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The Introduction of a Global Medical Education Strategy

Amy L. Outschoorn
Western University, aoutscho@uwo.ca

Abstract

Significant effort has been made in improving global health care over the last several decades, however, there had been a lack of consistency in the delivery of care. This includes a lack of access to safe and affordable surgery and comprehensive care in low- and middle-income countries. Health care organizations require that medical providers are equipped with the highest quality of medical education programs to enhance the provision of patient care. This Organizational Improvement Plan (OIP) examines a global, medical mission-based, Non-Governmental Organization (NGO), that provides highly specialized surgery and comprehensive care locally and internationally through medical volunteers. The Problem of Practice (PoP) discussed is the lack of consistency in the design, development, delivery, and evaluation of medical education curriculum at the organization. A systems theory approach through the lens of authentic and transformational leadership to address the PoP is presented, including the introduction of a global medical education strategy through the implementation of global curriculum standards. Evidence-based, best practices such as balancing both local and global education requirements, a framework as opposed to a prescriptive approach to implementing global medical education, and the importance of competency-based medical education are examined. The OIP incorporates the application of Kotter's eight-step process for leading change, Kaplan and Norton's balanced scorecard to monitor and evaluate change efforts, and Klein's management strategy for developing a robust communication plan. Ethics, equity, and social justice to improve patient outcomes through medical education is woven throughout, and the paper concludes with next steps and future considerations.

Keywords: medical education, curriculum standards, global, leadership, health care, competency-based medical education

Executive Summary

There is a large unmet need for global essential surgery (Bath et al., 2019). Five billion people worldwide do not have access to safe and affordable surgery, resulting in increased morbidities and mortalities, particularly in low- and middle-income countries (Meara et al., 2015). The literature shows that investing in global surgical services is feasible, will save lives, and promote economic growth (Meara et al., 2015). To address this gap, global health care organizations are being called upon to provide more safe surgery where it is needed the most. World Medical (a pseudonym) is a global, medical mission based, Non-Governmental Organization (NGO) responding to the call to action in global surgery. Founded on the premise of equity, ethics, and social justice to provide free, safe surgery to patients across the world, World Medical with its global footprint in over forty countries is committed to taking action. This process starts with the imperative need to ensure that volunteer health care providers are equipped with the knowledge and skills required to deliver patient care in the thirty-five countries where World Medical provides surgery and comprehensive care. This must be achieved through a research-based, best practice approach to create the highest quality of medical education programs.

Increased attention in recent years has focused not only on the provision of global surgery and more broadly on global health, but on the development of global medical curriculum. The World Federation for Medical Education (WFME) and the World Health Organization's (WHO) Institute for International Medical Education (IIME) have called for global standards in medical education to improve patient care (Giuliani et al., 2021). Currently at World Medical, medical education programs are developed and delivered by countries all around the world where surgeries take place. Additionally, global medical education programs are developed and delivered by World Medical's headquarters, located in the United States. With this blended model, the lack of curriculum standards to design and implement medical education results in insufficient data, and a lack of processes, documentation, and clarity by

those who develop education programs, as well all stakeholders such as the staff in the Education division at headquarters. The Problem of Practice (PoP) addressed is the lack of consistency in the design, development, delivery, and evaluation of medical education curriculum at World Medical. Addressing the PoP will not only contribute to the work of World Medical, but it is also intended to be shared through publications and presentations so other global health care providers can benefit from this work to enhance other models in global medical education. This link to helping others reflects the vision, mission, and values of World Medical through collaboration and community.

This Organizational Improvement Plan (OIP) is part of an organization-wide focus on increasing the number of health care providers available at World Medical to treat more patients through global surgery and comprehensive care. The solution proposed to address the PoP is the establishment of global curriculum standards created and managed by World Medical headquarters. The theoretical framework underpinning the work at World Medical is systems theory (Trbovich, 2014; von Bertalanffy,1968), signifying the complexity of an organization with multiple offices and stakeholders providing medical care on an international scale. Authentic (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) leadership serve as the foundational theories to drive current and future changes at the organization, reflecting of the vision, mission, and culture of World Medical. This includes compassion, commitment, and perseverance as World Medical embarks upon a new era of medical education based on this renewed focus in the current strategic plan. Outside of surgical and comprehensive medical care, education represents the largest portion of organizational spending thanks to generous financial donors worldwide, contributing to health systems strengthening in low- and middle-income countries.

To determine change readiness at World Medical, a force field analysis (Lewin, 1951) and a stakeholder analysis were conducted (Deszca et al., 2020). A PESTEL analysis (Evans &

Richardson, 2007) was performed to examine the external factors influencing the PoP and Nadler and Tushman's (1989) Congruence Model was used to conduct an organizational analysis. The solution proposed to address the PoP is the creation of global curriculum standards by the Education division at World Medical. The OIP includes a series of frameworks for implementing, evaluating and communicating change; Kotter's (2014) eight-step process for leading change, Kaplan and Norton's (1992) balanced scorecard to monitor and evaluate change, and Klein's (1996) management strategy for communicating change. It concludes with next steps and future considerations for the implementation of global curriculum standards to enhance medical education programs at World Medical in an effort to improve patient care.

Acknowledgments

My work is dedicated to my husband, Dean, and to our children, Jonny, Alex, and Jacob. I love you every day. Thank you for your unwavering support and encouragement.

