3) Present a profile of practicing Health Attachés accredited to the United States and foreign governments.

Methods: By synthesizing literature and definitions used in the field with an emphasis on practice, develop a framework for GHD and a tradecraft model for Health Attachés in the 21st Century (Chapter 2). Developed a core competency model for GHD by: (a) identifying core competency models from global public health and foreign affairs training institutions; (b) employing a priori word counts drawn from the foreign affairs literature, measure degrees of association and divergence between global public health and foreign affairs competency models; and (c) based on these comparisons, formulate an initial core competency model for GHD (Chapter 3). Utilize key informant interviews to qualitatively explore perspectives, preparation, best practices, and challenges in the field of GHD among Health Attachés accredited to the United States and foreign governments (Chapter 4).

Results: In Chapter 2, we introduce a *Pyramid of Global Health Diplomacy*, presenting three levels of GHD practice: *core*, *multi-stakeholder*, and *informal*, each

with associated actors, definitions, and tools; and a *Tradecraft Model of Global Health Diplomacy and Health Attachés*, to map relations among stakeholders, counterparts, and institutions. In Chapter 3, we propose a *Global Health Diplomacy Core Competency Model* illustrating foreign affairs institutions need additional knowledge, skills, and abilities in: (a) heath communication, (b) public health analysis, and (c) public health ethics; and global public health institutions need additional knowledge, skills, and abilities in: (a) leadership, (b) foreign languages, and (c) foreign policy goals, objectives, and strategies. In Chapter 4, Health Attachés identified skills in diplomacy and negotiation, applied science, and cross cultural competency critical for success, and providing expanded communication protocols on health plans and counterparts, while on-the-job training and mentored experiences for practitioners is important for future actors in the field.

Conclusion: This dissertation provides needed advancements in the field of GHD, helping to advance the science, practice, and tradecraft of GHD. While models presented in this body of work need to be tested, evaluated, and refined with additional research, they serve as a collective practice framework for the field, to inform any profession or institutions who practices GHD. Additionally, findings may help professionalize the field of GHD, the practice of Health Attachés, and create a more effective bridge between the fields of foreign affairs and public health, by increasing cross-field competence, and fostering more effective global health action when maintaining, expanding, and initiating new global health collaborations.

CHAPTER 1: INTRODUCTION

OVERVIEW

The world is more interconnected and transient than at any time in human history. As a consequence, the world is more vulnerable to disease threats that traverse borders than at any other time in human history. As outbreaks of pandemic influenza, Ebola Virus Diseases (EVD), or Zika illustrate, no disease can be controlled without collective action. Today, nations must join together to effectively respond to the public health threats of the 21st Century. The concept of countries, institutions, or the public, joining together to tackle diseases that cross international borders is referred to as Global Health Diplomacy (GHD).

However, GHD is an emerging field of practice, which has developed in significance over the last fifteen years.³ As a new field, the literature lacks a definitional framework, models of practice, or defined competencies to help standardize approaches and training across institutions. This is in sharp contrast to other forms of diplomatic practice, such as economic, political, or military diplomacy, that have extensive competency based research as well as supporting institutions.^{4,5} This lack of a common framework can lead to confusion when attempting to align appropriate actors, tools, and expectations to facilitate effective global health action.

The overall goal of this dissertation is to help advance the science, practice, and tradecraft of GHD. The tradecraft – or competency based research involving the application of specialized skills applied in service of a trade, such as employed in the tradecraft of intelligence, procurement, or business administration – is lacking in the field of GHD.^{5,6} Standard definitions, frameworks, models of practice, and

descriptions of key actors are needed to inform and strengthen the field. Doing so will help institutions that practice GHD appropriately prepare workforces and individual professionals who can competently bridge the independent priorities of global health and foreign affairs to facilitate more effective global health action.

BACKGROUND

Fifteen years ago, one would not have encountered the words 'global health' and 'diplomacy' in the same sentence, let alone as a distinct field. Today, GHD is represented prominently in dedicated sessions at every global health conference, is featured on global health institutional web sites, and supports at least two dedicated peer reviewed journals. ^{4,7-11} Despite the plethora of activity in GHD, no robust framework or empirical analytics have been performed in this nascent field, where principles of global health and diplomacy must intersect in concert. ¹² However, GHD evolved out of the separate fields of global health and foreign affairs, both of which maintain well established models of practice, competency based research, and institutions that recruit, train, and develop workforces and specialized personnel to accomplish goals, in these respective fields.

In the field of global health, health diplomacy is only given a tactic reference, under Collaborating and Partnering, within the Association of Schools for Public Health School's Global Health Competency Model, which is used for training Masters and PhD students. Similarly, in the field of foreign affairs, training in health diplomacy is given very little attention. The Department of State (DOS) is the oldest

federal agency in the U.S. Government, and is the lead agency for foreign affairs.⁵
The DOS's premier training institution for diplomats is the U.S. Foreign Service is the Foreign Service Institute (FSI). FSI has a mandate to train both America's diplomats as well as employees of all government agencies.¹⁴ While FSI has resident Deans and published core competency models for training specialized diplomats in the fields of Economics, Political, Consular, Public Affairs, and Management, it only maintains a single three-day survey course on GHD within the School of Economic Diplomacy, and it is not required to be a Foreign Service Officer.¹⁵

In the emerging field of GHD, no institution has yet published a model of practice or defined competencies that can be used to evaluate and measure progress within the field, develop standardize approaches across institutions, or describe the perspectives of practicing health diplomats. The field is simply too new. However, the fields of global health and foreign affairs are more well-established, as is the practice of diplomacy itself.

Global health, presented by Koplan as an evolution of the term 'international health', refers to the practice of controlling diseases of public health concern by partnering with nations around principles of health equity. ¹⁶ This is opposed to the concept of international health, which has in its origins in quarantine stations of the 16th and 17th century, which focused on reinforcing national borders in protective isolation from diseases. ^{16,17}

Diplomacy is the oldest tool in the arsenal of civilization – getting others to do what you want. 18 Diplomacy today is used by diplomats to achieve strategic national

objectives, and is a critical component in the practice of statecraft and foreign affairs. Diplomats by definition attempt to create and expand areas of agreement and cooperation while eliminating or reducing areas of disagreement or conflict. An important characteristic of modern diplomacy is the application of smart power, rather than hard power – using incentives, attractions, and persuasion, rather than military and economic coercion, in service of foreign policy objectives of the state.

Evolution of Global Health Diplomacy

GHD as characterized in 2008 by Adams and Novotny, is as a political activity meeting dual goals of improving health while strengthening relations among nations.²¹ In 2010, Assistant Secretary of State Jones defined GHD as a critical tool in foreign affairs, encouraging diplomats in the Department of State to use public health as they would the traditional tools of commercial, military, and political diplomacy.²² However, further refinement by Feldbaum and Michaud argued that GHD is used by states and non-state actors to achieve ulterior foreign policy objectives, and represents just a new tool to achieve foreign policy goals of nation-states.²³

So what is the relationship between global health and foreign affairs? Is global health driven by foreign policy? Or, is foreign policy driven by global health?

Understanding this foundational tension is critical to answer this question within the field of GHD. Kickbusch presented a continuum of global health and foreign policy, adapted in Figure 1.1, that presents this issue in a different light.²⁴

It is important to note the temporal nature of this continuum. Over time, as our world becomes more interconnected and globalized, and people and populations become more healthy and wealthy, health becomes a more important part of foreign policy discussions and negotiations. As we will illustrate in our next section, health is an integral part of foreign policy, continuing a trajectory of escalating global health issues which occupy foreign policy discussion and negotiations. As we will illustrate, this trajectory will continue.

How the U.S. Government Served as Leader for the Development of Global Health Diplomacy

The U.S. Government support for the globally prevention and control of HIV/AIDS helped develop this nascent field of public health practice. Over the last fifteen years, the U.S. Government has invested substantial resources internationally to prevent and control HIV/AIDS in the most severely impacted countries. In 2000, Vice President AI Gore addressed the U.N. Security Council during a special session dedicated to HIV/AIDS to declare the disease a security threat with the capacity to topple nations and destabilize entire regions of Africa, the first time the Security Council addressed a public health issue.²⁵

Also in 2000, the Clinton Administration passed the Leading in Fighting an Epidemic (LIFE) Initiative which mobilized \$100 million in funding to an interagency team to help control the spread of HIV/AIDS in Africa.²⁶ In 2003, President Bush announced in the State of the Union Address the creation of the President's

Emergency Plan for AIDS Relief (PEPFAR), and placed the coordination for the initiative within the U.S. Department of State (DOS), under the leadership of a Global AIDS Coordinator, with the rank of Ambassador.²⁷

Through an innovative interagency planning process, PEPFAR made individual U.S. Ambassadors responsible for the HIV/AIDS funding in their respective country of assignment. This ensured the highest level of attention by not only the nation's diplomatic corps, but also the President's representative in each country, to address an all-of-government approach mobilized at the highest levels of nation-state actors. This design also placed the overall accountability for implementing a public health initiative in foreign affairs fora, rather than within individual technical agencies, where through the U.S. Congress appropriations process, it resided previously.

PEPFAR is the largest commitment ever made by a single nation to combat a single disease and in its first five years succeeded in placing 2.1 million people on antiretroviral therapy, placing 10 million into care and support, which averted an estimated 3.28 million years of potential young people's life lost.²⁷ In 2008 President Obama, with bi-partisan support of the U.S. Congress, renewed PEPFAR for another 5 years and announced the creation of a Global Health Initiative (GHI), which unfortunately lacked funding and leadership for several years.²⁸ However, in a blog post in 2012, the DOS announced that the GHI office would close and a new Global Health Diplomacy Office would open. The GHD Office would be located within PEPFAR under the Global AIDS Coordinator, rather than in a parallel office within DOS, as was the previous structure of GHI.^{29,30} This announcement recognized the role that health diplomacy plays in foreign affairs, and the Office could serve as an

advocate for global health with international partners, from within the largest global health initiative in history.

There are over 19 executive branch federal agencies that receive PEPFAR funding and share a relationship with the Office of Global Health Diplomacy in DOS (Figure 1.2). Functionally, this structure permits all agencies to more strategically pool technical and financial recourse, exploit agency comparative advantages, to build capacity to tackle the world's HIV/AIDS epidemic. The creation of the Office of Global Health Diplomacy within PEPFAR presents an opportunity to use this innovative programmatic and management architecture to support broader and deeper diplomatic exchanges among nations, helping to link public health and foreign affairs agencies and actors, to address public health challenges of greatest concern.

The impact PEPFAR has on partner countries and relations with the U.S. Government is significant and illustrated in a recent report from the Bi-Partisan Policy Center, authored by former Senators Tom Daschle and Bill Frist, two of the sponsors of the original PEPFAR legislation. The report, "the Case for Strategic Health Diplomacy," presents evidence illustrating that countries that receive PEPFAR funding score significantly higher on the Human Development Index compared to non-PEPFAR countries, and that public perception of the United States is much higher in PEPFAR vs non-PEPFAR countries.³¹

Another important aspect of GHD practice is the perspective of health diplomats, and specifically, Health Attachés, who represent nation-states in global health negotiations, maintain and expand key relationships, collaborations, and

partnerships, and help to bridge public health and foreign affairs counterparts and institutions. Little is actually published in the literature about Health Attachés; there is no guidance on types of training to prepare health professionals for serving as this kind of specialized diplomat, or published narrative describing their conception of GHD, despite the escalating importance global health issues exert in foreign affairs.

Health Attachés and the Practice of Global Health Diplomacy

The response to the Ebola outbreak in 2014 is a recent illustration of the need for timely and effective practice of GHD.³² Among a list of challenges provided by an Interim Assessment Panel convened by the World Health Organization (WHO), was a 5 month delay in the declaration of a Public Health Emergency of International Concern (PHEIC), and a lack of coordination among WHO members states regarding travel bans, in clear violation of the International Health Regulations (IHR), both of which hampered response efforts in the global community.³³ Health Attachés are specialized diplomats that represent states in exactly these kinds of global health negotiations. Health Attachés are very few in number and little is published about this profession, preparation, and perspectives in the field of GHD.

Without the rigor that underpins traditional areas of diplomatic practice, such as political, economic, and military diplomacy, GHD will not develop a robust field of practice. This will present challenges to establishing a workforce with the specialized knowledge, skills, and experiences necessary to implement collaborations among global health and foreign affairs counterparts and stakeholders.

What this Research Adds

No institution has identified a practice model for GHD. There is no core competency model for GHD to inform the recruitment, training, or development of global health, foreign affairs, or other professions with similar mandates. Nothing is published describing the tradecraft of practicing Health Attachés, their understanding and conception of GHD, profile success and challenges, or seek suggestions to improve the practice of GHD, or to encourage the development and use of additional Health Attachés in the field. This research could inform any institution, government, non-government, or multinational cooperation that has a workforce active in global public health and wants to create a designated professional to help manage health and foreign affairs issues.

Without further refinement of the nuances involved in GHD practice, such as political, economic, and military diplomacy, GHD will not develop as field of practice, which will present challenges when trying to recruit, train, and/or develop this specialized workforce.

OVERARCHING STUDY AIMS

The specific aims of this project are to (1) update definitions and practice models in the field of GHD related to the development and practice of Health Attachés; (2) create a GHD core competency model to address gaps in training for

global public health, foreign affairs, or other specialized personnel with similar mandates; and (3) present a profile of practicing Health Attachés accredited to the United States and foreign governments.

The findings of this study will help public health, diplomatic, and other professionals charged with GHD, identify strategies to improve practice and help professionalize the tradecraft of GHD. A core competency model, similarly defined and maintained by the U.S. Department of State for traditional diplomacy, is needed to allow standardized competencies to be developed and adopted across institutions, to promote more effective approaches to address critical GHD problems and challenges.

Presenting a description of core GHD participants, Health Attachés, understanding their preparation, training, perspectives on GHD, including success and challenges, as well as suggestions for improving the field, will help provide a model of practice. This description will help encourage other countries and institutions to develop dedicated Health Attachés, as well as professionals charged with facilitating global health action. A practice model to establish a designated position, charged with a broad mandate to address global health issues, a Health Attaché, will help any institution engaged in public health issues that traverse international boundaries, facilitate more effective global health action. This would apply to individuals, private multinational companies, governments, or multilateral institutions.

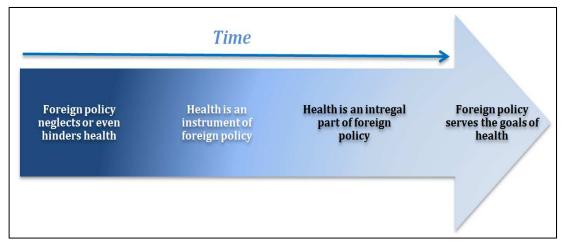


Figure 1.1: The Continuum of Global Health and Foreign Policy

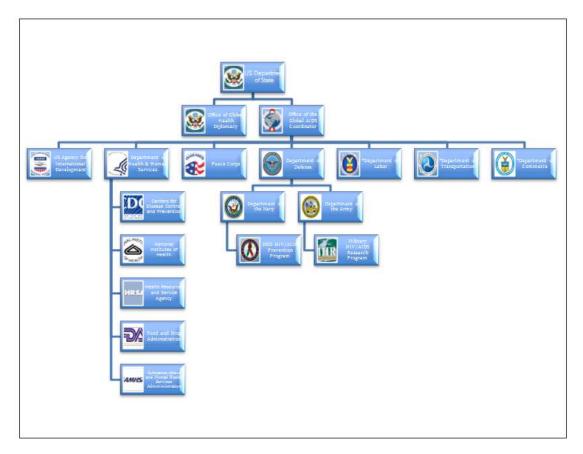


Figure 1.2: Executive Branch Agencies Supported by the President's Emergency Plans for AIDS Relief and Relationship to the Office of Global Health Diplomacy

REFERENCES

- 1. Heymann DL, Chen L, Takemi K, et al. Global health security: the wider lessons from the west African Ebola virus disease epidemic. *The Lancet*. 2015;385(9980):1884-1901.
- 2. Frieden T. CDC: 5 ways diseases in other countries can kill you. 2014. http://www.cnn.com/2014/02/13/health/frieden-global/index.html?iref=allsearch.
- 3. Kickbusch I, Silberschmidt G, Buss P. Global health diplomacy: the need for new perspectives, strategic approaches and skills in global health. *Bulletin of the World Health Organization*. 2007;85(3):230-232.
- 4. Kickbusch I. *Global Health Diplomacy A Survey on Training Programmes & Courses.* Geneva May 2008 2008.
- 5. State UDo. A History of Diplomacy. Washington, D.C.: US Department of State, Bureau of Public Affairs, Office of the Historian; 2004: http://history.state.gov/education/modules/history-diplomacy-intro. Accessed 10/23/2013.
- 6. Hocking B. Multistakeholder diplomacy: forms, functions and frustrations. *Multistakeholder Diplomacy: Challenges and Opportunities*. 2006:13-29.
- 7. Centre for Trade Policy and Law in Ottawa C. The Global Health Diplomacy Network (GHD-NET). 2014; http://www.ghd-net.org/. Accessed 2/14/2014.
- 8. Institute TG. Global Health Diplomacy. 2014; http://graduateinstitute.ch/home/research/centresandprogrammes/globalhealth/global-health-diplomacy.html. Accessed 2/28/2014.
- 9. Organization WH. Global Health Diplomacy. *Trade, foreign policy, diplomacy and health* 2014; http://www.who.int/trade/diplomacy/en/, 2/28/2014.
- 10. Studies CfSal. Global Health Diplomacy. 2014; http://csis.org/category/topics/global-health/global-health-diplomacy. Accessed 2/28/2014.
- 11. Diplomacy CfGHa. Center for Global Health and Diplomacy. 2014; http://globalhealthanddiplomacy.org/. Accessed 2/28/2014.
- 12. Katz R, Kornblet S, Arnold G, Lief E, Fischer JE. Defining health diplomacy: changing demands in the era of globalization. *Milbank Q.* 2011;89(3):503-523.