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Acronyms

ACLS (Advanced Cardiovascular Life Support)

AHA (American Heart Association)

AMA (American Medical Association)

BLS (Basic Life Support)

CMBE (Competency-Based Medical Education)

IIME (Institute for International Medical Education)

NGO (Non-Governmental Organization)

OIP (Organizational Improvement Plan)

PESTEL (Political, Economic, Social, Technological, Environment, and Legal)

PoP (Problem of Practice)

SDGs (Sustainable Development Goals)

WHO (World Health Organization)

WFME (World Federation for Medical Education)

Chapter 1: Introduction and Problem

In recent years, the topic of global surgery has received increased attention (Bath et al., 2019). This is due to the importance of safe surgery as a necessary component of health systems strengthening for all countries across the world (Meara et al., 2015). While incredible progress has been made in global health in recent decades, the lack of access to global surgery in low-income countries has worsened, resulting in increased morbidities and mortalities (Meara et al., 2015). Currently, there is a wide divergence in the level of safe surgeries across the globe. Medical education of health care providers is required to address this gap for organizations that provide global surgery. This first chapter introduces an international medical organization and an associated Problem of Practice (PoP) at the organization related to educational leadership in global surgery. Organizational context will be described, my own leadership position and lens statement articulated, guiding questions that emerge from the PoP discussed, a leadership-focused vision for change presented, and finally organizational change readiness assessed.

Organizational Context

While monumental gains have been made in global health care in recent decades, there has been a lack of consistency in the delivery of care (Meara et al., 2015). Most notably, “5 billion people do not have access to safe, affordable surgical and anesthesia care when needed. Access is worst in low-income and lower-middle-income countries, where nine of ten people cannot access basic surgical care” (Meara et al., 2015, p. 569). This staggering statistic demonstrates the need for international medical organizations who provide surgery to be more strategic and ambitious than ever in delivering care. This section provides an overview of the vision and mission of an organization referred to as World Medical, its aspirational strategic planning direction, an overview of the organizational structure with a brief analysis of the key external factors that impact the organization, and finally an introduction to the theoretical frameworks that drive individual and institutional approaches to leadership at World Medical.

Organizational Overview

World Medical is a non-profit, medical mission-based organization that provides highly specialized surgery and comprehensive care internationally through medical volunteers (World Medical, 2021a). The primary focus of World Medical is to treat one type of medical condition that occurs during pregnancy when parts of a baby's anatomy do not form properly (Mayo Clinic, 2018). It is one of the most prevalent congenital anomalies (i.e., birth defects) which can be prevented and treated (World Health Organization, 2020). When left untreated, the condition may lead to a variety of other medical problems (Mayo Clinic, 2018). World Medical provides extensive education to its volunteers in advance of and during missions to ensure they are equipped to deliver medical care. World Medical's mission is to provide free surgery and comprehensive care in low- and middle-income countries where the highest prevalence of the medical condition exists across the world (World Medical, 2021a).

World Medical was the first organization of its kind to support the World Health Organization's 2008 Safe Surgery Saves Lives initiative (World Health Organization, 2009), representative of its commitment to providing safe surgery on an international scale. Through a global footprint that includes program offices in more than thirty-five countries where surgery is provided, World Medical has thousands of volunteers from over sixty countries and on average conducts more than one hundred medical missions every year (World Medical, 2021a). This includes the supply of medical equipment such as operating tables, pharmaceuticals, and personal protective gear (World Medical, 2021a).

During missions, approximately eighty-five percent of the medical and non-medical volunteers are from the low- and middle-income host countries where the surgery is provided (World Medical, 2021a). Currently, education is delivered primarily through the program country offices, generally developed and facilitated by local and international medical volunteers and staff. Educational programs are designed and delivered based on the ten specialties the organization supports (e.g., nursing, nutrition, anesthesia, etc.) and contextualized by country

(e.g., language, cultural appropriateness, resource availability, etc.) (World Medical, 2021a). In other words, most of the education is developed at a local level by clinical experts from within program countries, with administrative support to implement those programs from the program country staff. The process is decentralized (not managed by headquarters), and the model is intended to provide localized medical education and to strengthen health systems within program countries to deliver safe surgery. This is accomplished through partnering with academic institutions, non-profit organizations, hospitals, private organizations, and governments. The model reflects the vision of the organization for a future of health through the provision of safe surgery across the world (World Medical, 2021a).

World Medical was founded several decades ago based on compassion, collaboration, and commitment, and has delivered surgery to hundreds of thousands of patients worldwide (World Medical, 2021a). The organization's primary sources of revenue are financial donations, gifts-in-kind, and contributed services which total over one hundred million dollars annually (World Medical, 2020a). World Medical's goal is to increase surgery and comprehensive care exponentially over the next ten years as part of its strategic plan to reach more patients than the last several decades combined (World Medical, 2021b). To reach this ambitious goal, the organization has identified the need to significantly increase its capacity (e.g., human resources, budget, etc.) in the Education division. This will allow World Medical to facilitate expanding the number of health care professionals qualified to provide care. This includes moving beyond the development and delivery of clinically specialized medical education programs in the program countries it serves. Currently, there are no overarching global standards or a strategy for medical education to be delivered consistently. This new era represents an opportunity to create a global medical education strategy to centralize curriculum and bring best practices in global medical education to fruition, such as balancing local and global education requirements (Brouwer et al., 2020) in the pursuit of global health equity (Adams et al., 2016).

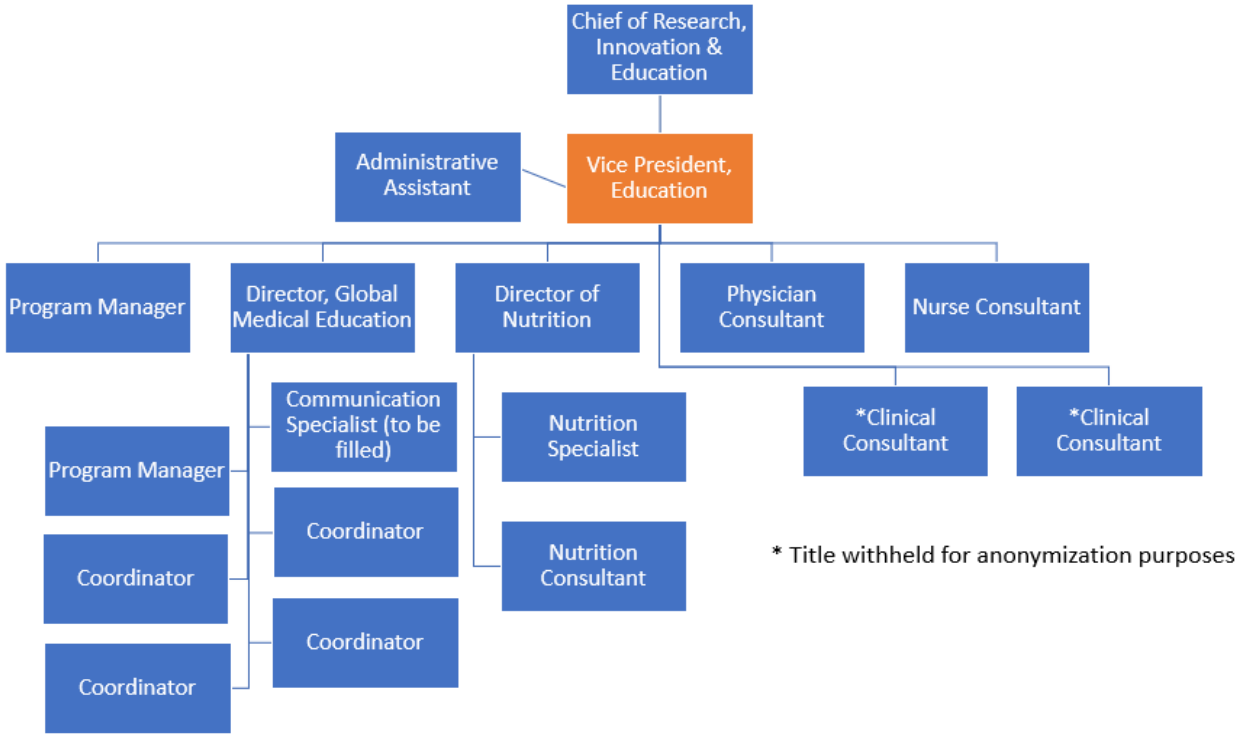
Organizational Structure and Analysis

Governed by an executive leadership team of over twenty people at headquarters and a board of directors, World Medical has a long-standing and well-established structure through its over six hundred staff members to carry out its mission and vision. This includes the program country staff where missions take place, along with six high-income partner countries, such as Canada, who raise awareness about the medical condition and lead philanthropic efforts. Program countries sit under the umbrella of World Medical headquarters, while partner countries are independently managed as separately registered charities. Partner countries, in addition to headquarters, constitute the fundraising arm of the organization while program countries are where medical missions take place.

The Education division lies within the division of Research, Innovation, and Education, is comprised of sixteen staff, and receives additional clinical, operational, and strategic support from several physician residents in the global fellowship program at the organization. The team consists of education and clinical experts, as well as people with global non-profit coordination and management experience. In the spring of 2021, a new executive leadership position in the division was established to oversee strategy and operations, and to enhance medical education as a strategy to ensure expanded safe, high quality global surgery. The current structure, as outlined in Figure 1 and with my role as Vice President of Education highlighted in orange, poses challenges in terms of the small size of the Education division in the context of the multitude of stakeholders and division mandate. However, opportunity exists to grow the Education team as part of the strategic plan (World Medical, 2021b).

Figure 1

Education Division at World Medical



In addition to an examination of the internal organizational structure and function of World Medical, a preliminary PESTEL analysis (Political, Economic, Social, Technological, Environment, and Legal) reveals the key external factors that impact the organization (Evans & Richardson, 2007). The PESTEL analysis is a structured, qualitative tool to understand the organization as a system (Evans & Richardson, 2007), and has been researched in health care (Thakur, 2021). From a political and legal perspective, World Medical works with many different levels of governments across the world, where there exists great variability internationally in terms of the legislation to deliver medical equipment, supplies, and medical care. The remaining economic, social, technological and environmental factors in the PESTEL analysis share similarities in that there is incredible diversity across the low-, middle-, and high-income countries where the organization is situated and delivers care, primarily in terms of resource availability. The PESTEL analysis will be elaborated upon later in this chapter.

Theoretical Frameworks

Systems theory is defined as a conceptual framework based on the principle that a system is best understood through the relationships and congruence of its component parts (Senge, 2006). With a large global footprint including multiple offices across the world, World Medical organically follows a systems theory approach to its strategy and operations. The complexity and extensiveness of the organization and specifically in education, is supported by von Bertalanffy's (1968) systems theory, based on the multiple systems involved (e.g., headquarters and program offices, volunteers and staff, etc.). Trbovich (2014) summarized systems thinking by stating that it "identifies the elements of a system, captures task dependencies, and outlines how work tasks need to be sequenced, coordinated, and synchronized" (p. 32). This approach is encompassed by the structure of World Medical with its governance by a board of directors and headquarters based in the United States, that are supported through the establishment of program countries where surgery and education are provided, and partner countries through their advocacy and fundraising. Importantly, systems theory has proven effectiveness in quality improvement within health care systems (Colbert et al., 2011; Petula, 2005; Plack et al, 2018, Ravitz et al., 2013), and will therefore be applied as the primary theoretical framework to drive the organization through changes in education.

Building on systems theory as the theoretical framework at World Medical, an examination of the leadership approach adopted by the organization is warranted. The philanthropic nature of World Medical through the delivery of free surgery aligns with an authentic leadership approach. The tenets of authentic leadership are comprised of purpose, values, relationships, self-discipline, and compassion and heart (Avolio & Gardner, 2005; George, 2003). It is an approach to leadership that encompasses service to others, transparency, self-awareness, commitment, and trust (George, 2003; George et al., 2007; Walumbwa et al., 2008), reflecting the service-centric capacity of World Medical as a non-profit health care organization. Authentic leadership aligns not only with the purpose of the

organization, but the approach taken by executive leadership in strategic planning, operational priorities (e.g., including the roles and responsibilities of staff), and supporting its volunteers. This is expressed through initiatives such as broad-scale consultation with program and partner countries during fiscal year and strategic planning and having some long-time volunteers now serving in a paid consultation capacity. Authentic leadership represents my personal lens as a leader through leading with purpose and compassion, specifically in my roles over the years supporting volunteers through medical education.