- 13. Calhoun JG, Spencer HC, Buekens P. Competencies for global heath graduate education. *Infectious disease clinics of North America*. 2011;25(3):575-592.
- 14. State Do. FOREIGN SERVICE INSTITUTE -- U.S. DEPARTMENT OF STATE. 2013; http://fsitraining.state.gov/. Accessed 10/8/2013, 2013.
- 15. State TDo. Foriegn Service Institute Course Catalog 2013-2015. In: Center GPSNFAT, ed. Washington, D.C.2013.
- 16. Koplan JP, Bond TC, Merson MH, et al. Towards a common definition of global health. *The Lancet*. 2009;373(9679):1993-1995.
- 17. Banta JE. From international health to global health. *Journal of community health*. 2001;26(2):73-76.
- 18. Freeman Jr CW. *Diplomat's Dictionary*. DIANE Publishing; 1994.
- 19. State USDo. A Short History of the Department of State. 2016; https://history.state.gov/departmenthistory/short-history/framework. Accessed 3/3/2016.
- 20. Clinton HR. Leading through Civilian Power-Redefining American Diplomacy and Development. *Foreign Aff.* 2010;89:13.
- 21. Adams V, Novotny TE, Leslie H. Global Health Diplomacy. *Medical Anthropology*. 2008;27(4):315-323.
- 22. Jones K-A. New Complexities and Approaches to Global Health Diplomacy: View from the U.S. Department of State. *PLoS Med.* 2010;7(5):e1000276.
- 23. Feldbaum H, Michaud J. Health Diplomacy and the Enduring Relevance of Foreign Policy Interests. *PLoS Med.* 2010;7(4):e1000226.
- 24. Kickbusch I. Global health diplomacy: how foreign policy can influence health. *BMJ*. 2011;342(d3):154.
- Gore A. Remarks as Prepared for Delivery by the Vice President Al Gore, united National Security Council Opening Session. 2000. 2000;
 http://clinton3.nara.gov/WH/EOP/OVP/speeches/unopen_fp.html. Accessed 9/27/2012.
- 26. Policy. WHOoNA. Leadership and Investment in Fighting an Epidemic (LIFE): A Global AIDS Initiative. July 19, 1999 1999.

- 27. Simonds RJ, Carrino CA, Moloney-Kitts M. Lessons From The President's Emergency Plan For AIDS Relief: From Quick Ramp-Up To The Role Of Strategic Partnership. *Health Affairs*. 2012;31(7):1397-1405.
- 28. Foundation KF. The U.S. Global Health Initiative (GHI) Fact Sheet. 2011; http://www.kff.org/globalhealth/upload/8116.pdf.
- 29. Office GHI. Global Health Initiative Strategy Document. 2009; http://www.cdc.gov/globalhealth/ghi/pdf/GHIStrategy.pdf. Accessed 9/24/2012, 2012.
- 30. Initiative GH. Global Health Initiative Next Steps A Joint Message. 2012; http://www.ghi.gov/newsroom/blogs/2012/194472.htm. Accessed July 16, 2012.
- 31. Tom Daschle BF. The Case for Strategic Health Diplomacy: A Study of PEPFAR. Conference on Strategic Health Diplomacy; November 9, 2015, 2015; Newseum, 8th Floor, Knight Conference Center, 555 Pennsylvania Ave NW, Washington, DC, 20001.
- 32. Maurice J. Expert panel slams WHO's poor showing against Ebola. *The Lancet.* 2015;386(9990):e1.
- 33. Organization WH. Report of the Ebola Interim Assessment Panel. 2015; http://www.who.int/csr/resources/publications/ebola/report-by-panel.pdf?ua=1. Accessed 2/16/2016, 2016.

CHAPTER 2: BRIDGING PUBLIC HEALTH AND FOREIGN AFFAIRS; THE TRADECRAFT OF GLOBAL HEALTH DIPLOMACY AND THE ROLE OF HEALTH ATTACHÉS

ABSTRACT

As the world becomes more interconnected, the need for coordinated responses to shared global public health threats has increased. A small but growing cadre of diplomats known as Health Attachés is key among the practitioners of global health diplomacy (GHD) who employ the tools of diplomacy and statecraft to bridge governments' public health and foreign policy objectives.

A Health Attaché is defined as a diplomat who collects, analyzes, and acts on information concerning health in a foreign country or countries and provides critical links between public health and foreign affairs stakeholders. The first mention in the literature of 'Health Attaché' was in a 1948 issue of the *Journal of the American Medical Association* announcing the assignment of Morris B. Sanders to U.S. Embassies in Brussels, Paris, and The Hague. Dr. Sanders was commissioned into the U.S. Public Health Service and detailed to the U.S. Department of State with a mission to collect information from these countries on health, medical research, and diseases of interest to the United States. Since then, a growing number of countries have assigned Health Attaché to work in embassies in countries of strategic importance. However, few papers specifically describe this special cadre of diplomats.

Understanding the role of Health Attaché, who work across disciplines and national boundaries, is important to improve the effectiveness of their work, enhance

countries use of Health Attaché, and help shape training and professional development of future GHD practitioners. In this paper, we first describe the conceptual background of GHD in the 21st century and its impact on the development of the Health Attaché. Next, we introduce a *Pyramid of Global Health Diplomacy*, presenting a cascade of actors, definitions, and tools to update definitional concepts used in this field, followed by a description of current practices and competencies of Health Attachés as a specific type of diplomat. Finally, we propose a *Tradecraft Model for GHD* and the modern Health Attaché to characterize the qualifications and training necessary for these professionals.

INTRODUCTION

Global Health Diplomacy: Foundational Definitions and Concepts for the 21st
Century

A country's foreign policy can be understood as the strategy of a state to achieve its goals and to protect its national interests within the international community. Yet twenty years ago, few would have used the words, 'global health' and 'diplomacy' in the same sentence, even though health is an integral component of global security.³ The term Global Health Diplomacy (GHD) is now firmly established in the global health lexicon, with relevance to both public health practice and foreign policy.⁴ In addition, many events over the last two decades have contributed to the development of the field of GHD, such as the increase in global funding for HIV/AIDS; the threat of emerging and re-emerging infectious diseases; the need for pandemic preparedness; the shifting of international health assistance to new multi-level collaborative partnerships; and the emerging focus on health system strengthening and universal health coverage. The field of GHD is supported by at least two peer-reviewed scientific journals, ^{5,6} numerous training programs, ⁷ at least eight major public health institutions that maintain GHD content on their web sites, ⁸⁻¹³ and a dedicated Office for GHD in the U.S. Department of State.

In 2008, Vicanne Adams, Thomas E. Novotny, and Hannah Leslie described GHD as a political activity that meets the dual goals of improving public health, while strengthening relations among nation states. ¹⁴ While this definition implies links between public health and foreign affairs, further refinements in the definition have followed. In 2009, U.S. Assistant Secretary of State for Oceans, Environment, and

Science, Kerri-Ann Jones, described GHD as a critical tool in foreign affairs, encouraging diplomats in the Department of State to consider public health principles along with the traditional tools of commercial, military, and political diplomacy. ¹⁵ Other stakeholders have also emphasized the use of health diplomacy as a "soft" or "smart" power tool in foreign policy¹⁶ as well as in national security discourse. ¹⁷ Ilona Kickbusch, a professor at the University of Geneva's Graduate Institute of International and Development Studies Global Health Programme, has described the temporal continuum of global health and foreign policy, ¹⁸ with health becoming an increasingly important part of foreign policy discussions and negotiations in a globalized world. With health threats that impact national security, such as highly pathogenic avian influenza, challenges to the safety of the global drug supply, ¹⁹ the continuing scourge of HIV/AIDS, ²⁰ and the spread of the Ebola virus declared a public health emergency of international concern, ²¹ the need for diplomats to understand health issues while being able to negotiate effectively in the multi-national foreign policy space is increasing.

In 2011, Katz et al., presented a taxonomy for GHD, defining "core," "multi-stakeholder," and "informal" forms of health diplomacy.²² We have employed Katz's definitional terms to construct a diagram (Figure 2.1) to illustrate and emphasize aspects of GHD practice. As depicted, each category of GHD practice involves different tools and actors: 1) *core health diplomacy* uses bilateral and multilateral treaties and agreements among government and state actors; 2) *multi-stakeholder diplomacy* uses partnerships among government agencies and multilateral

institutions, and 3) *informal health diplomacy* uses agreements with donor, academic, and humanitarian agencies.

This pyramidal structure does not imply that one category is more effective than another but rather, that the number of practitioners is fewer and the range of their activities is more focused at higher levels of the pyramid. Similarly, while neither actors nor tools are restricted to particular categories, actors and tools most frequently align within each respective category of GHD practice. To have a successful global health strategy that addresses public health and foreign policy goals, effective action at each level of the GHD pyramid is needed. As we propose below in our *Tradecraft Model* for a Health Attaché, GHD as practiced by Health Attachés, requires identifying and engaging these tools and actors and coordinating action among multiple counterparts and stakeholders.

Health Attachés and Their Qualifications

A Health Attaché, typically assigned by a country's ministry of health or foreign affairs, is accredited to the country of assignment--meaning that their name, diplomatic title, and mandate to represent the interests of their government--are presented by the sending government, and accepted by the receiving government, according to the procedures set out in the Vienna Convention of Diplomatic Relations (VCDR) of 1961.²³ Thus, a Health Attaché must be able to practice GHD and conduct related policy negotiations on behalf of his/her respective government. Negotiations may encompass other relevant sectors such as trade, security, and human rights, and thus the core competencies for a Health attaché must include in-depth technical

knowledge of public health issues and problems as well as broad-based general knowledge, sound judgment, and strong interpersonal skills. The practice of GHD requires balancing these elements among multiple stakeholders to mutually address foreign policy and global health goals.

Specifically, a core practitioner of GHD, including a Health Attaché, must possess technical skills in understanding global health risks as well as skills in traditional diplomatic fields of political, economic, commercial, public affairs, and military diplomacy. Public health professionals generally value deep scientific knowledge and technical skills, but there is also a growing recognition of the need for a wider breadth of knowledge and skills in foreign affairs, international law, and public policy among public health stakeholders and counterparts in order to bring about change needed to mobilize global health action among nations. Hence, Health Attachés need to utilize a set of traits, knowledge, and competencies that encompass multidisciplinary areas of public health practice, global health governance, health security, and risk communication.

Today, a Health Attaché's critical activities include facilitating links between domestic public health agencies and partners in their country or region of assignment, providing scientific and policy guidance on areas of public health practice, building and maintaining relationships in an international setting, and reporting on health matters in a foreign country. Other activities include facilitating and coordinating public health technical assistance; supporting research collaborations and information sharing; facilitating professional contacts; and negotiating bilateral and multilateral agreements. In addition, health attachés help coordinate public health policy across

government agencies to help create a consistent foreign policy voice for the government on health issues. Health Attaché also engage in promoting global health security and safety and facilitate global health governance.

Roles of U.S. Health Attachés

In the United States, Health Attaché positions are typically populated from agencies of the Department of Health and Human Services (HHS) such as the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), or the National Institutes of Health (NIH); or from the Office of Global Affairs (OGA) in the Office of the Secretary of HHS. OGA is an HHS staff office that provides formal support to the HHS Secretary for global health matters, and supports HHS Health Attachés deployed in the field. In addition, OGA coordinates with HHS Agencies, the broader U.S. Government interagency community, other countries, multinational organizations, and non-governmental entities.

Currently, five posts have full-time, dedicated Health Attaché assigned by HHS (four other posts previously hosted Health Attachés); four countries have part-time HHS Country Representatives, who also serve as full time CDC Country Directors but have a formal letter of appointment from OGA to represent HHS to a foreign government (Table 2.1). However, both Health Attaché and HHS Country Representatives represent the Secretary of HHS in-country and are the senior public health representative for the U.S. Government that provides direct support and counsel to the U.S. Ambassador. The Department of Defense (DOD) has two Health Affairs Attachés, and there is one Health Attaché assigned by the U.S. Agency for

International Development (USAID). While the DOD and USAID representatives respond to their own specific chain of command rather than HHS, they are senior active duty military or public health officers who maintain informal linkages to OGA and other HHS Agencies and, as with all Health Attaché, provide support to the U.S. Ambassador.

OGA receives more requests from U.S. Embassies to furnish Health Attaché than there is capacity to support. To establish a new Health Attaché position, a confluence of support must exist among the U.S. Government, the Department of State, HHS, and the U.S. Ambassador in a given country, in addition to identifying available funding. The priority for opening and closing positions is periodically reviewed with key stakeholders and counterparts in the U.S. Government, and with host country governments. While much can be accomplished in the modern electronic communication and transportation age that enables offices to communicate with counterparts in other countries, there is increasing, not decreasing demand for the expertise of a resident Health Attaché, formally accredited to represent his/her government in foreign affairs.

Tradecraft Model of Health Attachés in the U.S. Government

U.S. Health Attachés interface with four key categories of stakeholders (Figure 2.2): 1) U.S. Government, 2) Multi-national organizations, 3) Non-state actors (NGOs, large donor organizations, private corporations, general public), and 4) the host country government. Each may have different levels of focus on foreign policy or

public health goals that must be thoroughly understood by the Health Attaché in order for him/her to succeed as a health diplomat. For example, within the U.S. Government, HHS Agencies are primarily concerned with domestic public health goals and have only a small focus on foreign affairs. Conversely, the U.S. Department of State has a primary responsibility for foreign policy goals with a smaller focus on public health. Knowing the nuances of each institution's primary focus along the continuum of global health/foreign policy is necessary for the Health Attaché to align consultations and negotiations with appropriate interests, mechanisms, and partners.

As illustrated in Figure 2.1, partners are identified by either a *counterpart* relationship or a *stakeholder* relationship that must be further understood by the Health Attaché. Knowing which actors are in each category and which objectives they share will assist in framing discussions and defining expectations during negotiations.

A counterpart relationship is typically formalized in an official document or signed agreement, such as a Memorandum of Understanding (MOU) or a health protocol between health agencies in the home government and the partner country. A counterpart relationship could also be established between multiple counterparts, such as a Science and Technology Agreement (S&T), negotiated by the U.S. Department of State, that includes identifying health counterparts in the home and partner country. By comparison, a stakeholder relationship may or may not be codified in a formal agreement among partners. For example, the Health Attaché in Geneva, Switzerland, functions primarily as a liaison officer between the U.S. Mission and World Health Organization (WHO), and thus has a central counterpart

relationship. However, in any other country where a U.S. Health Attaché or HHS

Country Representative is present, WHO would generally be considered a

stakeholder and would not typically have a formal country-level agreement with U.S.

health agencies. Stakeholder relationships also include those with the host country

Ministry of Foreign Affairs or other non-health agencies. Health Attachés, in carrying

out their responsibilities, must navigate discussions and negotiations with both

counterparts and stakeholders.

As depicted in Figure 2.1, Health Attachés act as the central "node" or interface for a variety of counterparts and stakeholders. Tradecraft in this dynamic should include actively promoting domestic and shared global health interests in consultations and negotiations across the spectrum of national, host country, and global health stakeholders and counterparts through the formation and long-term cultivation of formal and informal relationships. More analysis and study of these dynamics, shared not only by today's Health Attachés, but diplomats in the traditional fields of political, economic, commercial, public affairs, and military diplomacy, is needed to develop this tradecraft model further.

We note that our proposed tradecraft model has certain limitations. First, it provides only a preliminary description and a foundational approach to some of the core competencies, training, and roles of the Health Attaché. As there is little research assessing the functions and impact of Health Attaché, further development of this tradecraft model will also likely evolve as this unique diplomatic role develops in 21st century diplomacy.

Non-U.S. Global Health Diplomacy Practitioners in Washington, D.C.

To further understand the range of duties of GHD practitioners, we also examined the roles of official diplomatic representatives to the United States using the publicly available 'Diplomatic List,' published quarterly by the Office of the Chief of Protocol of the U.S. Department of State. This list contains the name, title, and contact information for each government representative and is required by signatory nations to the Vienna Convention of Diplomatic Relations (VCDR) of 1961.²³ Often, the diplomatic title listed suggests the specific area of focus for each diplomat on the list, such as Defense Attaché, or Minister-Counselor for Commercial Affairs. A review of the Diplomatic List for 2011 and 2012 reveals that seven nations name a diplomat accredited to the United States with some responsibility in the field of health (Table 2.

For the majority of countries with representation in Washington, D.C., health matters are often included in the portfolios of diplomats who may have other focus areas or even titles. Specifically, health may only be a component of economics, trade, or science portfolios. This may limit the attention paid or prioritization of health issues by the named representative. It is somewhat surprising that only seven of 130 countries represented (approximately 750 diplomats) in Washington, D.C., have employed specifically-named health representatives. Given substantial increases in U.S. commitment and financing to global health initiatives in the past two decades through programs such as the President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund), one might expect that foreign representations would have required more specific health

expertise to support their negotiations with relevant U.S. agencies. The U.S. *President's Emergency Plan For AIDS Relief (PEPFAR)* has involved more than 70 nations since 2003; and 26 nations have been involved in the U.S. Global Health Security Agenda since February 2014.²⁵ This plethora of GHD activity suggests the need for more fully trained core practitioners of GHD, both for the United States and globally.

However, not every diplomat who practices GHD is a 'Health Attaché, nor is a role of the Health Attaché confined to only bilateral health negotiations. Government interaction with multi-national organizations such as WHO, non-governmental organizations, private sector business enterprises, or even the general public, also require GHD expertise in order to accomplish and negotiate health policy objectives of governments. Recently, global health challenges and funding changes have stimulated many diplomatic missions to assign a specific health expert to their Geneva-based missions. Hence, the Diplomatic List, if replicated in Geneva, would contain many more diplomats with "health" in their titles, though not all of these practitioners would necessarily be defined as a Health Attaché.

As illustrated in Figure 2.1, a critical factor differentiating Health Attachés from other diplomats is the Health Attaché's role, regardless of the agency to which they belong, in providing a critical link between the health agencies and the foreign policy apparatus of both the sending and receiving country. As government priorities migrate along the continuum between foreign policy and global health, from health being an *essential tool* of foreign policy to a *goal* of foreign policy, the need for

additional training in GHD, and, more specifically, the need, role and influence of diplomats dedicated as Health Attachés, is evident.²⁰

CONCLUSION

As the 21st century continues to emphasize the need for coordinated global health action among nations, the importance of *Global Health Diplomacy* has emerged within foreign policy circles. We have described the duties of the Health Attaché in negotiating cross cutting issues that intersect the fields of global public health and foreign affairs. In this paper, we have explored and defined an initial *Tradecraft Model for GHD and Health Attachés* in order to better describe his/her special brand of diplomatic practice. Further analysis of this model may assist both public health and foreign affairs practitioners and policy makers in developing more extensive pathways to address continuing global public health problems that impact the lives of millions. Hence, the success of the Health Attaché is of critical importance to addressing the core goals of GHD and to ensuring that health remains a priority in U.S. foreign policy and multinational engagement.

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the authors and do not necessarily reflect the official positions of the U.S. Department of Health and Human Services. We thank Holly Wong and Mitch Wolfe for editorial suggestions and Alicia Livinski for assisting with the literature review.

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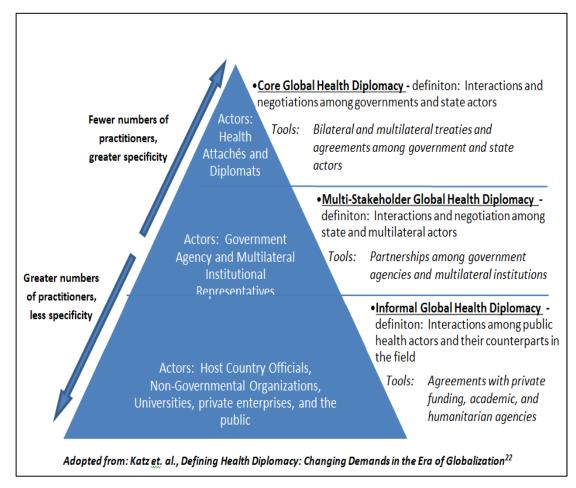


Figure 2.1: Pyramid of Global Health Diplomacy: Cascade of Actors, Definitions, and Tools

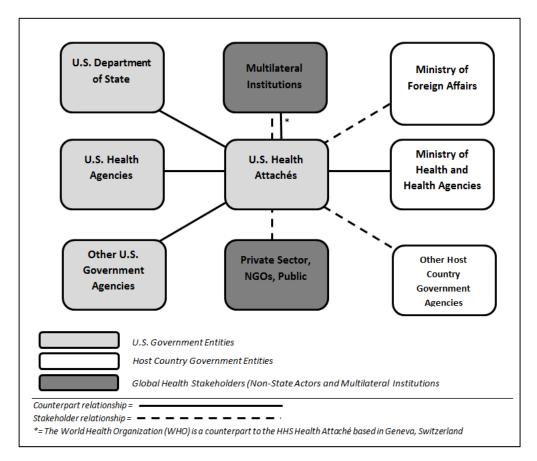


Figure 2.2: The Tradecraft Model of Global Health Diplomacy and U.S. Health Attachés

Table 2.1: Location and Title of Current and Former HHS Health Attachés; and Other Health Representatives

	HHS Health attachés	Title
1.	Beijing, China	Health attaché
2.	Brasilia, Brazil	Health attaché
3.	Geneva, Switzerland	Health attaché
4.	Johannesburg, South Africa	Health attaché
5.	New Delhi, India	Health attaché
	HHS Country Representatives (full time CDC Country Director)	
1.	Bangkok, Thailand	HHS Country Representative*
2.	Hanoi, Vietnam	HHS Country Representative*
3.	Guatemala City, Guatemala	HHS Country Representative*
4.	Nairobi, Kenya	HHS Country Representative*
	Department of Defense Health Affa	
1.	Hanoi, Vietnam	DOD Health Affairs Attaché**
2.	Port Moresby, Papua New Guinea	DOD Health Affairs Attaché**
	United States Agency for Internatio	nal Development Health attaché
1.	Jakarta, Indonesia	USAID Health attaché**
	Former HHS Health attachés	
1.	Hanoi, Vietnam	Health attaché
2.	Addis Ababa, Ethiopia	Health attaché
3.	Kabul, Afghanistan	Health attaché
4.	Baghdad, Iraq	Health attaché
*position is part time HHS Country Representative and full time CDC Country Director **position is assigned by DOD or USAID to support public health issues of importance to the U.S. Ambassador, and maintains informal links to OGA and the public health agencies of the sending and receiving country		

REFERENCES

- 1. Brown M, Shapiro C, Livinksi A, Novotny TE, Kolker J. Intersection of diplomacy and public health: The role of health attaches in the United States government's global engagement. 141st APHA Annual Meeting (November 2-November 6, 2013); 2013: APHA.
- 2. Shepler CHG. FIRST PUBLIC HEALTH ATTACHE APPOINTED. JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION 1948;10:761.
- 3. Koplan JP, Bond TC, Merson MH, et al. Towards a common definition of global health. The Lancet 2009;373:1993-5.
- 4. Kassalow JS. Why Health Is Important to US Foreign Policy. New York, NY2001.
- 5. Irwin R, Pearcey M. Editors' Introduction. Journal of Health Diplomacy 2013;1:2.
- 6. Manrique J. Letter from the Editor. Global Health and Diplomacy 2012;1:1.
- 7. Kickbusch I. Global Health Diplomacy A Survey on Training Programmes & Courses. Geneva2008 May 2008.
- 8. Global Health Diplomacy. 2014. 2/28/2014, at http://www.who.int/trade/diplomacy/en/.)
- 9. Center for Global Health and Diplomacy. 2014. (Accessed 2/28/2014, at http://globalhealthanddiplomacy.org/.)
- 10. Health Diplomacy. Department of Health and Human Services, 2014. (Accessed 2/28/2014, at http://www.globalhealth.gov/global-health-topics/health-diplomacy/.)
- 11. Office of Global Health Diplomacy. U.S. Department of State, 2014. (Accessed 2/28/2014, at http://www.state.gov/s/ghd/.)
- 12. Global Health Diplomacy. 2014. (Accessed 2/28/2014, at http://graduateinstitute.ch/home/research/centresandprogrammes/globalhealth/global-health-diplomacy.html.)
- 13. GRADUATE INSTITUTE OF INTERNATIONAL AND DEVELOPMENT STUDIES. 2014. (Accessed 2/14/2014, at http://graduateinstitute.ch/globalhealth.)
- 14. Adams V, Novotny TE, Leslie H. Global Health Diplomacy. Medical Anthropology 2008;27:315-23.
- 15. Jones K-A. New Complexities and Approaches to Global Health Diplomacy: View from the U.S. Department of State. PLoS Med 2010;7:e1000276.

- 16. Nye JS. Soft Power and American Foreign Policy. Political Science Quarterly 2004;119:255-70.
- 17. Feldbaum H, Michaud J. Health Diplomacy and the Enduring Relevance of Foreign Policy Interests. PLoS Med 2010;7:e1000226.
- 18. Kickbusch I. Global health diplomacy: how foreign policy can influence health. BMJ 2011;342:154.
- 19. Mackey T. Global health diplomacy and the governance of counterfeit medicines: a mapping exercise of institutional approaches. J Health Diplomacy 2013;1.
- 20. Kickbusch I, Kökény M. Global health diplomacy: five years on. Bulletin of the World Health Organization 2013;91:159-.
- 21. Hawkes N. Ebola outbreak is a public health emergency of international concern, WHO warns. BMJ 2014;349:g5089.
- 22. Katz R, Kornblet S, Arnold G, Lief E, Fischer JE. Defining health diplomacy: changing demands in the era of globalization. Milbank Q 2011;89:503-23.
- 23. Tunkin G. Vienna Convention on Diplomatic Relations. International Affairs 1961;7:51-6.
- 24. Protocol OotCo. Diplomatic List Winter 2012. In: State USDo, ed. Washington, DC: U.S. Government Printing Office; 2012.
- 25. Frieden T. CDC: 5 ways diseases in other countries can kill you. Washingon, D.C.: CNN; 2014.

CHAPTER 3: MAPPING FOREIGN AFFAIRS AND GLOBAL PUBLIC HEALTH
COMPETENCIES: TOWARDS A CORE COMPETENCY MODEL FOR GLOBAL
HEALTH DIPLOMACY

ABSTRACT

The largest Ebola Virus Disease outbreak in recorded history required not only the greatest global health response in history, but also placed new demands on both the diplomatic corps and public health officials. Coordinated action to address public health issues that cross national boundaries is referred to as global health diplomacy (GHD), broadly defined as political activity that meets dual goals of improving public health and strengthening relations among nations. However, there is no GHD core competency model to inform training of professionals, or help direct efforts requiring cross-disciplinary coordinated global health action. No institution has yet developed a GHD core competency model which would help bridge the fields of global public health and foreign affairs, providing additional guidance to diplomats, public health, or any other professionals with similar mandates to prepare for global health emergencies, or expand collaborations and partnerships to tackle public health problems of mutual concern. Without defined competencies in field of GHD, professionals changed with public health action may lack the specific knowledge, skills, or abilities to effectively manage or lead during a global health emergency, or formulate a complex global health partnership or collaboration.

This research identifies and maps core competencies that can be used to address this gap in the training of professionals in the fields of foreign affairs and global public health. We conducted focused internet searches to identify two core competency models in foreign affairs and six competency models in global public

health. Employing domain word counts, we compared models to determine degree of association, divergence, and emphasis. Based on these analyses, we propose an initial GHD core competency model to inform training within global public health and foreign affairs organizations and institutions, to ensure both foreign affairs, global health, and other professionals with a similar mandate for GHD practice, have the necessary knowledge, skills, and abilities to support effective global health action.

BACKGROUND

As the recent Ebola Virus Disease (EVD) outbreak rapidly demonstrated, foreign affairs and global public health professionals must work in concert to respond to complex diseases that rapidly transcend geopolitical borders. As a result of today's interconnected world, mass migration of people, and expanding social networks, more so than any other time in history, diseases threaten the security of populations globally, and nations must join together to tackle common public health threats. This is not a new model. Global health and foreign affairs institutions currently tackle a myriad of global health threats including prevention and control of HIV/AIDS, tuberculosis, malaria, and pandemic influenza (H1N1), as well as mobilizing responses to severe acute respiratory syndrome, and even non-communicable diseases. Coordinated action that transcends international borders by country governments, multilateral and research institutions, and the public, increasingly rely on this emerging field of practice which inextricably links actors in the fields of foreign affairs, security, and global public health.¹

GHD is broadly defined as political activities that meet the dual goals of improving public health and strengthening relations among nations.² However, linking the fields of global public health and diplomacy is a relatively recent concept, emerging over the last two decades.¹ Today, you can find GHD included as a topic in nearly every global health conference, as the focus of several academic journals,^{3,4} and included on the institutional web pages of multiple public health institutions.^{3,5-9} The concept is relevant to global public health professionals as well as members of the diplomatic corps. Despite the increasing necessity of developing knowledge,

skills, and best practices illustrating competence in the field of GHD, interdisciplinary training bridging the two fields remains nascent.¹⁰ This presents additional challenges to effectively measure or know if we have achieved specific competencies.¹¹ Additionally, greater refinement of definitions is needed to understand how competencies relate to specific areas of practice in the field of GHD.

Adding more specificity to the field, an article introduced three categories of GHD: *Core*, *Multilateral*, and *Informal* GHD.¹² Further refinements proposed practice oriented definitions, and added specific actors, tools, roles, and accreditation employed by each respective category of GHD (Figure 3.1).¹

At the top of the pyramid, *Core* GHD's primary actors are Health Attachés, specialized diplomats whose main job is to report, negotiate, and formulate agreements that link governments, public health agencies and institutions, around shared public health challenges and threats. Health Attachés have the highest degree of credentialing associated with their field of practice as a member of the diplomatic corps, and consequently the fewest practitioners, necessitating both sending and receiving governments to endorse a Health Attaché in a specific country. In the midsection of the pyramid is *Multilateral* GHD, whose principle actors are government employees and representatives of multilateral institutions, with more diverse standards for credentialing from these respective organizations and institutions, and as a result, a greater number of individual practitioners. At the base of the pyramid is *Informal* GHD, whose principle actors are individuals from technical agencies, country officials, non-governmental organizations, academia, private enterprises, and the public, which has the greatest variance in credentialing, as well as the largest

numbers of actors, and consequently, the greatest variety in associated tools and agreements.

As illustrated in Figure 3.1, to maximize effectiveness within each stratum, each actor employs specific tools, including agreements, strategies, and models of best practice to achieve a single shared goal: to mobilize nations, institutions, and the public to action around common public health threats. Together, these three types of GHD emphasize the cross-cutting and multi-disciplinary nature of this activity, but also reflect the complexity of defining competencies, targeting training appropriately, as well monitoring performance and forming best practice models for GHD actors at any level. This cascade of definitions, tools, and actors helps provide additional clarity to more effectively focus the practice of GHD. However, without defined GHD competencies' within the field to better inform training of professionals, actors within each stratum may lack the associated necessary knowledge, skills, or abilities – the application of a skill at the appropriate time.

Foreign affairs and public health agencies use core competencies for recruitment, accreditation, and educational standardization within their respective fields. 14,15 Core competencies are sets of knowledge, skills, abilities, and behaviors required for work within an organization and are used to measure progress and evaluate performance. However, in the emerging profession of GHD, neither foreign policy nor global public health institutions have updated their published core competency models to include the emerging link between the fields. Enhanced competency models that illustrate the cross-discipline knowledge, skills, and behaviors is needed for actors in *Core* GHD, to provide Health Attachés and diplomats with the capacity to manage and lead in the field of foreign affairs and

statecraft, but also needed for actors in *Multilateral* and *Informal* GHD, to inform more effective global public health negotiations in foreign policy fora. Identifying the specific domains needed within a GHD competency model will help both foreign affairs and global public health training programs better prepare professionals to successfully influence foreign policy outcomes, develop effective and more responsive partnerships, and more rapidly mobilize multi-stakeholder action to respond to global health events.

As illustrated, competencies are observable and measurable forms of human behavior that are needed by a group or individual to achieve the goals of an organization.¹⁷ A competency model is an organizing framework that lists the behaviors or abilities required for effective performance in a specific job.¹⁸ Hence, such a model provides a uniform approach for individuals and organizations within the specific field.¹⁹ Further, established core competency models help institutions recruit, train, and accredit individuals into a profession, standardize approaches across institutions, and measure progress of an individual or an organization toward the goals of the group.²⁰

The development of a core competency model in the nascent field of GHD, based off of analysis of differences, similarities, and degrees of emphasis of core competencies employed by global public health and foreign affairs organizations, is thus necessary. This model would illustrate additional areas of emphasis needed when preparing global public health, foreign affairs, or any professionals working with public health issues that cross international boundaries, for challenges in today's interconnected world. Additionally, this would help align and guide practitioners charged with negotiations, policy development, and advocacy, to support more

effective public health action, critical in times of global public health emergencies.

This paper fills this critical gap by proposing an initial core competency model for the emerging field of GHD to increase effectiveness as well as standardization for GHD actors.

METHODS

We used a three-stage process to develop a competency model for GHD. First, we identified published competency models with definitions from global public health and foreign affairs training organizations by conducting web searches and literature reviews of institutions, government agencies, academic programs, and the peer-reviewed literature. Second, we created an aggregate model for both foreign affairs and global public health to facilitate comparisons between the two disciplines. Employing foreign affairs domains established in the literature as an analytical framework, we then measured degrees of association by counting the foreign affairs key domain words that occur within each competency model. This analytical framework applied consistently across models gives us a surrogate measure for emphasis within each domain, elucidating degrees of shared commonality as well as divergence among the models. Finally, informed with these measures of association, we developed a draft set of core competencies for GHD. By focusing on the greatest differences between the models, we identify domains of additional emphasis needed within both foreign affairs and global public health training programs.

Stage 1: Literature Review

Searches utilized PubMed, JSTOR, Google, and Google Scholar.²¹ We included competency models published from global public health and foreign affairs institutions that provide training to professionals in their respective fields. Unpublished competency models from government agencies, private universities, and firms that may charge fees for use of their competency models were excluded. To provide adequate source material to support word counts and comparisons, only competency models that contained full narrative definitions were included in the analysis.

Search terms for public health institutions with training mandates included: 'training in health diplomacy', 'training in global public health', and 'training in applied public health,' 'global public health', and 'core competency model' or 'core competencies' or 'core precepts' – which like competency, means a rule of action or conduct within a given field.

Search terms for diplomatic and foreign affairs institutions with training mandates included: 'training in diplomacy', 'competencies for diplomatic training', and 'applied diplomacy,' 'foreign affairs', 'diplomacy', and 'core competency model', 'core competencies', or 'core precepts'.

By adding Boolean logic to the search terms, focusing on 'training' and identifying models from institutions with training mandates and full published core competency models with definitions, will identify the models of interest to be included in the comparative analyses.

Stage 2: Analysis of Competency Models

We assembled an inventory of competency models (all models included in the analysis are listed in Appendix A: Global Public Health Competency Models and Appendix B: Foreign Affairs Competency Models). We then created an aggregate model to facilitate comparisons across disciplines. To create the aggregate model, we utilized seven a priori foreign affairs domains from the foreign affairs literature, identified as important in the review of the models and used to train diplomats in the U.S. Foreign Service. We then enumerated the occurrence of each foreign affairs domain descriptor within each core competency model included in the analysis. The aggregate model thus represents a count of domain descriptors within each competency model. The higher count of domain descriptors, the greater the emphasis of this foreign affairs domain within in each model.

We used the foreign affairs domains to develop the analytic framework used for cross competency comparison as the foreign affairs domains are well established training elements and based on more than 200 years of refinement and application in training in diplomacy, foreign affairs, and statecraft.²² Global public health is by comparison a much newer academic field and emphasizes by necessity a multidisciplinary approach to competency development.²³ Foreign affairs domains also include areas emphasized in the literature for GHD, such as leadership, negotiations, and training in political, military, and commercial affairs.²⁴ In addition, given the growing demand that global public health issues make on foreign policy, diplomatic training must also draw on competencies supported in the global public health literature, such as population health, research and ethical analysis, and

scientific communication. Thus, employing word counts from the foreign affairs framework, applied consistency across multiple competency models with definitions, from both fields, yields measures of divergence and intersection, as well as relative emphasis among the competency models from these two fields.

Stage 3: Developing an Initial Competency Model for GHD

We developed the GHD competency model by identifying domains with the greatest difference between global public health and foreign affairs, rather than including domains with the greatest similarity. Including competencies with the greatest difference ensures cross-discipline competence, which as illustrated in the literature is most needed for the effective practice of GHD. Areas with agreement between fields are not included in the final model, as these competencies have sufficient attention within both foreign affairs and global public health.

RESULTS

We found no published inventories or comprehensive mapping exercises to describe competencies in the emerging field of GHD. However, we identified two core competency models that met the criteria established from our search methodology in the field of foreign affairs from a single institution, and six core competency models from the field of global public health from four different institutions (Figure 3.2).