Building on the importance of an authentic leadership approach at World Medical, the new strategic direction reflects a time of tremendous change at the organization which must also be addressed through a leadership approach. Transformational leadership as coined by Burns (1978) and elaborated upon by Bass (1985) currently serves as the predominant leadership theory applied as the organization is undergoing a period of significant evolution and expansion. Transformational leadership drives evolution in systems and organizations (Sverre, 2019), including performance (Burns, 1978), representing strong support in addressing the PoP. Research has demonstrated that transformational leadership in health care leads to improved patient safety outcomes (McFadden et al., 2015), which is critically important to World Medical. Transformational leadership has been linked to “exceptional performance and ethically-inspired goals” (Xirasagar, 2008, p. 602), appealing to the higher motivation (Bass & Avolio, 1990; Bass & Avolio, 1995) of the medical volunteers who are the recipients of education at World Medical. Research demonstrates that authentic and transformational leadership have a strong association, and that using both leadership styles contributes to organizational commitment and employee performance (Joo & Nimon, 2014). These leadership models not only align with my personal approach to leadership but are in step with the mission and vision of World Medical. Through a clear understanding of the vision, mission, and goals of World Medical, the application of theoretical and leadership frameworks will support a new era in medical education. Transformational leadership will be critical to drive change to help a global

organization that has been in existence for several decades by examining challenges in a new way, and to provide excitement and inspiration as to how World Medical will continue making changes collectively and for the common good. This will build on what World Medical has already accomplished, positioning the organization well to address the PoP.

Leadership Position and Lens Statement

Northouse (2019) described leadership as "a complex process having multiple dimensions" (p. 31). As such, the definition of leadership continues to be debated, and theories created, refined, studied, and applied. Kouzes and Posner (2017) stipulated that what is critical to capture about leadership are the core values that a leader follows to describe what they represent, their expectations, and what can be anticipated of them and their followers. In medical education, effective leadership is critically important to meet the demand of high medical education standards and clinical care (Oates, 2012; van Diggele et al., 2020). These leadership skills go beyond subject matter expertise in medical education and include the need for leaders to have knowledge of leadership concepts, business acumen, and a leadership presence (Oates, 2012). This section discusses my leadership agency, positionality, role in the change process, and my personal leadership lens within the context of the PoP.

Leadership Agency and Positionality

Due to its size and complexity as a global organization that provides health care, World Medical naturally follows a systems theory approach in operational and strategic planning. Additionally, it is intentionally applied by the organization to large-scale, complex, and strategic efforts to drive change. Trbovich (2014) proposed that one of the ways leaders can integrate systems thinking into health care organizations is by "possessing the courage and energy to challenge the status quo and seek improvements" (p. 33), addressing the importance of change management. In their research on teamwork, Amos and Klimoski (2014) proposed three qualities that serve as the foundation of courage; character, confidence, and credibility, reflecting the virtue of courage not only in its importance as it applies to leaders, but as a

necessary component for team members to drive change. As a non-profit organization with thousands of volunteers across the world, World Medical was founded on the basis of courageous leaders, with courage as a core value of the organization and therefore as part of its identity (Brown & Trevino, 2006). This includes the courage of the medical volunteers who provide surgery, a testament to their commitment as health care providers in the global health arena. Character, confidence, and credibility of the leaders within the organization, including both staff and volunteers, are crucial in meeting our courageous goal of treating more patients in the next ten years than in the first forty years combined (World Medical, 2021b). This courage is reflected in the mission and vision of the organization (World Medical, 2021a), as well as in the work of the organization as documented in its strategic plan (World Medical, 2021b).

As the executive leader in Education at World Medical, I hold a senior leadership role within the organization. Reporting to the Chief of Research, Innovation, and Education, I oversee the operations and strategy of the Education division and am responsible for ensuring that the work of the division adheres to the mission, vision, and strategic plan of the organization. This responsibility and oversight is highlighted by the fact that there is no formal board or committee governance of the Education division, nor does the board of directors at World Medical approve decisions related to education. In other words, the decisions related to operations and strategy are not required to be approved beyond the Chief of Research, Innovation, and Education at headquarters and the Chief Operating Officer. This positionality reflects my opportunity for influence and authority as a legitimate leader (French & Raven, 1959) in the decision-making process on all aspects related to education. With a staff complement of sixteen individuals and multiple lines of reporting in my portfolio, I have the authority to approve decisions such as those related to budgets and contracts. The team is comprised of individuals who coordinate education programs, facilitate the development of curriculum, and provide clinical consultation on medical education programs. I have been asked to expand the size of the staff and budget in the context of this new era at World Medical where

education is at the forefront of leading significant change, as positioned in the broad yet identified need to enhance the effectiveness and consistency in medical education to improve safety and clinical outcomes.

The core function of the Education division includes the coordination, creation, and distribution of medical education curriculum for medical volunteers. As outlined in my job description, I have been tasked with moving beyond the current curriculum design, development, and delivery approach as a gap exists in the consistency of planning and implementation in education. This gap has expanded as a multitude of programs have been created over the last several decades by staff at headquarters, volunteers, and the program offices in over thirty-five countries where surgery is provided without medical education curriculum standards. Importantly, the establishment of these standards is in an effort not only to bring consistency and rigour to education, but to align with the strategic goal of the organization to increase the number of health care professionals qualified to reach more patients. I was hired for this role based on my educational background in science and education, and with experience as an executive leader in medical education for the last decade. In my previous role at another organization, I managed a medical education portfolio that supported over forty thousand physicians. This included the accreditation of medical education programs and the continuing medical education participation requirements of those physicians to maintain licensure and certification.