In total, eight competency models from five institutions fit the inclusion criteria (Table 3.1). We identified two models from one foreign affairs institution (n=2 models from 1 institution) and six models from four global public health institutions (n=6 models from 4 institutions).

Surprisingly, the U.S. Department of State, Foreign Service Institute, is the only foreign affairs institution that has two published core competency models in the field of foreign affairs. Other foreign affairs models were not included as they did not provide competency models with definitions, which are necessary for content analysis, or were not publicly accessible. This is striking considering that every country must maintain a foreign affairs department and train professional diplomats to effectively manage relations with other nations. However, the U.S. Foreign Service Institute publishes a complete core competency model with definitions relevant to each career stage of a diplomat in the U.S. Foreign Service (designated as a Foreign Service Officer [FSO]).

The first model, "13 Dimensions," is used to recruit and select new FSOs entering the diplomatic corps, with these individuals eventually working at the 294 U.S. Embassies, Consulates, and Missions abroad.²⁶ The second model, "Criteria for Tenure and Promotion in the Foreign Service," is used after an employee is hired into the Foreign Service, differentiating among the levels of career competencies and used to guide FSOs through a prescribed career track within the U.S. diplomatic corps.¹⁵ No other foreign affairs institution has a published core competency mode that fit the established inclusion criteria.

Among global public health institutions, we identified six global health core competency models from four different institutions: the World Health Organization

(WHO) -- with a model for WHO employees,²⁷ the Association of Schools and Programs of Public Health (ASPPH) -- with two models, one for Masters level and one for PhD level students,^{14,28-30} the U.S. Centers for Disease Control and Prevention (CDC) -- with two models, one for CDC employees who work globally, and one for Field Epidemiology Training Program participants, an applied public health training program supported internationally by the CDC;³¹⁻³³ and the U.S. Food and Drug Administration (FDA) -- with one model for FDA employees who work globally.^{34,35}

Three of these institutions, WHO, CDC, and FDA, maintain a workforce of global health professionals who work internationally, supporting their respective agency missions and mandates. While the size and composition of these respective workforces vary, all have processes by which professionals are recruited, trained, retained, and promoted, so that they can be effective in their international assignments. ASPPH is an association of academic public health programs that publishes a global public health competency model for use by schools of public health, and this is used to recruit, train, mentor, and prepare students for careers in global public health. While focused on academic preparation, the ASPPH models describe various professional standards for global public health practice and are included in the analysis.

Foreign Affairs Aggregate Model

We identified seven foreign affairs competency domain descriptors to compare competencies across disciplines. The first column in Table 3.2 lists the

domain descriptor from the foreign affairs framework, which serves as the comparison framework for our analyses (Table 3.2). The next two columns show the number of occurrences for each respective descriptor within the first two foreign affairs models. The Foreign Affairs Aggregate column is the sum of the counts for Models1 and 2. The final column in Table 3.2 is the proportional mention of each domain descriptor in the aggregate. This proportion illustrates the emphasis placed on that domain in the field of foreign affairs, ordering the competencies from the highest emphasis to lowest emphasis. The 'Substantive Knowledge' domain occurs most often (41%) in the foreign affairs model. Substantive knowledge refers to knowledge of foreign policy objectives at the entry level, using professional standards to improve foreign affairs programs at the mid-level, and raising the level of performance of the foreign affairs organization or institution at the senior level. 15 'Foreign language skills,' is the second highest (15%); followed by 'communication', 'managerial', and 'leadership' skills, all at 12% respectively, and lastly 'interpersonal' and 'intellectual' skills at 5% and 3%, respectively. This is the foreign affairs aggregate model we will use for comparison with global public health aggregate model, in the next section.

Global Public Health Aggregate Model

Six global public health core competency models were identified during the literature review (Table 3.3) and were utilized in an aggregate for comparisons across disciplines. Similarly to the creation of the foreign affairs model, the global public health aggregate model describes highest emphasis to lowest emphasis using the proportional mention of domain descriptors. Within the global public health model,

the highest percentage mention of descriptors is 'communication' skills (28%), followed by 'substantive knowledge' (24%), 'intellectual' skills (15%), 'managerial' and 'interpersonal' skills (11% each), 'foreign language' skills (7%), and 'leadership' skills (4%). This model will be used in the next section to compare across disciples. Comparing the foreign affairs and global public health aggregate competency models, we found that the highest degree of overlap was for 'substantive knowledge' (41% and 28% respectively), followed by communication skills (12% and 28% respectively), and managerial skills (12% and 11% respectively) (Table 3.3).

The differences between emphasis among foreign affairs and global public health training competency models can be best visualized graphically (Figure 3.3). Global public health places a greater emphasis on 'communications' and 'intellectual skills.' And foreign affairs conversely place much greater emphasis on 'leadership,' 'foreign language,' and 'substantive knowledge' of U.S. foreign policy. Whereby, both competency models have similar attention to managerial skills. This visualization illustrates in Figure 3.3, to be more effective in crossing disciplines from global public health to foreign affairs, or vice versa, these are the areas of greatest divergence, and can thus serve as a map to enhance training for both global public health and foreign affairs professionals.

Global Health Diplomacy Core Competency Model

The final competency model for GHD presents the interdisciplinary emphasis needed to address training gaps in public health (Table 3.5). The GHD model is not designed to be employed as a stand-alone model, but, rather, it can inform existing

training programs of professionals in both fields. Like any core competency model, this model needs to adopted by existing and new training programs, tested, refined, measured, and validated by institutions and organizations that conducting training, so standardized approaches to GHD training may be identified, refined, and implemented, targeting global health action within each stratum of GHD.

By identifying and comparing areas of greatest emphasis within each respective field, we also identified gaps to be addressed for each discipline. This mapping suggests needed enhancements to core competencies used to train professionals in both global public health and foreign affairs institutions. The suggested set of core competencies should be used to enhance the practice of GHD as derived from the models included in the comparison analysis, in Annex A. These competencies should be used to enhance training for public health, foreign affairs, or any profession with a similar mandate to practice GHD, working with public health issues that traverse international boundaries, to increase more effective global health action.

DISCUSSION

This is the first study to identify critical gaps in the training of global public health and foreign affairs professionals to be effective actors in global health diplomacy. Addressing these gaps is an integral component in improving the response to global epidemics, forming new and maintaining existing complex global health collaborations and partnerships, as well as responding to workforce development challenges. We have illustrated gaps in the practice of *core*, *multi-*

stakeholder, and informal GHD. This analysis will help align and guide recruitment and training of professionals in each field, enhance educational approaches across institutions, develop appropriately prepared workforces, and help measure progress in professional development over time.^{1,13}

As illustrated during the Ebola outbreak in West Africa, diseases can rapidly threaten global populations and destabilize local governments, necessitating countries, multi-national institutions, private enterprises, and non-governmental organizations, to mobilize enormous resources to tackle shared global public health threats. This activity increasingly relies on the emerging field of GHD to inform more effective public health actions where foreign policy, security, and public health goals intersect. As complex diseases transcend borders, a model for GHD becomes increasingly important to inform and guide foreign affairs, public health, and other professionals with a similar mandates, to work together in concert to facilitate global health action.

With the mobility of populations due to economic forces and conflict as well as the saturation of social and news media with public health issues, the world is more interconnected than ever before. In addition, there are now billions of dollars in foreign assistance for both global health development initiatives and public health emergency responses. These elements create a perfect storm for complex political and health challenges which affect billions of people. More than ever before, global health and foreign affairs professions need to work together to tackle these complex problems and use increasingly scarce global health resources more effectively.

Our comparative analysis illustrates that each discipline's competency model has elements to support the practice of GHD and help bridge the fields of foreign

affairs and global health. However, there are gaps in both disciplinary models. Global public health training normally does not include skills in leadership, foreign language, or foreign policy. On the other hand, foreign affairs competency models used to prepare diplomats in the U.S. Foreign Service does not include skills in health risk communication, public health analysis, and public health ethics. In order to increase effectiveness of multi-level global health cooperation across public health and foreign affairs professions, a core GHD competency model that incorporates the strengths of each field, while also addressing the cross-field deficiencies identified in this analysis, will better prepare these professionals to effectively address GHD challenges.

Global public health institutions may utilize these GHD competences to enhance recruitment, retention, and accreditation so professionals charged with global health action may acquire additional knowledge, experience, and abilities related to foreign policy goals and objective, language, and leadership. Our analysis emphasizes that these GHD competencies are the areas of least attention among global public health training programs, but are areas of greatest emphasis among foreign affairs training.

At the same time, foreign affairs institutions may use these GHD competencies to enhance training of foreign affairs professionals, so they receive additional knowledge, skills, and abilities related to health communications, literacy, risk communication, marketing, public health analysis of quantitative and qualitative data, and synthesizing information for research and practice, as well as ethical knowledge related to population health.

One example of cross-field competence we identified in the literature review and reported in the identified models included in the analysis is represented in the

President's Emergency Plan for AIDS Relief (PEPFAR), the largest public health initiative in history targeting a single disease by a single government. PEPFAR is implemented by public health agencies, but managed and led at the U.S. Department of State through diplomatic missions and is headed by an ambassadorial level appointee, the Global AIDS Coordinator, within the U.S. Foreign Service.³⁸

Ambassadors who have PEPFAR in their respective mission are responsible for the leadership of PEPFAR, requiring competencies in both global public health and foreign affairs to be effective. Although PEPFAR is mentioned in the models listed in Appendix A, neither foreign affairs nor global public health mention this program as a bridge between the fields, requiring cross-field competency.

Others have identified a lack of rigorous definitions in the emerging field of GHD, thus limiting the application of pedagogical standards across institutions. ¹² As a result, GHD education is often structured as survey courses for lay and health professionals alike, and often only focusing on the knowledge of global public health principles, concepts, and programs, often limited in time, depth, and scope. ¹⁹ While short courses that focus on knowledge play an important role in continuing education, without competency models to guide training specific to GHD, the knowledge, skills, and behaviors necessary to truly prepare a workforce to practice GHD are not well-defined. Competency models are needed to inform more effective practice of GHD. ^{12,39,40}

Professionalism and tradecraft -- the skills gained through experience in a trade, especially codified in the practice of diplomacy, has not been sufficiently described in the global public health literature. Perhaps this is due to the fact that global public health is by nature multidisciplinary, drawing from many fields of

practice. The analysis presented, identifying dearth in both fields, is a starting point to help inform more effective models of practice for the tradecraft of GHD, which will need to draw on the knowledge, skills, and behaviors from both fields.

There are several limitations to the analysis we performed. First, foreign affairs and global public health core competency models were designed to support different professional fields, objectives, and institutions. By extension, each field has different and distinct workforces. However, as illustrated in this study, there is an increasing need to bolster competence for both global public health, foreign affairs, or any other professionals with a similar mandate to work together to be effective.

Public health experts need to understand foreign policy organizations, objectives, and have skills employed by diplomats; and diplomats must be able to understand, manage, and communicate the relative risk of global public health threats that impact national security and population health. Thus, both fields must draw on foreign affairs and public health competencies to train and prepare their respective workforces. Our GHD competency model provides an initial guide to bolster the development of interdisciplinary knowledge, skills, and practice in GHD.

An additional limitation is the comparison of aggregate models for foreign affairs and global public health. While foreign affairs competencies characterize the training of Foreign Service Officers serving at U.S. Consulates, Embassies and Missions abroad, the six global public health competencies we identified are derived from four different institutions, all with different mandates, workforces, and constituencies. Each focus on different aspects of public health practice: academic training (ASPPH), regulatory function (FDA), and public health policy and global governance (WHO), and applied public health fieldwork (CDC). Foreign affairs

competency models are stratified according to entry, mid-, and senior levels. None of the global public health competency models take this approach. However, all models in this analysis had published definitions sufficient for content analysis between these two fields. It is important to reiterate that the core competency model for GHD is not a stand-alone model for practice, but rather is designed to enhance the existing models from foreign affairs, global public health, or any other training with a similar mandate for their workforce.

The foreign affairs competency domains were employed as a baseline for both disciplines and compared across the aggregate competency models by counting the occurrence of each domain descriptors. This method is only a surrogate measure for emphasis and used for comparison and association between these two disciplines. However, this counting methodology, applied consistently, does yields a measure of emphasis and association between these two fields. The word counts do not take into account that the two fields employ slightly different lexicons and may use words differently. However, only including competency models with descriptions assured the content analysis was using the terms in a similar manner, and do show a relative emphasis of each domain within each field.

Lastly, by design, focusing only on published foreign affairs and global public health competency models, the search parameters severely limited the number of models included in this analysis. Since global public health draws from many disciplines, there are other areas of practice in global public health that were not included and thus not evaluated, but may have direct application to the practice of GHD. For example, the only ethical component of the draft GHD competency model relates to research ethics (Institutional Review Board procedures to ensure the ethical

conduct of researchers and the protection of rights for the research subjects). A health diplomat may need additional competencies in population health ethics when evaluating vaccine programs rather than clinical research studies. Thus, additional research and analysis is needed to incorporate competencies for the ethical practice of GHD.

Nevertheless, the search parameters for this study included sufficient information to illustrate major similarities and differences between the two separate but related fields of global health and foreign affairs.

CONCLUSION

Evaluation of training programs is needed to refine the GHD competencies and pedagogical approaches that may be used in global health and diplomatic education. Competency-based training offers professionals engaged in GHD a better sense of what is necessary for collaboration, strategic thinking, and skill development needed to accomplish both global health and foreign policy goals in multi-level negotiations.

Foreign affairs institutions charged with training diplomats need to emphasize additional knowledge, skills, and abilities in heath communication, analysis, and public health ethics to be more effectively support global health. Similarly, global public health institutions charged with training health professionals need additional knowledge, skills, and abilities in leadership, foreign languages, and foreign policy goals, objectives, and strategies, to be successful in foreign affairs fora.

We have illustrated complementary competencies, drawn from the field of global public health and foreign affairs, which will help improve the practice of GHD. The GHD model presented in this study is not meant to be used in isolation, but rather used as guidance in designing appropriate training curricula of respective professionals in any institution charged with global health action, to increase effectiveness, especially critical during a public health crisis or emergency, or maintaining, expanding, or designing new responsive and complex public health collaborations. Given the lessons currently being gleaned from the Ebola epidemic, there is continual need to expand the study of GHD and the pedagogy needed to support the development of future practitioners in this field.

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Chapter 3, is a reprint of material submitted to Global Health Governance.

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Chapter is dedicated to all professionals who replace themselves - by helping others
to see one, do one, and teach one, mentoring competency in others. Matthew

Brown was the primary investigator and author of this paper.

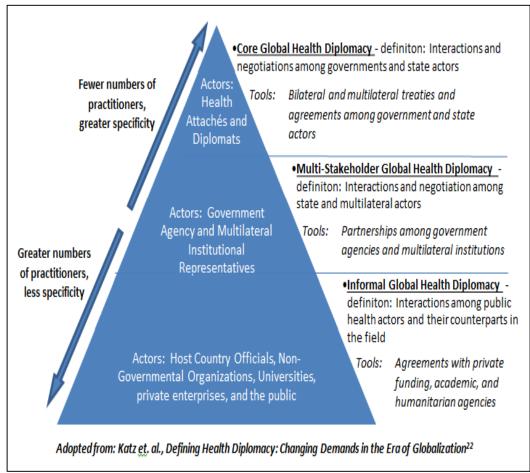


Figure 3.1: Pyramid of Global Health Diplomacy: Cascade of Actors, Definitions, and Tools

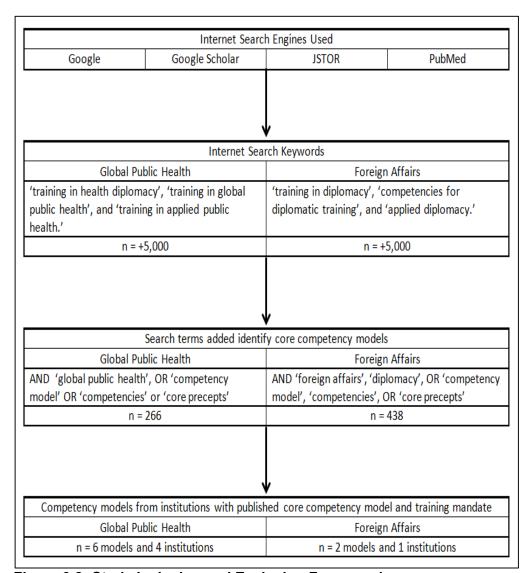


Figure 3.2: Study Inclusion and Exclusion Framework

Table 3.1: Global Public Health and Foreign Affairs Institutions with Published Competency Models and Training Mandates

	Name of Institution	Type of	Published Competency Model
		Institution	
1.	U.S. Department of State (DOS)	Foreign Affairs	Foreign Service Officer Qualifications - 13 Dimensions ³⁶
2.	U.S. Department of State (DOS)	Foreign Affairs	Decision Criteria for Tenure and Promotion in the
			Foreign Service (3 FAH-1 EXHIBIT H-2321.1B) ³⁷
3.	World Health Organization (WHO)	Global Public	World Health Organization Core Competency Model ²⁷
		Health	
4.	Association of Schools and	Global Public	Association of Public Health Schools Global Health
	Programs of Public Health	Health	Competencies for Masters in Public Health ²⁸
	(ASPPH)		
5.	Association of Schools and	Global Public	Association of Schools of Public Health Core
	Programs of Public Health	Health	Competencies for the Doctor of Public Health Degree,
	(ASPPH)		by Competency Domain ³⁰
6.	Centers for Disease Control and	Global Public	Centers for Disease Control and Prevention field
	Prevention (CDC)	Health	epidemiology training program competencies31
7.	Centers for Disease Control and	Global Public	Centers for Disease Control and Prevention: Global
	Prevention (CDC)	Health	Public Health Competency Model ³³
8.	Food and Drug Administration	Global Public	Food and Drug Administration: Developing a Global
	(FDA)	Health	Curriculum for Regulators; Competency Definitions ³⁵

Description of Organizations: The WHO is a multilateral body comprised of health agencies from member states of the United Nations. The workforce populates the various technical agencies of the organization to set global public health norms and standards. ASPPH is an association of schools and programs of public health, American and international academic institutions that train and accredit professionals in global public health. The CDC is a public health practice agency, whose global workforce staff overseas offices and institutions with various disease protection, prevention, and control missions and mandates. The FDA is a public health regulatory agency with overseas offices and a workforce of global regulators to carry out food, feed, medical device and pharmaceutical protection and regulation mandate. Both CDC and FDA are agencies within the U.S. Department of Health and Human Services, the principle public health authority in the United Sates.