My agency and positionality at World Medical to facilitate change in education is supported through the current organizational structure as demonstrated in my ability to make decisions related to the operations and strategy of the division. This agency is pronounced through the lack of a formal governance structure or committee to approve decisions regarding education requirements and provides great influence for my role in change management. The risk of a lack of formal governance in education at World Medical is acknowledged. To ensure that systems theory is applied to the Education division, addressing the gap in the current

structure where there exists unbalanced power must be embedded into the Organizational Improvement Plan (OIP) to incorporate enhanced power distribution. This is intended to ensure that character, confidence, and credibility (Amos & Klimoski, 2014) are established with the Education division to reflect the courage of the organization through the change-making process.

Personal Leadership Lens

Building on the importance of the change-making process, my own personal leadership lens is an important consideration in the vision for change. Bellande (2005) acknowledged the importance of approaching medical education from a systems thinking perspective, recognizing that medical education leaders, "are part of a complex health care system with processes, other health providers, and patients who must be considered in providing learning interventions" (p. 206). While significant agency and power is assigned to my role in education at World Medical, approaching the PoP and OIP necessitates a systems approach to change as supported in the literature on health care organizations (Trbovich, 2014), particularly related to quality improvement within health care systems (Colbert et al., 2011; Petula, 2005; Plack et al, 2018, Ravitz et al., 2013). As the research on global surgery demonstrates, there is an incredible need to address the gap in access to safe surgery and comprehensive care (Meara et al., 2015). This reflects my personal approach to leadership as I am drawn to the field of medical education based on its ability to not only improve patient care but to drive systems changes such as expanding the reach of medical care.

Fistein and Cruise Malloy (2017) stipulated that "healthcare management and leadership are by nature a philosophical and deeply ethical enterprise" (p. 218). In a seminal article on health care leadership in the twenty-first century, Slavkin (2010) discussed the importance of medical education leadership across multiple specialties (e.g., medicine, dentistry, pharmacy, etc.), in domestic and international policy, in medical equipment distribution, and in the multitude of clinical practices such as medical clinics, as well as small and large hospitals where care is

provided. This complexity and call to action aligns with the work and future direction of World Medical. An important consideration in the evolution of medical education at the organization will be the “systems-based and interdisciplinary learning” (Bellande, 2005, p. 203) required, building on the notion that a systems theoretical framework is essential in understanding the complexity of World Medical as an organization. As stated by Slavkin (2010), “leadership at its best is when vision becomes strategic, the leader’s voice becomes persuasive, and the results become tangible” (p. 35). This reflects my own personal leadership lens and my mandate, through collaboration with the Education division staff, to lead changes in education that can be implemented, evaluated, and celebrated. A key determinant of organizational success is effective leadership (Bennis & Nanus, 1985). My approach to leadership is ensuring that the primary objective of creating high medical education standards to enhance clinical care is embedded throughout addressing the PoP and subsequently the OIP.

A leadership philosophy of practice provides a conceptual approach to leaders and their followers to move forward with purpose and should be informed by theory and literature. My own approach to leadership reflects a combination of authentic (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) leadership. Research demonstrates a strong link between authentic and transformational leadership in health care (Day & Leggat, 2018; Heller & Harrison, 2021; Perez, 2021), such as trust and enhanced performance, organizational commitment, job satisfaction, and employee retention, reflecting an evidence-based and practice-informed approach. This combination of leadership approaches describes my own leadership style, that of World Medical as an organization, and the non-profit health care arena. As a medical education leader, I strive to inspire others to embrace and welcome change. Through courage and authenticity my goal is to work collaboratively with others to raise ethical aspiration in medical education with the intended outcome of improving patient care. This is demonstrated through my commitment to change in education initiatives which includes a

collaborative approach through strong communication and compassion toward others. Strong leadership is needed to drive change in addressing organizational challenges, including the identification of such challenges.

Leadership Problem of Practice

The foundation of medical education is to improve the safe delivery of care to patients (Filipe et al., 2014). As expectations on health care providers increase and research in the field of medical education and global surgery advance (Moore et al., 2018), organizations such as World Medical are expected to respond. This includes setting medical education standards that align with the literature findings from both a patient care perspective and the way medical education programs are designed, delivered, implemented and evaluated. Over the last few decades, there has been a shift to reflect the expected competencies of health care providers to move beyond clinical expertise and is representative of a more comprehensive skillset such as leadership and communication skills (Bandiera et al., 2006). This evolution reflects the continuous changes that occur in the lifelong learning requirements of health care professionals, and the need for advancement of the education systems that support this learning. The following section articulates the PoP at World Medical in education that will be addressed through the OIP.

Problem of Practice

World Medical creates and delivers education to its medical volunteers. Staff within program countries and at headquarters collaborate to identify potential medical volunteers to serve on missions through a volunteer database which houses information based on clinical expertise, languages spoken, geographic location, etc. Staff in program countries where medical missions take place design education interventions when a gap in knowledge or skills is detected through data and the advice of medical volunteers and staff. This process includes the identification of credentialed educators, who are seasoned volunteers and have a background in education (e.g., university appointment), to deliver the education to newer volunteers. The

credentialed educator requirements were established collaboratively by the departments of Medical Oversight, Volunteer Services, and Education, and include clear roles and responsibilities (World Medical, 2020b). Credentialled educators partner with program country staff to design and deliver education programs, sometimes including the evaluation of both learner and program outputs.