Table 3.2: Foreign Affairs Institutional Competencies and Domain Descriptors

Key Definitional Word, Search Term in 'Quotes'	Foreign Service Qualifications - 13 Dimensions	Promotion in Foreign Service - Core Precepts	Foreign Affairs Aggregate	Foreign Affairs Percentage
'Leadership' skills	1	7	8	12%
'Managerial' skills ('manage')	0	8	8	12%
'Interpersonal' skills ('personal')	2	1	3	5%
'Communication'	1	7	8	12%
Foreign 'language' skills	1	9	10	15%
'Intellectual' skills (<i>'intellect'</i> 'analysis' 'analyze')	0	2	2	3%
Substantive 'knowledge'	1	26	27	41%

Table 3.3: Global Public Health Competencies by Foreign Affairs Domain Descriptors

Domain Descriptors	Model 1: WHO Global Competen cy Model	Model 2: APPHA Global Health - Masters	Model 3: APPHA Global Health - Doctorate	Model 4: CDC FETP Competen cies	Model 5: CDC Global Health Compete ncies	Model 6: FDA Compete ncy Definitio ns	Aggregate Global Public Heath Model	Proportion of descriptor %
'Communication'	4	2	13	3	3	17	42	28%
Substantive 'knowledge'	5	1	1	0	8	21	36	24%
'Intellectual' skills ('intellect' 'analysis' 'analyze')	0	12	3	1	0	6	22	15%
'Managerial' skills ('manage')	4	1	2	4	2	3	16	11%
'Interpersonal' skills ('personal')	5	1	1	1	0	8	16	11%
Foreign 'language' skills	0	0	0	0	1	10	11	7%
'Leadership' skills	2	0	1	1	0	2	6	4%
Total							149	100%

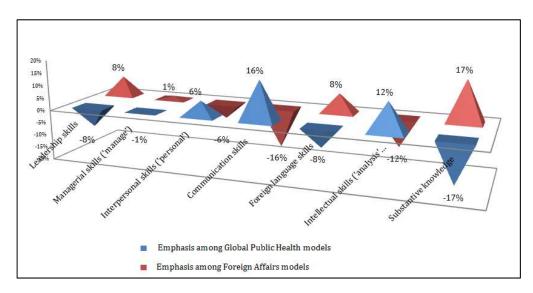


Figure 3.3: Global Public Health and Foreign Affairs Competency Comparison

Table 3.4: Comparison of Domains Between Foreign Affairs and Global Public Heath Competency Models

Competency Domains	Foreign Affairs Institutions (%)	Global Public Health Institutions (%)	Difference Between Public Health and Foreign Affairs (percentage points)
Leadership skills	12%	4%	8
Managerial skills ('manage')	12%	11%	1
Interpersonal skills ('personal')	5%	11%	6
Communication skills	12%	28%	16
Foreign language skills	15%	7%	8
Intellectual skills ('analysis'			
'analyze')	3%	15%	12
Substantive knowledge	41%	24%	17
Totals	100%	100%	

Table 3.5: Global Public Health Diplomacy Initial Core Competency Model

For global public health professionals to be successful in a foreign affairs context:					
1.	Substantial Knowledge and Skills	Knowledge offoreign policy objectives at the entry level, using professional standards to improve foreign affairs programs at mid-level, and raising the level of performance of foreign affairs organization at senior level ¹⁵			
2.	Leadership Skills	Identifies problems and proposes creative and realistic solutions; seeks to improve job and organization performance at entry level, at the mid-level develops innovative technical solutions to make process/organizational improvements and policy adjustments; engages staffin developing effective solutions; at the senior level creates organization-wide innovations; takes a long-term view and acts as a catalyst for constructive change; anticipates and prepares for future. 15			
3.	Foreign Language Skills	Uses foreign language skills to enhance job performance, and better serve customers at entry level; at the mid-level uses skill to effectively communicate, work, and exercise influence, or to improve relationships with local community to better serve customers; at the senior level uses skill to promote U.S. interests with a wide range of audiences, including the media. 15			
For for	eign affairs professionals to	be successful working with global health issues:			
1.	Health Communication Skills	Develop written public health communications, and develop and deliver or al public health communications; 3335 Integrate health literacy concepts in all communication and marketing initiatives; develop formative and outcome evaluation plans for communication and marketing efforts; prepare dissemination plans for communication programs and evaluations; 30			
2.	Public Health Analysis Skills	Evaluate and prioritize the importance of diseases or conditions of national public health concern (including scientific data, regulatory information, inspectional observations and other data regarding animals, drugs, food ingredients, and medical devices); ^{3,1,35} Identify the relationships among patterns of morbidity, mortality, and disability of a specified community, country, or region; ^{2,9} Analyze epidemiologic data using appropriate statistical methods; ^{2,1} Interpret quantitative and qualitative data following current scientific standards; synthesize health information from multiple sources for research and practice. ^{3,0} Presents information in a clear and concise manner orally and in writing to ensure others understand his/her ideas; and appropriately adapts his/her message, style, and tone to accommodate a variety of audiences. ^{3,5}			
3.	Interpersonal and Ethical Knowledge and Skills	Understand the sensitive nature of cultural, political, and policy differences and their impact in the design and implementation of public health programs, and demonstrate knowledge of Human Research Subjects protocols and local Institutional Review Board (IRB) requirements 33			

REFERENCES

- 1. Brown MDM, Tim K.; Shapiro, Craig N.;Kolker, Jimmy; Novotny, Thomas E. Bridging Public Health and Foreign Affairs: The Tradecraft of Global Health Diplomacy and the Role of Health Attachés. *Science & Diplomacy*. 2014;3(3).
- 2. Adams V, Novotny TE, Leslie H. Global Health Diplomacy. *Medical Anthropology*. 2008;27(4):315-323.
- 3. Centre for Trade Policy and Law in Ottawa C. The Global Health Diplomacy Network (GHD-NET). 2014; http://www.ghd-net.org/. Accessed 2/14/2014.
- 4. Irwin R, Pearcey M. Editors' Introduction: Journal of Health Diplomacy. *Journal of Health Diplomacy*. 2013;1(1):2.
- 5. Studies CfSal. Global Health Diplomacy. 2014; http://csis.org/category/topics/global-health/global-health-diplomacy. Accessed 2/28/2014.
- 6. State USDo. Office of Global Health Diplomacy. 2014; http://www.state.gov/s/qhd/. Accessed 2/28/2014.
- 7. Organization WH. Global Health Diplomacy. *Trade, foreign policy, diplomacy and health* 2014; http://www.who.int/trade/diplomacy/en/, 2/28/2014.
- 8. Institute TG. Global Health Diplomacy. 2014; http://graduateinstitute.ch/home/research/centresandprogrammes/globalhealth/global-health-diplomacy.html. Accessed 2/28/2014.
- 9. Affairs OoG. Health Diplomacy. *Office of Global Affairs* 2014; http://www.globalhealth.gov/global-health-topics/health-diplomacy/. Accessed 2/28/2014.
- 10. Katz R, Blazes D, Bae J, Puntambekar N, Perdue CL, Fischer J. Global Health Diplomacy Training for Military Medical Researchers. *Military medicine*. 2014;179(4):364-369.
- 11. Eichbaum Q. The Problem With Competencies in Global Health Education. *Academic Medicine*. 2015;Publish Ahead of Print.
- 12. Katz R, Kornblet S, Arnold G, Lief E, Fischer JE. Defining health diplomacy: changing demands in the era of globalization. *Milbank Q.* 2011;89(3):503-523.
- 13. Ebrahim S, Squires N, di Fabio JL, et al. Radical changes in medical education needed globally. *The Lancet Global Health*. 2015;3(3):e128-e129.

- 14. Ablah E, Biberman DA, Weist EM, et al. Improving Global Health Education: Development of a Global Health Competency Model. *The American journal of tropical medicine and hygiene*. 2014;90(3):560-565.
- 15. State TDo. DECISION CRITERIA FOR TENURE AND PROMOTION IN THE FOREIGN SERVICE (3 FAH-1 EXHIBIT H-2321.1B). U.S. Department of State Foreign Affairs Manual. Vol Volume 32014.
- 16. Danny G. Langdon and Anne F. Marrelli P. A New Model for Systematic Competency Identification. *International Society for Performance Improvement.* 2002;Vol. 41, No. 4.
- 17. Prevention CfDCa. The Public Health Emergency Law Competency Model. 2014; http://www.cdc.gov/phlp/publications/topic/phel-competencies.html. Accessed 9/27/2014, 2014.
- 18. Ibrahim NM, Van der Heijden B, Wahba K, Shaker M. Towards developing a multiple-jobs competency model for Egyptian diplomats. Paper presented at: Seventh International Conference on HRD Research and Practice Across Europe2006.
- 19. Calhoun JG, Ramiah K, Weist EM, Shortell SM. Development of a core competency model for the master of public health degree. *Journal Information*. 2008;98(9).
- 20. Marrelli AF, Tondora J, Hoge MA. Strategies for developing competency models. *Administration and Policy in Mental Health and Mental Health Services Research.* 2005;32(5-6):533-561.
- 21. Nourbakhsh E, Nugent R, Wang H, Cevik C, Nugent K. Medical literature searches: a comparison of PubMed and Google Scholar. *Health Information & Libraries Journal*. 2012;29(3):214-222.
- 22. State Do. FOREIGN SERVICE INSTITUTE -- U.S. DEPARTMENT OF STATE. 2013; http://fsitraining.state.gov/. Accessed 10/8/2013, 2013.
- 23. Koplan JP, Bond TC, Merson MH, et al. Towards a common definition of global health. *The Lancet*. 2009;373(9679):1993-1995.
- 24. Jones K-A. New Complexities and Approaches to Global Health Diplomacy: View from the U.S. Department of State. *PLoS Med.* 2010;7(5):e1000276.
- 25. State Do. Foreign Service Officer Qualifications 13 DIMENSIONS. 2013; http://careers.state.gov/uploads/7e/3b/7e3b2a09abdf83eb5afc24af5586c896/3.0.0 FSO 13 dimensions.pdf?utm_source=AFSA+Members&utm_campaign=58da8b027f-WP Op Ed4 13 2013&utm_medium=email. Accessed April 9, 2013, 2013.
- 26. State USDo. Websites of U.S. Embassies, Consulates, and Diplmatic Missions Abroad. 2016; http://www.usembassy.gov/. Accessed 3/5/2016, 2016.

- 27. Organization WH. WHO GLOBAL COMPETENCY MODEL. 2014; http://www.who.int/employment/WHO_competencies_EN.pdf. Accessed 4/18/2014, 2014.
- 28. Calhoun JG, Ramiah K, Weist EM, Shortell SM. Development of a Core Competency Model for the Master of Public Health Degree. *American Journal of Public Health*. 2008;98(9):1598-1607.
- 29. Calhoun JG, Spencer HC, Buekens P. Competencies for global heath graduate education. *Infectious disease clinics of North America*. 2011;25(3):575-592.
- 30. Calhoun JG, McElligott JE, Weist EM, Raczynski JM. Core competencies for doctoral education in public health. *American journal of public health*. 2012;102(1):22-29.
- 31. Traicoff DA, Walke HT, Jones DS, Gogstad EK, Imtiaz R, White ME. Replicating success: developing a standard FETP curriculum. *Public Health Rep.* 2008;123 Suppl 1:28-34.
- 32. Schneider D, Evering-Watley M, Walke H, Bloland PB. Training the global public health workforce through applied epidemiology training programs: CDC's experience, 1951–2011. *Public Health Rev.* 2011;33:190-203.
- 33. Prevention CfDCa. Global Public Health Competency Model. In: Health CfG, ed. Atlanta, GA: Centers for Disease Control and Prevention; 2012.
- 34. Charles Preston SA, Tammie Bell, Katherine Bond, Julia Bradsher,, Martha Brumfield GB, Thomas Hughes, Stacy Kane, Sherry Keramidas,, Margaret Miller MM, Lembit Rägo, Jim Riviere, Mary Lou Valdez,, Wojtala* aG. *Discussion Paper: Developing a Global Curriculum for Regulators*. Washington, D.C.: Institute of Medicine; June 7, 2013 2013.
- 35. Preston C, Azatyan S, Bell T, et al. Developing a Global Curriculum for Regulators. *Institute of Medicine: Discussion Paper.* 2013.
- 36. State USDo. Foreign Service Officer 13 Dimensions. 2013; http://careers.state.gov/uploads/4c/e8/4ce8ce99d45087fc22dbd582ebab88f7/3.0.0 FSO 13 dimensions.pdf. Accessed April 15, 2013.
- 37. State TDo. Foreign Service Officer Qualifications 13 DIMENSIONS. 2014; 9/10/2014. Available at: http://www.careers.state.gov/uploads/4c/e8/4ce8ce99d45087fc22dbd582ebab88f7/3.0.0 FSO 13 dimensions.pdf, 2014.
- 38. Simonds RJ, Carrino CA, Moloney-Kitts M. Lessons From The President's Emergency Plan For AIDS Relief: From Quick Ramp-Up To The Role Of Strategic Partnership. *Health Affairs*. 2012;31(7):1397-1405.

- 39. Kickbusch I, Silberschmidt G, Buss P. Global health diplomacy: the need for new perspectives, strategic approaches and skills in global health. *Bulletin of the World Health Organization*. 2007;85(3):230-232.
- 40. Fidler DP. Navigating the global health terrain: mapping global health diplomacy. *Asian J. WTO & Int'l Health L & Pol'y.* 2011;6:1.

CHAPTER 4: APPLIED GLOBAL HEALTH DIPLOMACY: PROFILE OF HEALTH DIPLOMATS ACCREDITED TO THE UNITED STATED AND FOREIGN GOVERNMENTS

ABSTRACT

Global Health Diplomacy (GHD) is a burgeoning field that bridges the independent priorities of both global health and foreign affairs. Given the increasing need to mobilize the global community to respond to Public Health Emergency of International Concern (PHEIC) such as Ebola or Zika, or design complex public health partnerships to tackle issues of mutual concern, effective and timely coordination and cooperation among state actors is critical. Health Attachés are key professionals who represent states during these crises. Despite their unique diplomatic mandate, little is actually published about this profession, the preparation needed for it, and the perspectives of those who work in this field. As such, we sought to qualitatively explore the roles, practices, and challenges of accredited Health Attachés from the United States as well as those representing other countries. Through purposive sampling, we performed in-depth interviews with seven Health Attachés: three foreign Health Attachés accredited to the United States and four U.S. Health Attachés accredited to foreign governments. Our interviews explored four key topics: the role and mission of Health Attachés, skills needed to perform GHD, examples of successes and challenges in accomplishing their respective missions, and suggestions for the future development of this professional position. We found several best practices and areas for improvement. Our findings indicated that skills in diplomacy and negotiation, applied science, and cross cultural competency are needed to be a successful core GHD practitioner. Additionally, establishing a clear

career path for Health Attachés and providing on-the-job training and mentored experiences for practitioners is critical for future actors in the field and fostering effective global health action. This would help individual practice, create clear training and career pathways, and ultimately decrease tensions between the fields of foreign affairs, which focuses on advancing national interest, and global health, which focuses on principles of health equity and collective action.

INTRODUCTION

Global Health Diplomacy (GHD) is an emerging field that bridges the fields of global health and foreign affairs. Global health, introduced by Koplan as an evolution of the term 'international health', refers to the practice of tackling diseases of public health concern by partnering with nations around principles of health equity, rather than reinforcing national borders in protective isolation. Achieving strategic national objectives through persuasion and attraction, is a critical component in the practice of diplomacy, statecraft, and foreign affairs. As today's world is more interconnected and mobile than at any other time in history, diseases of global significance cannot be tackled by countries in isolation.

The concept of nations joining together to tackle public health problems is referred to as GHD.² In this context, GHD is defined as having dual goals of improving health while strengthening relations among nations.⁵ Today, GHD is a necessary tool in the practice of modern diplomacy, expanding traditional areas diplomacy from economic, political, and military perspectives.⁶ The global response to the Ebola outbreak in 2014 is a recent illustration of the need for timely and effective

practice of GHD.⁷ Among a list of challenges provided by an Interim Assessment Panel, was a 5-month delay in the declaration of PHEIC, and a lack of coordination among WHO members states regarding travel bans, in clear violation of the International Health Regulations (IHR), both of which hampered response efforts in the global community.⁸

It should be noted that there are multiple forms of GHD described in the literature. As Katz et. al. (2011), and Brown et. al. (2014), report, there are three levels of GHD, each with respective actors, tools, roles, and levels of accreditation: core, multi-stakeholder, and informal. 1,9 Core GHD actors are officially accredited Health Attachés and diplomats, charged with representing and linking public health institutions in one government, to public health institutions in another government.^{1,9} Due to the strict processes needed to diplomatically accredit Health Attachés, involving both a sending and receiving state, core GHD practitioners are the smallest number of GHD practitioners and employ tools primarily focused on state-level action. Multi-stakeholder GHD actors include government employees and multilateral representatives, who have more varied levels of credentialing, and thus represent a larger population of practitioners, and employ tools focused on multi-stakeholder action. Lastly, informal GHD, which includes host country officials, non-governmental organizations, private enterprises, universities, and the general public, have the fewest required credentials and subsequently represent the largest number of practitioners and most diverse set of associated tools. GHD at each level of practice is equally important and necessary for effective global health action. Each distinct group cultivates respective best practices, definitions, tools, and has distinct comparative advantages. This study focuses on the perspectives of core GHD actors

because of their official credentialing and experiences serving as national actors representing government institutions. These professionals, known as Health Attachés, and not adequately described in the literature, and no profile has ever been published capturing perspectives on the practice of GHD, challenges, successes, or suggestions for the future of the field.

Health Attachés are specialized diplomats that collect, analyze, and act on information concerning health in a foreign country or countries; they cultivate key relationships and also provide critical links between public health and foreign affairs stakeholders. To be effective, Health Attachés must competently interact with all three levels of GHD actors on the Pyramid of GHD. They represent the views of their government and forge partnerships with other governments, multilateral institutions, private sector companies, non-governmental organizations and institutions, academia, and the general public.

To be successful in these interactions, Health Attachés must complete a rigid credentialing process involving both sending and receiving governments, to represent their sending government's views on health matters to receiving governments and non-governmental stakeholders. As primary actors in core GHD, it is important to understand the perspectives of Health Attachés because their unique perspectives in representing state-level actors have not been described in the literature. Additionally, little is known about the practice of core GHD, their priority missions, their perspectives on health-related negotiations, or even the career preparation involved in becoming a Health Attaché.

GHD lacks many standard descriptions, definitions, and evaluation frameworks that appear in descriptions of other fields of practice. 1,9 Consequently,

practitioners at all three levels of GHD do not describe the practice of GHD as a tradecraft, or the specific skills applied in service of this trade, or even characterize it as a subset of traditional diplomatic practice. This lack of a common GHD framework may result in considerable confusion or misunderstanding of expectations and relative roles among key actors and stakeholders. As such, there is a need to understand what *core* GHD practitioners currently interpret as their roles and responsibilities in order to define competencies and develop an evaluation framework for the practice of GHD.

We sought to understand what currently-accredited Health Attaché professional roles and practices encompass, as well as what challenges they face in the field of GHD. These findings may then be used to develop more targeted training programs that can prepare other diplomats, health, or any similar professionals charged with the practice of GHD, to respond to public health emergencies and security crises, as well as to more effectively support, manage, or lead global health issues that impact multinational organizations and entities. Further, delineating these elements of practice and providing lessons learned to other GHD practitioners may improve the ability of nations and other partners find common ground when tackling public health problems of greatest significance.

METHODS

Participant Selection

This qualitative study utilized seven key informants interviews among foreign

Health Attachés accredited to the United States and U.S. Health Attachés accredited

to foreign governments. All interviews were completed between 2013 and 2014. This study was approved by the Institutional Review Boards at the University of California San Diego and San Diego State University (Protocol #1538089).

Health Attachés are highly specialized core GHD actors and are few in number. ¹³ During the period of this study, there were only 13 individuals eligible for inclusion in the study population. While not all agreed to participate, we were able to evaluate non-participants' stated reasons for declining to participate.

Foreign Health Attachés. Eligible individuals included foreign diplomats who were officially accredited to the U.S. Government residing in the Washington, D.C. area, and who had the word "health" in their official diplomatic title as it appeared on the Diplomatic List. Accredited foreign diplomats are diplomats whose credentials from their respective embassy or government have been accepted by the U.S. Department of State (DOS) on behalf of the U.S. Government. This accreditation process, stipulated in the Vienna Convention on Diplomatic Relations (VCDR), allows diplomats to represent the views of their respective government to another government, as well as to the greater diplomatic community. 12 As stipulated in the VCDR, all accredited foreign diplomats are listed on a "Diplomatic List," published quarterly by the DOS, Office of the Chief of Protocol, on their publically available institutional web page. 14 This list includes the individual's name and address, diplomatic rank and formal title, which gives a brief indication of the diplomat's area of specialization and function in the Mission. ¹⁵ The Mission refers to the government staff and constituent agencies that reside within the diplomatic buildings, residences, and compounds that make up the respective Embassy community. We used the DOS Diplomatic List to recruit foreign Health Attachés into our study. The Diplomatic List

published in Spring 2011 and Winter 2012 shows that only seven of the more than 177 countries have an accredited diplomat to the U.S. with the word "health" in their job title (Table 4.1).¹⁵

U.S. Health Attachés. Eligible individuals included only U.S. diplomats assigned as Health Attachés abroad (at the time of this study, only five countries had U.S. Health Attachés assigned to them: China, India, South Africa, Switzerland [Geneva, assigned to the U.S. Mission to the United Nations], and Brazil). 1,13 The U.S. Department of Health and Human Services (HHS), Office of Global Affairs (OGA) is the U.S. governmental unit responsible for assigning Health Attachés to U.S. Embassies abroad. U.S. Health Attachés have an interagency appointment process that allows them to represent the Secretary of HHS in an international context, enables them to report on health issues in the foreign country or region of assignment, and helps them to link public health agencies and other stakeholders between countries or regions of assignment. U.S. Health Attachés also provide scientific guidance to U.S. Ambassadors and other members of the U.S. Missions on areas of public health practice. They maintain key health-related relationships in the foreign country, and help support U.S. government responses to public health issues and challenges. 13 We contacted all five accredited Health Attachés for participation. Their countries or regions of assignment, diplomatic titles, and respective public health counterparts, are listed in Table 4.2.

Study Procedures

Given the small population eligible for this study, we tried to include all eligible professionals in our sample. We conducted semi-structured interviews with all those who agreed to participate. Interviews were conducted face-to-face if possible, or administered over the phone when not. For participants located in the Washington D.C. area, interviews were arranged at a time and location convenient for the participant. For participants not located in the Washington, D.C. area, interviews were conducted over the phone at a time that was convenient for the research participant.

Informed consent was obtained from all participants and included permission to record and transcribe the interview. Interview notes were taken and incorporated into the narrative transcript. All participants were permitted an opportunity to review and clarify any parts of the interview text before finalizing the transcript. Participant incentives were not offered in this study. Since all subjects' names, titles, addresses, and respective country mission or Embassy was publically available, no promise of anonymity was possible, and while no names were to be reported in the analysis or reporting of results, no degree of anonymity was possible. These issues were covered in a consent form which was administered and consent obtained prior to starting the interview process.

A priori themes were drawn from the literature and used to develop the interview guide. 1,16,17 We focused on six domains related to the practice of GHD. 18 These domains represent gaps in the GHD literature and have not been previously described by practicing Health Attachés. 19-21 These domains included:

- Health Attaché office and organizational structure, including their purpose, scope, and definition of GHD;
- 2. Activities and goals of their office;
- 3. Diplomatic challenges undertaken in achieving GHD-related goals;
- 4. Health-related activities that required diplomatic negotiations;
- 5. Specific or general training that is helpful in serving as a Health Attaché;
- 6. Suggestions to help improve the field and practice of GHD.

The complete interview guide is attached in Appendix B.

DATA ANALYSIS

All audio-recordings were transcribed verbatim. Transcripts were uploaded into MAXQDA for analysis. The principle investigator (MB) and a study research assistant reviewed all notes and transcripts and participated in the coding process. Transcripts were first read and reviewed to develop an understanding of the content and to identify emergent topics/themes. Deep codes were created from these emergent themes. These themes were combined with our a priori codes, as derived from our review of the literature, and compiled to create a codebook. The code book included a description of each code's content, inclusion/exclusion criteria, and a text example. Transcripts were then coded separately by the principle investigator and study research assistant. After coding was completed, transcripts were reviewed for discrepancies, resolutions discussed, and the final codes were applied to the transcript of the interviews.

In an effort to maintain participant confidentiality, during the data analysis, all participants were referred to by the country they were from (foreign Health Attaches) or represented (U.S. Health Attaches). We continue to refer to each Health Attaché in this manner throughout this paper. However, given that all diplomats by definition have their names, titles, and contact information on publically available Diplomatic Lists, according to the VCDR, and the small community, even with the minimal identifiers used, maintaining anonymity of the study participants is not possible. This was discussed during the informed consent process with each participant prior to the start of every interview. However, we will continue to identify all quotations and references to participants' responses by only the Embassy or Country and the identity of the individual respondent is not included in the analysis, or the reporting of any results.

RESULTS

Of the thirteen Health Attachés eligible to participate in the study, both foreign and American, only seven agreed to be interviewed (Table 4.3). These included three foreign Health Attachés accredited to the United States and four U.S. Health Attachés serving at U.S. Embassies abroad. The foreign Health Attachés were serving at the Canadian Embassy, the European Union (E.U.) Diplomatic Mission, and the Italian Embassy in the Washington, D.C. area. The U.S. Health Attachés were assigned to U.S. Embassies in South Africa, China, India, and Geneva.

Several reasons were cited for lack of participation among the foreign diplomats. The Health Attachés in the South Africa, Saudi Arabia, Kuwait, Denmark,

and France Embassies felt unqualified to participate in a study on GHD. South Africa, Saudi Arabia, Kuwait each responded that they were not public health professionals, and their main roles were as medical professionals who provided primary health care to diplomatic personnel stationed at the Embassy and their families who reside in the Washington, D.C. area. In the case of Saudi Arabia and Kuwait, they also assisted expatriate citizens in navigating both health care and insurance access in the United States. In the case of Denmark and France, these diplomats explained over the course of several emails and the phone conversations that they felt unqualified to participate in the interview about GHD.

They both explained that while their profiles included health, they primarily focused on management and reporting of economic and political affairs, rather than health affairs. Both independently suggested interviewing the Health Attaché for the E.U., who was already included as a study participant. Both diplomats independently asserted that the E.U. Health Attaché would be the most appropriate person to represent their countries as a participant in this study as the E.U. Health Attaché supported the 28 respective E.U. Missions in the Washington, D.C. area regarding public health matters, and additionally was very active as a full time Health Attaché within the diplomatic community.

During the interview with the E.U. Health Attaché, she suggested the inclusion of the Science Attaché for the Italian Embassy and the Canadian Health Attaché for study participation, as they were the most active among the foreign diplomatic community on public health issues in the Washington, D.C. area. The U.S. Health Attaché assigned to Brazil was unable to be interviewed due to staff turn-over and a resulting vacancy in the post during the study's data collection period. Table 4.3 lists

all identified Health Attachés, whether they agreed to be interviewed, and reasons for refusal.

The Role and Position of Health Attaché

Attaché India

"I am the ambassador's primary advisor on health issues and coordinating representational or policy related issues in the health sector." -- U.S. Health

All participants stated that their primary role was to act as the main advisor to the Ambassador and the Mission on health matters and to manage health related activities. Most of the Health Attachés were solely part of a bilateral mission, meaning the purpose of the Embassy is primarily to maintain a formal relationship, codified in agreements, between a sending and receiving government. However, in two cases, E.U. and Geneva, the Health Attaché was part of a multilateral delegation. As such, they represented their respective sending government to a multilateral institution. The U.S. Health Attaché in Geneva is part of the U.S. Mission to the United Nations, with a focus on the World Health Organization. The E.U. Health Attaché represents the European Union, and supports and interacts with the 28 E.U. country Missions' resident in the United States, as well as represents the E.U. to the U.S. Government and the diplomatic community in the Washington, D.C. area. Both of these multilateral relationships are codified in formal agreements within their constituent institutions.

Interestingly, no Health Attaché was part of a dedicated health section in any Mission. Instead they were embedded in other Embassy sections, such as the Commercial (E.U), Economic (Canada), Science and Technology Section (Italy), or

Environment, Science, Technology and Health (ESTH) sections or Political sections (U.S). The Health Attachés in the U.S. Embassies in China, India and South Africa, and the Canadian Health Attaché were the only participants who had their own employees and a unit dedicated solely to public health, rather than acting as a solo professional. As a result of not having a dedicated health section, with the exception of Italy, Canada, and the E.U., Health Attachés had a direct reporting pathway to either the Ambassador, or the Deputy Chief of Mission. In the case of Canada, Italy, and the E.U., the Health Attaché did report to the Ambassador, but through another section head of the Embassy. In Italy's case, the Attaché reported to a Science and Technology Section head, in Canada's case to the Economic Section Head, and the E.U. case to the Commercial Section head. However, all also maintained a direct reporting line to Ambassador. It is interesting to note that as reported by the Geneva U.S. Health Attaché, in the U.S. DOS organizational structure of a Mission, if no ESTH section or officer is present, public health normally matters fall to the Economic Section. However, in all cases, foreign and U.S. Health Attachés, there was a direct reporting relationship to their national public health authority in their home countries (Table 4.4).

What Makes a Health Attaché?

GHD does not have standardized competencies as a field or required training for practitioners, and as such, no Health Attaché was trained to be a Health Attaché. As stated by the Canadian Health Attaché, "One of the deficiencies in global health diplomacy is not having a common language." As such, as reported by the Candian

Health Attachés, we have to create our own best practices while identifying needed skills and gaps in training for successful careers. Our participants voiced that there were five main skills needed for success GHD practice: they must have diplomatic and negotiation skills, they must have public health and scientific knowledge, they must understand their Mission's priorities, and must be cross-culturally competent.

Health Attachés cited a numerous specific skills developed during their respective careers that contributed to various professional successes while serving in a diplomatic Mission. The Italian Health Attaché highlighted the need for technical skills in the field of health.

"[You need a] strong technical background. Sort of a professional diversification...because the real challenge is to understand what science means, to be able to read and understand...areas of interest by different scientists..."—Italy Health Attaché

The Health Attaché from the E.U. referred to the importance of negotiations skills when working on the Trans Pacific Partnership (TPP), a trade agreement among 12 Pacific Rim countries, which has undergone years of negotiations. She cited simulation games to develop her negotiation skills as part of her career development.

"Sometimes you have bad arguments, or you are sent into a mine field which you can't defend... we make a difference in our work with simulation games about negotiation so you [can test various] different outcomes."-- E.U. Health

Attaché

The U.S. Health Attaché to China highlighted the subtle professional skills and cultural understandings needed in diplomatic negotiations.

"In international negotiations it's all about postures. In addition to body language, listening, it's also cultural sensitivity and, of course, nobody can learn everything about every culture but instead of trying to put forward your position too quickly... even playing poker might help too. It's because that's what ... negotiations might be." – U.S. Health Attaché China

Health Diplomacy in Action

To be effective in their roles, Health Attachés reported that they engage in daily activities, tracking existing and negotiating new agreements, organizing and attending meetings, drafting briefing documents, meeting counterparts, collaborators, and other actors vested in public health issues in the country or region of assignment. As stated by one U.S. Attaché, all activities while serving as a Health Attaché require maintaining and building relationships, the bread and butter of diplomacy.

"Relationship building is a key component of my responsibilities being the sole HHS representative in this country and this part of the world. The relationships are critical to my effective work and that's a very important part of my job." —

U.S. Health Attaché South Africa

Health Attachés reported that they must be able to create and draw upon relationships within their host country in order to advance the priorities of their Mission while searching for an intersection of mutual interests, for both the home and host governments. Part of building and/or maintaining these relationships comes from chairing and attending committees, working groups, or ad-hoc coordination efforts on health issues and collaborations in the country or region. Relationships built from

these events are then utilized in meetings that manage or maintain requirements related to existing agreements, renew health agreements, and establish new partnerships, accords, or agreements codifying mutual requirements and benefits among parties.

Moreover, each Health Attaché reported employing knowledge gained from these relationships and the identified priorities when contributing to internal planning documents with the Mission, or crafting briefing documents, memos, and talking points or speeches for Mission and governmental leadership. As the U.S. Health Attaché in Geneva mentioned, sometimes "we have a need for key elements to be respected, like human rights, inclusion of sexual and reproductive health services ... provided to women and a range of things [to be included]." Since Health Attachés have established relationships with other country representatives, they reported the ability to effectively find ways to succeed in implementing the health initiatives that were of greatest importance to their respective governments, while also finding some mutual benefit for the host government. When referring to an innovation initiative supported by the Embassy:

"That was a good example of global health diplomacy in that we're providing seed money to these entrepreneurs, medical entrepreneurs in their own countries that would then spin off to a [business to] benefit the country.

Example would be a faster way to vaccinate or painless way to give vaccinations." -- Canada Health Attaché

Health priorities are also part of health portfolios with established goals and objectives of the Mission in the health sector, and are typically part of a larger Embassy strategic planning process, with a number of foreign policy goals. While

most Mission plans are not available for public review or comment and remain unpublished, they are sometimes shared with government counterparts, and are sometimes important to allocate resources, such as the U.S. Government's President's Emergency Plan for AIDS Relief (PEPFAR), which provides 5-year strategic plans that in turn guide development of annual Country Operational Plans with the host country. Another example is the European Union's "Third Health Programme (2014-2020)" which involved all countries in the Union, which has a global heath component. This plan, developed from a protracted and deliberate consensus-building process, has a health component to engages E.U. member states, universities, industry partners, and the general public, and is published online every six years.

Another example of a multi-year consensus process involves Member States preparing resolutions for the World Health Assembly, the convening body of the World Health Organization, the main intergovernmental authority in global public health.²⁷ In describing one negotiation, the U.S. Health Attaché remarked:

"This one ended up being about two years of negotiations; from 2010 to 2012 ... we built a consensus around a public health approach to dealing with substandard and counterfeit medicines. We created a new member state mechanism which is effectively a subsidiary body of the World Health Assembly to kind of manage and oversee WHO engagement on counterfeits."

-- U.S. Health Attaché to WHO Geneva

One Mission priority, cited by all seven Health Attachés, was global health security. As the Italian Health Attaché commented:

"We also tend to react on the spot by different interests depending on different priorities; Ebola these days [and] global health security are taking priority."

-- Italy Health Attaché

The participants stated that health security, found in most global health initiatives, requires continuous discussions with diplomats and other government officials as well as many representatives of the private sectors. The Global Health Security Agenda (GHSA), a U.S. led collaborative with the World Health Organization, governments, organizations, and civil society, to accelerate implementation of the IHR, had several meetings that included participants from each of the seven countries who participated in this study.²⁸

During the study period, four GHSA events were held. These were located in Washington, D.C. in February 2014, Helsinki in May 2014, Jakarta in August 2014, and the White House in Washington, D.C. in September 2014.²⁹ All seven participants attended one or more of these meetings or were involved in inviting and preparing attendees on health-related security issues. In cases of China, India, and South Africa, the diplomatic exchange also involved a *demarche* concerning attendance at a forthcoming GHSA meeting.³⁰ A formal communication of one government, to another government, usually hosted through respective foreign ministries.

The Future of Global Health Diplomacy

All seven participants strongly believed that GHD as a field and practice would continue to expand and grow in importance in the future, and consequently must be

supported and resourced accordingly. A challenge cited by India, South Africa, China, Geneva, Italy, the E.U. and Canada, was a lack of resources to maintain the requirements of their job, host meetings, travel, and a demand for their services was a challenge to meet an increasing workload. The U.S. Health Attaché in South Africa succinctly summarized the thoughts on this:

"The amount of international health engagement continues to grow, whether that's bilateral relations or mutual recognition of interests in Health Security, or just plain globalization [that] makes the world smaller, we are going to continue to do more things together...the amount of health diplomacy engagement required to manage and facilitate is a challenge." -- U.S. Health

Attaché South Africa

As asserted by all the participants, GHD is critical to ensuring the success of multistate engagement on health issues.