In addition to creating education programs based on identified learning needs, World Medical is also an accredited provider of the American Heart Association (AHA, 2021). This partnership includes programs such as Basic Life Support (BLS) and Advanced Cardiovascular Life Support (ACLS), commonly required courses for health care providers all over the world where surgery is delivered (e.g., hospitals). Those programs are logistically coordinated through the Education division at World Medical and delivered by the AHA to medical volunteers in program countries. Several other programs in recent years have been designed and delivered by the Education division, through consultation and development with residents in our global surgery fellowship program and with seasoned education and medical volunteers. These include programs on leadership, an overview of global surgery, and the specialized surgery and comprehensive care performed by medical volunteers on behalf of World Medical. Finally, several medical education conferences have been facilitated both at the program country, partner country, and headquarters levels, often with international speakers and attendees and covering a broad range of topics across multiple specialties. This combination of programs reflects the depth and breadth of medical education offered by the organization.

Presently, there is a lack of consistency in the way that education programs are designed and delivered. Therefore, the PoP to be addressed is the lack of consistency in the design, development, delivery, and evaluation of medical education curriculum at World Medical. This includes the absence of specific learning requirements or clinical outcomes of the medical volunteers who participate in medical education programs. Best practices in education and more specifically in medical education identify the need to include the assessment of

professional competence (Davis, 1998). From a global medical education perspective, best practices also include the importance of incorporating both local and global education requirements (Brouwer et al., 2020). However, much of the research on global medical education is based on university programs such as post-graduate medical degrees, reflecting a limitation to the application of global medical education for World Medical's volunteers as the majority are already in medical practice. Volunteers at the organization span ten medical specialties, including surgical (e.g., anesthesia) and non-surgical (e.g., nutrition) disciplines. This complexity will be addressed through the exploration of literature in the delivery of global medical education (Slavkin, 2010; Sweet & Palazzi, 2015), including the literature on interdisciplinary learning (Bellande, 2005; Homeyer et al., 2018; Langlois et al., 2020). The goal of addressing the PoP is to achieve a more desirable organizational state through a structure that creates a more consistent way to monitor, evaluate, and improve medical education.

This new era in medical education at World Medical connotes an exciting time for transformational change at the organization. With the commitment by executive leadership to develop a strategy in education as demonstrated through hiring an executive to lead the portfolio, there is a tremendous opportunity to bring best practices in the design, development, delivery, and evaluation of medical education programs. The development of a strategy reflects the current vision and mission of the organization; to deliver safe surgery and comprehensive care to patients. Additionally, this approach aligns with the future vision and mission of the organization; to increase the number of health care professionals qualified to provide care to more patients across the world through safe surgery and comprehensive care.

Framing the Problem of Practice

The Lancet Commission on Global Surgery, supported by more than one hundred countries, was established in 2014 to address gaps in the current approach to global surgery (Meara et al., 2015). The report suggested that the solution lies in health systems strengthening and resource allocation to prevent morbidity and mortality in low- and middle-income countries

where the need for surgery will continue to rise significantly without intervention (Meara et al., 2015). World Medical has incorporated the Lancet report (Meara et al., 2015) into its strategic planning (World Medical, 2021b) based on the call to action by the Lancet Commission to address the current crisis in global surgery. This section will address the need for change at World Medical, provide a brief historical overview of the PoP through literature, discuss internal and external data related to the PoP, describe the results of a PESTEL analysis, and finally present the social justice context of the PoP.

The Lack of Global Medical Education Standards

Fistein and Cruise Malloy (2017) addressed the paradox of health care administrators to improve operational efficiencies with humanitarian efforts to deliver care. Referencing the Lancet Commission on Global Surgery, Watters et al. (2018) suggested that improving global surgery must go beyond consensus of stakeholders to the establishment of clear and measurable goals. A central focus in the current strategic plan at World Medical includes a theory of change that “maps out the connection between programmatic activities and initiatives and the short-term outcomes and long-term expected impact” (World Medical, 2021b, p. 8). The approach at World Medical to address this need is documented in the strategic plan through the establishment of increased targeted clinical outputs such as the number of patient consultations, operations, and follow-up appointments (World Medical, 2021b). Part of this solution will include medical education as an intervention to strengthen health systems, improving the quality of care provided and the number of patients treated.

In recent years, significant research has been focused not only on the challenges with the delivery of global medical care, but with the development of global medical curriculum. Some of these challenges include the variation between countries, implementation barriers, and having multiple stakeholders (Giuliani et al., 2021). Criticism of the implementation of global curriculum has included the dominance of the western medical model (Whitehead, 2013), which will be addressed in the proposed solution. The World Federation for Medical Education

(WFME) and the World Health Organization's (WHO) Institute for International Medical Education (IIME) have called for global standards in medical education to improve patient care (Giuliani et al., 2021). World Medical has a tremendous opportunity to respond by creating global curriculum standards as an organization that delivers international and interdisciplinary care, contributing to health system strengthening and the current crisis in surgery in low- and middle-income countries (Meara et al., 2015).

Medical education has evolved to address the need for health care providers to move beyond clinical competencies to include enabling competencies such as communication skills (Chan, 2002; Evans et al., 2002). This is facilitated through ensuring organizations have curriculum standards in medical education. This PoP is intended to address the creation of robust curriculum standards in medical education, as global best practices and results of their effectiveness exist, such as the establishment of learning objectives, conducting needs assessments on target audiences, and evaluation (Sweet & Palazzi, 2015). Consideration should include the recent shift from time-based learning for health care providers to competency-based curriculum, aligning with the current approach to medical school and residency training (Pangaro & ten Cate, 2013).

PESTEL Analysis

The creation of a global medical education strategy requires addressing the external factors influencing the PoP to create an OIP that is both practical and ambitious. Therefore, an external analysis using the PESTEL framework has been conducted. PESTEL is a structured framework to examine the organization as a system (Evans & Richardson, 2007), linking it to the theoretical framework of systems theory (von Bertalanffy, 1968), and subsequently demonstrating applicability to World Medical. As outlined in Table 1, the factors in the PESTEL framework have been listed, and examples of those factors in relation to World Medical are presented.