All Health Attachés cited that as the practice and use of diplomatic activities involving health continue to grow, workload likewise increases, but unfortunately, resources do not follow suit. There is limited funding to hire additional staff, support travel, or host meetings or workshops. Only India, South Africa, and Geneva had more than one employee in addition to the Health Attaché. Given this, they predicted that meeting the increasing demands of diplomatic activity in health will be a critical challenge to overcome in the future.

Finally, in addition to resource challenges, Health Attachés in India, South Africa, and China cited that there is a perceived fundamental tension between the goals of public health and those of foreign policy objectives.

"... [the idea that] they have very different priorities than we [health professionals] do or they have very different objectives than we do...that there is anybody at the table [of the U.S. Mission] who has very different objectives than we do. I mean, if they do I think that's a problem. Certainly something that needs to have some sort of reconciliation..." – U.S. Health Attaché India

All participants cited that health is present in nearly all foreign policy goals, be them commercial, trade, or security, and this will mean a greater need for negotiations by diplomats with competencies in health engagement within a foreign policy environment.

DISCUSSION

Health Attachés are key practitioners in GHD. The information we have reported in this qualitative study may contribute to pedagogy, additional research, and refinement of training processes in the field of GHD. We attempted to collect information on best practices and to identify challenges in GHD as experienced by *core* GHD practitioners. We found that Health Attachés are in a unique position to report on how diplomacy can be applied in the field of global health and foreign affairs. They are the main advisers to diplomatic personnel regarding public health matters in both their home and host countries. They essentially act as the link between governments on health issues, which requires them to be successful in building and maintaining relationships at all levels (i.e., with academics, with industry representatives, with non-governmental groups, with intergovernmental organizations, and with other diplomats). To successfully create and nourish these

relationships, Attachés need a unique set of skills. They must be knowledgeable about a various health issues (from intellectual property rights, to health risks of counterfeit or substandard medication, to health security issues, like Ebola or Zika) or have the ability to quickly learn about emerging issues.

They must be able to carefully and attentively listen to concerns and converse with multiple actors on many subjects. They must also understand the cultural context of health issues in the country that they work.. Finally, they must have some training and competencies in foreign affairs in order to understand how the various health topics fit within their Mission's overall foreign policy goals and objectives. Our results suggest how multidisciplinary training would result in better-prepared Health Attachés who could more effectively conduct GHD. Additionally, these results suggest that training and skills of GHD practitioners may require development of competencies that could then be evaluated, either as part of the training process or as a means of professional development.

In fact, our participants also discussed specific areas in which the field could be improved. To facilitate communication among key actors, one suggested creating and hosting a key contact list of health professionals and their areas of specialization in a country or a region. Such a list could be maintained by the host country government and made available to accredited health diplomats or other public health actors in the country or region. This listing would assist GHD actors in knowing who to contact on specific subjects in each respective post. An email listserve or e-group of GHD practitioners in the host community could help create and maintain relationships that are essential to the success of GHD. Finally, they suggested that open communication and sharing of documents would be beneficial to the field of

GHD. While this is a standard practice of advancing public health practice, this is not the case with traditional areas of diplomatic practice, where issues of national sovereignty and economic strategic advantage outweigh concerns for transparency.

Most often, Mission foreign policy objectives and goals are not openly published. However, potentially publishing a global health Mission strategic plan, similar to the E.U. strategic plan for health engagement, could potentially help improve transparency and eliminate redundancy concerning health activities and priorities of partner governments. Similar models for this practice were described in PEPFAR 5-Year Strategic Country Plan, and annual Country Operational Plans.

The seven participants all described a direct line of communication with either the Ambassador or the Deputy Chief of Mission. Additionally, Health Attachés also help write and shape Mission priorities. Both the line of communication and the direct involvement in shaping health priorities are critical points for leverage and integration of health goals in traditional areas of diplomacy. Health Attachés may serve as advocates for health initiatives if they fit appropriately with the Mission's overall objectives. And according to all participants, health issues are present in nearly all foreign affairs goals and objectives. And all reported that this will continue and grow over time.

Both foreign and U.S. Health Attachés discussed how the field to GHD will grow in practice and importance in the coming years. However, in order for GHD to continue growing in the future, GHD practitioners must be able balance public health and foreign affairs goals and objectives, finding strategic areas of overlap and convergence. This practice of bridging global health and foreign affairs goals is a

specialized practice and perspective, which Health Attachés by design help develop, and represent the front lines of the practice of GHD.

As the past decade has demonstrated, multistate health issues, such as the domestic anthrax scare in 2001, the West African Ebola outbreak in 2014, and the emerging Zika Virus crises in 2016, are becoming more common and demonstrate the need for countries to form durable and responsive partnerships to tackle health threats and foster effective global health action that transcends international borders.

WHO Director General Margaret Chan addressed the United Nations Security

Council during a special session on Ebola stating, "Ebola is likely the greatest

peacetime challenge that the United Nations and its agencies have ever faced."

Since such responses are difficult to organize, coordinate, and carryout, GHD

practices must be applied in these situations, and thus those who lead these

responses must be adequately trained to provide diplomatic guidance during these

events in addition to understanding how to address them as specific areas of public health practice.

Participants also described a perceived tension between public health and foreign affairs goals. While not all Health Attachés agreed about whether public health goals should be used to advance foreign affairs objectives, or if diplomacy should be used to advance health goals, the participants did believe that a shared perspective is needed. As the U.S. Health Attaché to India stated, neither field's goals supersede the other; GHD practitioners should be working toward the same ends as all others in the Mission. In part, this tension is due to the lack of standardization of competencies and differences in preparation within the field of GHD, unlike the standard areas of diplomatic practice. Standardizing the field and practice of GHD

may help reconcile this tension between the fields of foreign affairs and global public health, bringing these two fields, and practitioners, closer together.

Each participant cited that the best preparation and training to prepare for work in the country Mission, is 'on the job training,' and another significant finding is that no Health Attaché was trained to be a Health Attaché. Such training and mentored experiences will reinforce skill development in an applied context and can contribute to a more well defined career path. Resources to establish this type of training, including rigorous pedagogy, applied, and measurable, needs to be further developed.

Our study's main weakness was in our limited sample. While we would have preferred to interview a greater number of foreign Health Attachés to better understand how their roles differ from those of U.S. Health Attachés, we were limited to only diplomats listed on the Diplomatic List. This meant that we were unable to talk to foreign Health Attachés who may be posted in other countries (e.g., a Canadian Health Attaché posted in China). However, given these limitations, we believe that the variety of participants who each had a unique perspective provided an important perceptive of *core* GHD actors.

CONCLUSION

Despite the limitations of this study, we were able to identify several lessons to apply to the growing field of GHD. First, GHD actors need to receive appropriate practical training in order to successfully negotiate the intersection of global health and foreign affairs. Our participants suggested several areas of training that would

benefit GHD actors: diplomacy and negotiation, applied science, and cross-cultural competency. Second, participants articulated the need for a career path for GHD practitioners through fellowship programs, increased opportunities for on-the-job training and mentored experiences, and GHD competencies with defined levels of mastery that can be used in occupational evaluation and career development. This would help individual practice, create clear training and career pathways, and ultimately decrease tensions between the independent priorities in the fields of foreign affairs and global public health, fostering more effective global health action.

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Chapter 4, in full, is in preparation for submission to Global Health Science and Practice. This work is dedicated to all of the Health Attachés who participated in this study of health diplomacy, and to all Health Attachés who are currently or have served on the front lines of health diplomacy, giving form to this field, and helping to make this work a better place by joining nations and intuitions around common public health challenges. Brown MD, Bergmann JN, Novotny TE. Matthew Brown was the primary investigator and author of this paper.

Table 4.1: Diplomats in Washington, D.C., Accredited to the United States with 'Health' in Their Diplomatic

	Country Embassy/Delegation	Diplomatic Title	
1.	Canada	Counselor for Health*	
2.	Denmark	Health and Training Attaché*	
3.	European Union	Minister-Counselor for Food Safety,	
4.	France	Health and Consumer Affairs	
5.	South Africa	Counselor for Health	
6.	Saudi Arabia	Health Attaché*	
7.	Kuwait	Health Attaché*	

Table 4.2: U.S. Health Attachés Assigned Abroad by the United States Department of Health and Human Services

	Country	Diplomatic Tile/Primary Counterpart			
1.	Brazil	Health Attaché/Ministry of Health			
2.	China	Health Attaché/Ministry of Health and Family Planning			
3.	India	Health Attaché/Ministry of Health and Family Welfare			
4.	South Africa	Health Attaché/Department of Health			
5.	Geneva (in Switzerland)*	Health Attaché*/World Health Organization			
	*Health Attaché's counterpart is within the U.S. Mission to the United Nations, World Health Organization, a multilateral organization, adopted from Paper presented at 141st APHA Annual Meeting (November 2-November 6, 2013), https://apha.confex.com/apha/141am/webprogramadapt/Paper278367.html				

Table 4.3: Eight Health Attachés Accredited to the United States and Five Health Attachés Accredited to Foreign Governments, Who Participated in the Global Health Diplomacy Study, 2012-2014

Diplo	omats in Washingto	n, D.C., A	ccredited to the United States, with "Health" in Diplomatic Title			
Country Y/N		Y/N	Interview Month/Year, or reason for refusal			
1.	Canada	Yes	February 2012			
2.	Denmark	No	Position vacant February 2012; referred to E.U. Health Attaché			
3.	European Union	Yes	February 2012; also encouraged we interview Italy Science Attaché			
4.	Italy	Yes	August 2014 (referred to by the E.U. Health Attaché)			
5.	France	No	Position did not address public health issues, referred to E.U. Health Attaché			
6.	South Africa	No	Clinical provider of health services, does not address public health issues			
7.	Saudi Arabia	No	Clinical provider of health services, does not address public health issues			
8.	Kuwait	No	Clinical provider of health services, does not address public health issues			
U.S.	Health Attachés Ass	signed Ab	road by the United States Department of Health and Human			
Country Y/N		Y/N	Interview Month/Year, or reason for refusal			
1.	Brazil	No	Unable to schedule and position became vacant			
2.	China	Yes	March 2014			
3.	India	Yes	February 2014			
4.	South Africa	Yes	August 2014			
5.	Geneva	Yes	October 2014			

Table 4.4: Foreign and U.S. Health Attachés Reporting relationship to Ambassador and Domestic Health Authority, and Section Size

	County	Reporting Ambassador/Deputy	Section	Direct Reporting to	Number of
		Chief of Mission		Public Health Agency	Staff
1.	Canada	Yes	Econ	Yes	4
2.	E.U	No	Econ	Yes	4
3.	Italy	No	Science	Yes	2
U.S.	Health Attaché	s Assigned Abroad by the United St	ates Departmen	t of Health and Human Serv	rices
County		Reporting Ambassador/Deputy		Reporting to Public	Number of
		Chief of Mission		Health Authority	Staff
4.	China	Yes	ESTH*	Yes	1
		Yes	ESTH*	Yes	2
5.	India	163			
5. 6.	India South Africa	Yes	ESTH*	Yes	3

REFERENCES

- 1. Brown MDM, Tim K.; Shapiro, Craig N.;Kolker, Jimmy; Novotny, Thomas E. Bridging Public Health and Foreign Affairs: The Tradecraft of Global Health Diplomacy and the Role of Health Attachés. *Science & Diplomacy*. 2014;3(3).
- 2. Koplan JP, Bond TC, Merson MH, et al. Towards a common definition of global health. *The Lancet*. 2009;373(9679):1993-1995.
- 3. State USDo. A Short History of the Department of State. 2016; https://history.state.gov/departmenthistory/short-history/framework. Accessed 3/3/2016.
- 4. Heymann DL, Chen L, Takemi K, et al. Global health security: the wider lessons from the west African Ebola virus disease epidemic. *The Lancet*. 2015;385(9980):1884-1901.
- 5. Adams V, Novotny TE, Leslie H. Global Health Diplomacy. *Medical Anthropology*. 2008;27(4):315-323.
- 6. Jones K-A. New Complexities and Approaches to Global Health Diplomacy: View from the U.S. Department of State. *PLoS Med.* 2010;7(5):e1000276.
- 7. Maurice J. Expert panel slams WHO's poor showing against Ebola. *The Lancet*. 2015;386(9990):e1.
- 8. Organization WH. Report of the Ebola Interim Assessment Panel. 2015; http://www.who.int/csr/resources/publications/ebola/report-by-panel.pdf?ua=1. Accessed 2/16/2016, 2016.
- 9. Katz R, Kornblet S, Arnold G, Lief E, Fischer JE. Defining health diplomacy: changing demands in the era of globalization. *Milbank Q.* 2011;89(3):503-523.
- 10. Brown M. Intersection of diplomacy and public health: The role of health attaches in the United States government's global engagement. Paper presented at: 141st APHA Annual Meeting (November 2-November 6, 2013)2013.
- 11. Kussbach E. Vienna Convention on Consular Relations. *Encyclopedia of Public International Law.* 1963;9:390-392.
- 12. Tunkin G. Vienna Convention on Diplomatic Relations. *International Affairs*. 1961;7(6):51-56.
- 13. Brown M, Shapiro C, Livinksi A, Novotny TE, Kolker J. Intersection of diplomacy and public health: The role of health attaches in the United States

- government's global engagement. Paper presented at: 141st APHA Annual Meeting (November 2-November 6, 2013)2013.
- 14. State USDo. Historical Diplomactic List. 2016; http://www.state.gov/s/cpr/rls/dpl/. Accessed 3/3/2016.
- 15. Protocol OotCo. Diplomatic List Winter 2012. In: State USDo, ed. Vol Winter 2012. Washington, DC: U.S. Government Printing Office; 2012.
- 16. Affairs OoG. Health Diplomacy. *Office of Global Affairs* 2014; http://www.globalhealth.gov/global-health-topics/health-diplomacy/. Accessed 2/28/2014.
- 17. Kennedy P. Secretary Patrick Kennedy's Remarks to the American Academy of Diplomacy. 2012 Annual Meeting; April 30, 2012, 2012; The Cohen Group.
- 18. State TDo. DECISION CRITERIA FOR TENURE AND PROMOTION IN THE FOREIGN SERVICE (3 FAH-1 EXHIBIT H-2321.1B). *U.S. Department of State Foreign Affairs Manual*. Vol Volume 32014.
- 19. Kickbusch I, Kökény M. Global health diplomacy: five years on. *Bulletin of the World Health Organization*. 2013;91(3):159-159.
- 20. Hunter A, Wilson L, Stanhope M, et al. Global health diplomacy: An integrative review of the literature and implications for nursing. *Nursing outlook.* 2012.
- 21. Smith KLaR. What is 'Global Health Diplomacy'? A Conceptual Review. *GLOBAL HEALTH GOVERNANCE*. 2011;VOLUME V(NO. I FALL 2011).
- 22. Hancock B, Ockleford E, Windridge K. *An introduction to qualitative research.*Trent focus group Nottingham; 1998.
- 23. Flick U. An introduction to qualitative research. Sage; 2009.
- 24. Tom Daschle BF. The Case for Strategic Health Diplomacy: A Study of PEPFAR. Conference on Strategic Health Diplomacy; November 9, 2015, 2015; Newseum, 8th Floor, Knight Conference Center, 555 Pennsylvania Ave NW, Washington, DC, 20001.
- 25. Simonds RJ, Carrino CA, Moloney-Kitts M. Lessons From The President's Emergency Plan For AIDS Relief: From Quick Ramp-Up To The Role Of Strategic Partnership. *Health Affairs*. 2012;31(7):1397-1405.
- 26. Commission E. European Commission, DG Health and Food Safety, Public health, Health programme, Policy. 2015; http://ec.europa.eu/health/programme/policy/index_en.htm. Accessed October 12, 2015.

- 27. Organization WH. Report of the First Meeting of the Member State mechanism on substandard/spurious/falselylabelled/falsified/counterfeit medical products. Vol Agenda item 9. Geneva, Switzerland: World Health Organization; 2012.
- 28. Frieden T. CDC: 5 ways diseases in other countries can kill you. 2014. http://www.cnn.com/2014/02/13/health/frieden-global/index.html?iref=allsearch.
- 29. Prevention CfDCa. Global Health Global Health Security Agenda -- Events. 2015; http://www.cdc.gov/globalhealth/security/events/default.html. Accessed October 12, 2015.
- 30. Freeman Jr CW. Diplomat's Dictionary. DIANE Publishing; 1994.
- 31. WHO Director-General addresses UN Security Council on Ebola [press release]. 2014.

CHAPTER 5: DISCUSSION

APPLIED HEALTH DIPLOMACY: DEVELOPMENT OF A FRAMEWORK TO

ADVANCE THE SCIENCE, PRACTICE, AND TRADECRAFT OF GLOBAL HEALTH

DIPLOMACY

OVERVIEW

This dissertation research was undertaken to better describe and understand the practice of the emerging field of Global Health Diplomacy (GHD). GHD is a relatively new field, developing over the last fifteen years that bridges independent priorities within the fields of global health and foreign affairs. Given the increasing need to mobilize the global community to respond to Public Health Emergencies of International Concern (PHEIC) such as Ebola or Zika, as well as forge new and expand existing partnerships for collective action, effective and timely coordination and cooperation among multiple actors is critical. Health Attachés are specialized diplomats who represent states' interests within these negotiations.

Despite Health Attachés specific diplomatic and public health mandates, they are very few in numbers, and little is published about this profession, preparation, and perspectives in field of GHD. Additionally, no institution has published a GHD core competency model, which would help recruit, train, monitor, and evaluate professionals in global health, foreign affairs, and other similarly charged institutions with a mandate for working on global health issues that transcend international borders. This can lead to confusion when trying to align appropriate actors, tools, and institutions to achieve effective global health action.