From a political standpoint, the organization delivers care internationally and works with all levels of government within countries. Based on its global reach as an NGO in health care, World Medical receives over one hundred million dollars annually in financial donations, gifts-in-kind, and contributed services, with most of that funding going toward surgery and education. Social factors that influence the organization include insufficient research on the social effects of the medical condition (Meara et al., 2015) and the importance of health care organizations practicing cultural sensitivity in the delivery of global medical care (Biswas et al., 2020). From a technological lens, World Medical spends a considerable amount of time, effort and planning to optimize the use of resources in low- and middle-income countries by providing equipment and technology, including in education interventions. Environmental factors identified include the recommendation for health care providers to learn about communities and ecosystems beyond an individual patient level and the need for medical curriculum to address environment health (Omrani et al., 2020). Finally, the WHO (2015) created an overarching global legal framework that enhances the ability for health care providers such as World Medical to practice international medical care. Systematically, all the factors outlined contribute to influencing the organization. The most important takeaway from the PESTEL analysis is that there are few and only minor limitations to the factors identified that impede the ability to facilitate and modify the delivery of medical education specifically. This is because challenges such as shipping of equipment, navigating financial payments, legal regulations regarding the delivery of care, etc. do not reside as a responsibility within the Education division.

Table 1

PESTEL Analysis of World Medical

Factor	Examples
Political	• As an NGO, World Medical delivers care internationally and works closely with all levels of government within program countries. • As outlined in the organization's Code of Conduct, each program country office is accountable to its funding agencies, government, and constituents (World Medical, 2021c). • World Medical navigates tax policies, trade policies and tariffs with shipping surgical supplies and other resources.

Factor	Examples
	• Meara et al. (2015) advocated that, “strong clinical leadership, professional management, and government policies should support all levels of care” in global care (p. 579).
Economic	• Primary sources of revenue include financial donations, gifts-in-kind, and contributed services at over one hundred million dollars annually (World Medical, 2020a). • Resource availability (e.g., equipment, operating tables, pharmaceuticals, etc.) varies across low-, middle- and high-income countries (i.e., program and partner countries). • Projected global economy losses without an increase in global expenditure in global surgery is estimated at twelve to thirteen trillion between 2015-2030 (Meara et al., 2015).
Social	• There is insufficient research about the social effects of the medical condition treated by World Medical (Meara et al., 2015). • Research on global medical education indicates the need for more community-based, patient-focussed curriculum to address the social determinants of health (Biswas et al., 2020). • Cultural sensitivity should be applied in the provision of medical care and global health (Biswas et al., 2020).
Technological	• “Increased attention should be given to the use of innovation and technology to reduce costs and optimize the use of resources in the delivery of surgical and anaesthesia care in low-resource environments” (Meara et al., 2015). • “In low- and middle-income countries, increasing access to effective health education can contribute to improved health outcomes” which can be achieved through technology (Adam et al., 2019, p. 1).
Environmental	• Omrani et al. (2020) identified that future health care providers should receive curriculum to address the importance of health and ecosystems in the provision of patient care. • Currently there is a gap in medical curriculum globally in environment health (Omrani et al., 2020).
Legal	• The World Health Organization established International Health Regulations to “provide an overarching legal framework that defines countries’ rights and obligations in handling public health events and emergencies that have the potential to cross borders” (WHO, 2005, p. 1). • Challenges with global health law include “vague standards, ineffective monitoring, weak enforcement” (Gostin & Taylor, 2008, p. 61).

This examination of the broader discourse is best supported by the research of Ho and Pinney (2016), who addressed the fact that health care administrators must be held ethically accountable at the micro level (e.g., patient and health care provider interactions), meso level (e.g., system for delivering care to patients), and the macro level (e.g., patients across the world). This link to the importance of ethical leadership and broader discourse at World Medical through the PESTEL analysis will be woven throughout the education strategy. From a practical implementation perspective, external factors as they relate to the PoP will be addressed such as the importance of creating curriculum that addresses the social determinants of health and environmental factors that impact health, as captured in Table 1.

Data at World Medical

The primary focus of World Medical in terms of data collection has been on the number of patients treated, emphasizing the importance of this data to one of our primary stakeholders, our financial donors. A main limitation to addressing the PoP at World Medical lies with the limited availability of data, both in terms of general organizational data (e.g., employee satisfaction surveys, detailed and up-to-date information about volunteers, etc.) and in education. With the design and delivery of medical education programs primarily being led by program countries, after almost four decades since the organization was established, we do not have complete data on the number of education programs delivered, the content of those programs, and evaluations of those programs. This significant challenge is currently being discussed with the executive leadership team, and the Education division has recently devised some processes and tools for collecting this data (e.g., on online survey for program countries to complete after each education program is delivered). This will be developed further as part of the global medical education strategy.

A 2015 Korn Ferry study demonstrated that organizations with teams focused on their organizational purpose had three times the annual growth rate for their industry. World Medical has leveraged this research and established a project in 2021 to connect our organizational strategy to our purpose. This process is being facilitated by an external organization specializing in this work and involves one-on-one interviews with several staff members, as well as surveys across the organization, including with program and partner countries. In addition to ensuring that our current strategy is connected to our purpose, another goal is to ensure that our reputation is enhanced through our alignment of strategy and purpose, and that our people feel valued and engaged (World Medical, 2021d). This results of this study, which will be available later this year, will be analyzed and both quantitative and qualitative data included as part of the education strategy.

An important pillar to the success of the organization's sustainment through financial donations has been in our reporting on the number of health care professionals who receive education and on our clinical outcomes. Based on our recent Annual Report, over one hundred medical missions were conducted in 2020, over ten thousand AHA courses were delivered, almost fifteen thousand volunteers received medical education outside of AHA courses based on medical specialty, over fifteen thousand patients received medical care, and close to a quarter of a million patient interactions (e.g., health screenings, consultations, post-operative care, etc.) occurred, reflecting our approach to comprehensive care (World Medical, 2020a). These numbers paint the picture of the extensive reach World Medical has in education and medical care, highlighting the need to go beyond the number of volunteers who receive education to reflecting an outcomes-based approach in the creation of an education strategy.