Bridging Public Health and Foreign Affairs: the Tradecraft of Global Health Diplomacy and the Role of Health Attachés

In Chapter 2, we defined a Health Attaché as a diplomat who collects, analyzes, and acts on information concerning health in a foreign country or countries and provides critical links between public health and foreign affairs stakeholders.¹ Understanding the role of Health Attachés, who work across disciplines and national boundaries, is important to improve the effectiveness of their work, enhance use of Health Attachés, and help shape training and professional development of future GHD practitioners.² Next, we described the conceptual background of GHD in the 21st century and its impact on the development of the Health Attaché. Following that, we introduced a Pyramid of Global Health Diplomacy, presenting a framework of actors. 3,4 definitions, and tools, aligned to three categories of GHD practice: core. multi-stakeholder, and informal GHD.⁵ We then described the current practices and competencies of Health Attachés as a specialized type of diplomat. Finally, we proposed an initial Tradecraft Model for Global Health Diplomacy and Health Attachés, illustrating the various counterparts and stakeholders who work with Health Attachés to better characterize the qualifications, training, and roles.² This research provides the first practice model for GHD in the field, providing a framework to illustrate the escalating priority that health occupies within foreign policy and multinational engagement.⁶

Mapping Foreign Affairs and Global Public Health Competencies: Towards a Core Competency Model for Global Health Diplomacy

The largest Ebola Virus Disease outbreak in recorded history required not only the greatest global health response in history, but also placed new demands on both the diplomatic corps and public health officials.⁷⁻⁹ Coordinated action to address public health issues that cross national boundaries is referred to as global health diplomacy (GHD), broadly defined as political activity that meets dual goals of improving public health and strengthening relations among nations.⁴ However, there is no GHD core competency model to help prepare institutional workforces, offer targeted training to professionals, or help monitor or direct efforts that require cross-disciplinary competency.^{3,10}

No institution has yet developed a GHD core competency model which would help bridge the fields of global public health and foreign affairs, providing additional training and guidance to diplomats, public health professionals, or other similarly charged professions. Workforces in the 21st Century need to prepare for and lead during global health emergencies, as well as forge new and expand existing collaborations for global health action. Without defined competencies in field of GHD, institutions charged with public health action may lack personnel with the required knowledge, skills, and abilities to effectively manage or lead during a global health emergency, or without the required competencies to design, implement or maintain complex multi-party collaborations for collective action.^{11,12}

This dissertation identified and mapped core competencies that can be used to address this gap in the recruitment, training, and management of professionals in the fields of foreign affairs and global public health. Limiting inclusion criteria to institutions with a training mandate and published core competency models with full

definitions, we conducted focused internet searches to identify two core competency models in foreign affairs from a single institution, and six core competency models from five different institutions in global public health that met our inclusion criteria.¹³

Employing domain word counts and a foreign affairs framework established in the literature, we compared models to determine degrees of association, divergence, and emphasis. Based on these analyses, we proposed an initial GHD core competency model to inform training of global public health, foreign affairs, or other professionals who need to tackle public health issues that cross international borders. This initial core competency model can be used by organizations and institutions, to ensure specialized personnel implementing GHD have the necessary knowledge, skills, and abilities to support effective global health action.

The comparison analysis illustrate that foreign affairs institutions charged with training diplomats need additional knowledge, skills, and abilities in (1) heath and risk communication, (2) public health analysis, and (3) public health ethics, to more effectively support global health collaborations and collective action. Similarly, global public health institutions charged with training health professionals need additional knowledge, skills, and abilities in (1) leadership, (2) foreign languages, and (3) foreign policy goals, objectives, and strategies.

The GHD model presented in this study is not meant to be used in isolation, but rather used as guidance in designing appropriate training curricula of respective professionals in any field, to increase effectiveness for global health action, especially critical during public health crisis or emergency, or when formulating complex multiparty collaborations to tackle common public health threats. Given the lessons currently being gleaned from the Ebola epidemic, there is a need to expand the study of GHD and the pedagogy needed to support the development of future practitioners.

Applied Global Health Diplomacy: Profile of Health Diplomats Accredited to the United States and Foreign Governments, A Qualitative Study

GHD is a burgeoning field that bridges the independent priorities of both global health and foreign affairs. 3.4,14,15 Given the increasing need to mobilize the global community to respond to PHEICs such as Ebola or Zika, or maintain and expand collaborations for collective action, effective and timely coordination and cooperation among actors is critical. 7,9,16 Health Attachés are specialized diplomats who represent states to design, expand, and maintain effective collaborations for collective global health action. 1,2,17 Despite their specialized diplomatic role, these professionals are few in number, and little is actually published about this profession, the preparation needed for it, and the perspectives of those who work in this field. 1,2 As such, we sought to qualitatively explore the roles, practices, and challenges of accredited Health Attachés from the United States as well as those representing other countries.

Through purposive sampling, we performed in-depth interviews with seven Health Attachés: three foreign Health Attachés accredited to the United States and four U.S. Health Attachés accredited to foreign governments. Our interviews explored four key topics: the role and mission of Health Attachés, skills needed to perform GHD, examples of successes and challenges in accomplishing their respective missions, and suggestions for the future development of this professional position.

We found several best practices and areas for improvement. Our findings indicated that skills in diplomacy and negotiation, applied science, and cross cultural competency are critical to be a successful. Additionally, providing on-the-job training

and mentored experiences for practitioners is important for future actors in the field. This would also help advance the practice of Health Attachés, create clear training and career pathways, and ultimately help bridge the professional fields of foreign affairs, which focuses on advancing national interest; and global health, which focuses on principles of health equity and collective action. Additionally, this profile will help encourage other countries and institutions who work in GHD, to develop dedicated Health Attachés, to help populate and prepare the field with a diplomatic workforce, better able to tackle the challenges of public health threats in the 21st Century.

LIMITATIONS

The major limitation to the models presented in Chapter 2, the *Pyramid of Global Health Diplomacy*, which aligned to three categories of GHD practice: *core*, *multi-stakeholder*, and *informal* GHD,⁵ and the *Tradecraft Model for Global Health Diplomacy and Health Attachés*, is that these are the very first practice models published in the nascent field of GHD.⁶ Since they are new, these models lack experience based research that accompanies other analytical frameworks present in the professional literature for foreign affairs and global health. However, they do represent a foundational set of models, to help inform and professionalize this growing field.

While these models are based in an analysis of the literature for GHD, with a focus on practice, there is no single supporting institution for GHD that would 'own' these models and support the rigor needed to test within the context of an institution or specific workforce. However, this limitation can also present an advantage. Since these models are not owned by a single field or institution, and they are by the nature of GHD itself -- multidisciplinary, they may also have applications beyond global public health and foreign affairs. For example, other fields that engage in the practice of GHD may find relevance and utility with the framework presented in this dissertation – such as clinical medicine, nursing, social work, university researchers, non-governmental organizations, private foundations, or multinational commercial enterprises.

The results of global health and foreign affairs competency mapping presented in Chapter 3 had several limitations. While this was the first comparative analysis to illustrate gaps in competencies used to recruit, train, and manage public health and foreign affairs professionals, we had a relatively small sample size – only

five institutions and eight core competency models fit our inclusion criteria. While the sample size was small compared to the plethora of institutions that work in foreign affairs and global public health, this finding illustrated that there are relatively few that have published their core competency models with full descriptions and definitions. Fewer yet have either developed or published the levels of career mastery, from entry, journeyman, to senior and executive levels. While not a stated finding of the study, this indeed may encourage other institutions to engage in competency based research and make their competency models either public, or support the analytical work needed to further define the specific goals and respective needs of the workforce. This foundational research is a first step of many that must be taken to develop a full GHD core competency model, to inform more effective diplomatic practice.

Another limitation in Chapter 3 is that foreign affairs and global public health core competency models were designed to support different professional fields, objectives, and have specific supporting institutions behind each model. By extension, each field has a distinct workforce and profession that the institution recruits, trains, and manages over the course of a career. This study presented an initial GHD competency model that is not wedded to a specific sponsoring institution.

Since GHD lacks a dedicated institution and dedicated workforce, this may limit the applicability of this model to be tested and refined over time. However, as illustrated by this study, while there are many institutions that employ short-course training in GHD, none have yet published a GHD core company model, as illustrated in this study. The lack of a dedicated workforce of GHD, and since no single institution owns GHD, this model can be adopted for multiple uses. Since this is the first model to be published in GHD, it can help inform other trainings for professionals

engaged in its practice by being adaptable, also helping to advance the experience base for this initial model.

An additional limitation is the comparison of aggregate models for foreign affairs and global public health. While two foreign affairs competency models characterize the recruitment and training of Foreign Service Officers serving at U.S. Consulates, Embassies and Missions abroad, this is within a single institution, the U.S. Department of State. While the six identified global public health competency models are derived from four different institutions. These institutions all have different mandates, workforces, and constituencies.

Each global public health institution focuses on different aspects of public health practice: academic training (ASPPH), regulatory function (FDA), and public health policy and global governance (WHO), and applied public health practice fieldwork (CDC). Foreign affairs competency models are stratified according to entry, mid-, and senior levels. None of the global public health competency models take this approach. However, all models in this analysis had published definitions sufficient for content analysis between these two fields. For purposes of foundational research, this initial model is a significant first step to inform additional trainings, preparations of workforces to conduct GHD, and is sufficient to be adopted, tested, and refined over time.

Another limitation in Chapter 3 is that the model has no specific home and is not a stand-alone model of practice, and unlike all other models included in this study, and as stated, is not owned by any specific institution. For a competency model to be sustained, tested, refined, and informed with competency base research, it would normally need the support of an institution that benefits from that workforce. For

GHD, there is no single institution and no single workforce. However, a lack of a home institution also presents a parallel advantage.

While any specific institution may not exclusively research the field of GHD, this initial GHD model can be adapted and tested, as is the multidisciplinary nature of GHD. The initial GHD model can complement existing trainings, enhancing competencies used to train foreign affairs, global public health, or other any other workforces with a component of GHD practice within. This adaptability can over time provide other institutions that work in this space opportunity to bolster their workforce to be successful where foreign affairs and global public health intersect, fostering global health action.

Lastly, in Chapter 4, the major limitation for the profile of practicing Health Attachés is the small sample size. While there were 13 Health Attachés eligible to participate, only seven agreed to participate in the study. The question we are forced to pose is: with such a small population, how generalizable are the results? Since this is a first profile of practicing Health Attachés, this was also an important finding. The study inclusion criteria focused on exploring *core* GHD practitioners, necessitating a sending and receiving government accreditation process, established in the Vienna Convention of Diplomatic Relations (VCDR).¹⁸

Employing the *Pyramid* and the *Tradecraft Model of GHD* developed in Chapter 2, there are actually only a small number of fully accredited state actors working in the space of *core* GHD. This finding is significant in that additional state coordination or cooperation is needed in the field, and supporting the creation of additional Health Attachés is needed. This first profile of Health Attachés can spur other countries and institutions to create this own dedicated Health Attachés, and not diplomats that do health on a part time basis, as findings in Chapter 3 and 4 both

illustrate. This can also apply to any institution, or non-state actor, donor organization, or commercial enterprise, who may have a vented interest in supporting a resident Health Attaché, with a mandate to help bridge public health and foreign affairs goals and objectives.

As indicated in Chapter 2, it is surprising to note that with the massive investment the U.S. Government has made in global health over the last 15 years, of the over 750 diplomats accredited within the Washington, D.C. area, less than 10 are full time Health Attachés, with a dedicated public health portfolio. If this study were repeated selecting only diplomats with the terms 'economic' in their diplomatic title, the results would be in the 100s, if not more. The need to have specialized diplomats with public health and foreign affairs knowledge, skills, and competencies, to serve as Health Attachés with dedicated public health portfolios, will continue to grow over time, and this research will help facilitate this development.

RECCOMENDATIONS AND FUTRURE RESEARCH NEEDS

The models presented in Chapter 2, the *Pyramid of Global Health Diplomacy*, presents a framework of actors,^{3,4} definitions, and tools, aligned to the three categories of GHD practice: *core*, *multi-stakeholder*, and *informal* GHD.⁵ The *Tradecraft Model for Health Attachés and GHD*, illustrating the various counterparts and stakeholders, to better characterize the qualifications, training, and role for these professionals,² are the first practice models to be published in the nascent field of GHD.⁶ Since they are new, time will tell if these models lend utility to the field, and continue to develop. While these models lack experience based research that

accompanies other analytical frameworks present in the fields of foreign affairs and global health, they do represent a first marker in the field.

This marker can now be analyzed and informed with real world applications. In addition, since GHD by definition is multidisciplinary, and as such there is no single institution that owns GHD, other fields with supporting institutions that engage in the practice of GHD may find utility employing these models – such as clinical medicine, nursing, social work, institutional researchers, non-governmental organizations, and even private multinational corporations like Facebook and Google – both of which have active engagement in global health. As companies see the need to work with government and public health institutions and support complex multiparty collaborations and cooperation, they may find utility in supporting their own respective Health Attachés. This experience can help tests these models with real world applications that benefit populations of the planet.

Institutions charged with the practice of GHD can use the results from Chapter 3, the initial GHD core competency model, to bolster recruitment, training, and management of their respective workforces and specialized personnel. The multidisciplinary nature of GHD will allow this initial competency model to be applied within any discipline that needs to facilitate global health action. This can also help compliment the plethora of short course trainings in GHD, presented in Chapter 2 and Chapter 3.

Additionally, since this is the first competency model to be published in GHD, it will encourage other institutions to either develop and/or publish their own respective competency models that are active in GHD, such as medical universities, non-governmental institutions such as the Bill and Melinda Gates Foundation, multinational cooperations, or other federal agencies, such as the Department of

Defense, U.S. Agency for International Development, National Institutions of Health, and National Science Foundation.

As illustrated in Chapter 3, the Association of Schools and Programs of Public Health (ASPPH) developed global health core competency models for Master and PhD level students. ASPPH hosted a series of workshops and stakeholder meetings and surveys, which solicited and analyzed key informant feedback and refined and adopted elements of the model for use by public health universities and colleges. Stakeholders included government and non-governmental organizations, private companies and academic colleges and universities. A similar multiyear stakeholder project, with surveys, analyses, and processes, could be supported by institutions that practice GHD, which would fast-track the analytical competency based research needed to develop and test a core competency model for GHD.

Finally, as discussed in Chapter 2, all levels of the *Pyramid* of *GHD* are not only equally important, but all are critical at every level to design, expand, and maintain collaborations for collective global health action. All of these institutions, either as *core*, *multi-stakeholder*, and/or *informal* GHD practitioners, have unique roles and contributions in the field, and specialized employees who practice GHDs. However, none have yet to publish their core competency models, showing how they recruit, train, and develop the specific knowledge, skills, and competencies important for their respective workforces and specialized employees in their institutions who are active in field of GHD, working on public health challenges that cross international boundaries.

CONCLUSIONS

This dissertation provides expanded practice descriptions and analyses in the field of GHD, which may help to advance the science, practice, and tradecraft of GHD. While models presented in this body of work need to be tested, evaluated, and refined with additional research, they serve as a collective practice framework for the field, helping to inform any individual, institution, or organization that works on public health problems that cross international borders.

Additionally, these findings can help professionalize the field of GHD, the practice and preparation of Health Attachés, as well as help encourage other institutions, organizations, and governments to support the development of additional Health Attachés to help manage and lead public health challenges. Additional Health Attachés, with competencies in global health, and foreign affairs, will help foster more effective global health action, and more responsive global partnerships, needed to tackle the public health challenges of the 21st Century, and help make the world a better place for our children.

REFERENCES

- 1. Brown M, Shapiro C, Livinksi A, Novotny TE, Kolker J. Intersection of diplomacy and public health: The role of health attaches in the United States government's global engagement. Paper presented at: 141st APHA Annual Meeting (November 2-November 6, 2013)2013.
- 2. Brown MDM, Tim K.; Shapiro, Craig N.;Kolker, Jimmy; Novotny, Thomas E. Bridging Public Health and Foreign Affairs: The Tradecraft of Global Health Diplomacy and the Role of Health Attachés. *Science & Diplomacy*. 2014;3(3).
- 3. Kickbusch I, Novotny TE, Drager N, Silberschmidt G, Alcazar S. Global health diplomacy: training across disciplines. *Bulletin of the World Health Organization*. 2007;85(12):971-973.
- 4. Adams V, Novotny TE, Leslie H. Global Health Diplomacy. *Medical Anthropology.* 2008;27(4):315-323.
- 5. Katz R, Kornblet S, Arnold G, Lief E, Fischer JE. Defining health diplomacy: changing demands in the era of globalization. *Milbank Q*. 2011;89(3):503-523.
- 6. Clinton HR. Leading through Civilian Power-Redefining American Diplomacy and Development. *Foreign Aff.* 2010;89:13.
- 7. Farrar JJ, Piot P. The Ebola emergency—immediate action, ongoing strategy. *New England Journal of Medicine*. 2014;371(16):1545-1546.
- 8. WHO Director-General addresses UN Security Council on Ebola [press release]. 2014.
- 9. Organization WH. Report of the Ebola Interim Assessment Panel. 2015; http://www.who.int/csr/resources/publications/ebola/report-by-panel.pdf?ua=1. Accessed 2/16/2016. 2016.
- 10. Kickbusch I. *Global Health Diplomacy A Survey on Training Programmes & Courses.* Geneva May 2008 2008.
- 11. Marrelli AF, Tondora J, Hoge MA. Strategies for developing competency models. *Administration and Policy in Mental Health and Mental Health Services Research.* 2005;32(5-6):533-561.
- 12. Calhoun JG, Ramiah K, Weist EM, Shortell SM. Development of a Core Competency Model for the Master of Public Health Degree. *American Journal of Public Health*. 2008;98(9):1598-1607.

- 13. Nourbakhsh E, Nugent R, Wang H, Cevik C, Nugent K. Medical literature searches: a comparison of PubMed and Google Scholar. *Health Information & Libraries Journal*. 2012;29(3):214-222.
- 14. Hocking B. Multistakeholder diplomacy: forms, functions and frustrations. *Multistakeholder Diplomacy: Challenges and Opportunities*. 2006:13-29.
- 15. Kickbusch I, Silberschmidt G, Buss P. Global health diplomacy: the need for new perspectives, strategic approaches and skills in global health. *Bulletin of the World Health Organization*. 2007;85(3):230-232.
- 16. Fink S. Liberia Is Declared Free of Ebola, but Officials Sound Note of Caution. 2015; http://www.nytimes.com/2015/05/10/world/africa/liberia-is-free-of-ebola-world-health-organization-declares.html? r=0. Accessed 8/5/2015.
- 17. Shepler CHG. FIRST PUBLIC HEALTH ATTACHE APPOINTED. *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*. 1948;10(138):761.
- 18. Collection UNT. Vienna Convention on Diplomatic Relations. 1961; https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=III-3&chapter=3&lang=en. Accessed 1/14/2014.
- 19. Brown M, is Senior Advisor OoGA, Department of Health and Human Services, and a PhD student in the Joint Doctoral, Program in Global Health at San Diego State University University of California SD, Mackey TK, Liang BA.
- 20. Calhoun JG, McElligott JE, Weist EM, Raczynski JM. Core competencies for doctoral education in public health. *American journal of public health*. 2012;102(1):22-29.