Social Justice at World Medical

World Medical was established based on the foundation of equity, ethics, and social justice to provide free, safe surgery to patients across the world. This is reflected in the vision, mission, and most importantly the work of the organization. Hixon et al. (2013) articulated that social justice should be at the core of medical education and boldly appealed to physicians to address international health disparities. Mihelic et al. (2010) emphasized the importance of examining both the short- and long-term consequences and benefits of ethical decisions, an approach that will be applied to the creation of an education strategy at World Medical. A social justice lens will guide the organization to consider ethical concerns and encourage internal debate and exploration into how to create a strategy that considers research, ethics, and societal transformation (Rexhepi & Torres, 2011). This aligns with the ethical approach taken by World Medical via the American Medical Association (AMA) Code of Medical Ethics in the delivery of care, based on ethical and professional regulations to safeguard the treatment of patients (AMA, n.d.). Patients are first and foremost in the model of the provision of surgery and care at World Medical, and therefore addressing the PoP will include regular reflection and

adherence to the AMA Code of Medical Ethics (AMA, n.d.). Framing the PoP through the need for organizational change via literature, data, and an environmental analysis supports World Medical's strategic direction to address the gaps in the current approach to global surgery (Meara et al., 2015) through the creation of a global medical education strategy. This includes World Medical's consistent and continuous commitment to equity, diversity, and social justice in the provision of patient care and in the way the organization functions in business operations.

Guiding Questions Emerging from the Problem of Practice

According to Agee (2009), "in qualitative studies, the ongoing process of questioning is an integral part of understanding the unfolding lives and perspectives of others" (p. 431). This position captures the importance of questioning in science education (Vale, 2013), and in creating successful and lasting changes in health care organizations (Nilsen et al., 2020). With growing interest on the topic of global medical education curriculum (Wu et al., 2020), the need to ask questions about why a problem exists before potential solution(s) are identified becomes an imperative step in the successful implementation of organizational change. This section addresses challenges that emerge from the main problem, factors that contribute to the problem, and potential lines of inquiry that stem from the problem.

Challenges Emerging from the Problem of Practice

According to the World Federation for Medical Education (WFME, n.d.), when it comes to medical school, residency training, and continuing professional development, curriculum standards should provide a framework rather than a prescriptive core curriculum. Research is abundant in articulating the importance of overarching curriculum standards in medical education to enhance knowledge translation (Graham et al., 2006; Graham & Tetroe, 2007; Kitto et al., 2018). This includes prescriptive steps in the process of the creation of such a framework with components such as conducting a needs assessment and evaluating learning outcomes in medical education programs (Thomas et al., 2016).

Currently at World Medical, there are no overarching standards or a strategy for medical education to be delivered consistently. Therefore, the PoP to be addressed is the lack of consistency in the design, development, delivery, and evaluation of medical education curriculum at World Medical. This lack of consistency has resulted in great variability of the medical education programs that have been created by the organization, and the absence of a formal evaluation of those programs has resulted in a lack of both quantitative and qualitative data. Based on best practices in curriculum development, a formalized approach to data collection will be used to enhance future medical education programs (Prideaux, 2007). The challenges in establishing global medical education curriculum standards are abundant, such as intercountry variability, multiple stakeholders, sociocultural differences, and large-scale implementation of change (Giuliani et al., 2021). With an almost forty-year history in the global medical education space, the introduction of curriculum standards may result in resistance, challenges with interpretation of those standards, and compliance with implementation. These factors will need to be taken into consideration in addressing the PoP through a robust approach to change management, as well as in the communication and evaluation of the strategy.

Lines of Inquiry from the Problem of Practice

Appreciative Inquiry (AI), an approach to organizational change by focusing on strengths, has been touted as having the potential to transform medical education, including curriculum development (Sandars & Murdoch-Eaton, 2017). With the lens of enhancing the performance of learners and administrators, and in an attempt to transform organizational culture (Ruhe et al., 2011), AI is the process of asking questions to address problems based on a solution-focused approach. Therefore, in identifying the PoP as the lack of consistency in the design, development, delivery, and evaluation of medical education curriculum at World Medical, the following questions will be addressed: *Why have curriculum standards not been created or implemented?* There will be rationale behind this question, such as a lack of need,

resources, time, budget, etc. *How are current medical education programs monitored and evaluated?* This question is imperative because it will demonstrate the lack of data currently available, which should be used to inform enhancement of medical education programs. *How are the clinical outcomes of medical volunteers currently measured?* While there is tracking of clinical outcomes of all patients, a more comprehensive strategy is required to make a link between clinical outcomes and medical education program design. *What are the consequences if curriculum standards are not established?* This question will address some of the previous questions identified above, demonstrating need and applicability. *Lastly, how do curriculum standards fit within the larger global organizational strategy?* There is a direct link from the current strategic plan of increasing the number of volunteers to treat more patients, tying this to any changes to medical education and specifically curriculum design will be imperative for successful change implementation.

The questions posed are intended to reflect the gaps between current processes and procedures in an effort to drive change. These questions will be presented to stakeholders for discussion in the early stages of change planning. This approach addresses the broader context of the organization's commitment to patient care as it supports World Medical's involvement in the World Health Organization's Safe Surgery Saves Lives initiative (World Health Organization, 2009) by establishing best practices in medical education.

Leadership-Focused Vision for Change

Armenakis and Harris (2009) noted that driving organizational change requires the correct diagnosis of the problem, labeling the root causes of the problem, and that change recipients believe change is needed. Research on leadership in medical education describes the need for leaders to go beyond creating a vision for change to creating a shared vision for change among stakeholders (Swanwick & McKimm, 2011; van Diggele et al., 2020). As an organization founded on systems thinking and shared decision-making, World Medical is in a strong position to bring collective change in medical education to improve and expand patient

care (World Medical, 2021b). This section focusses on my vision for change, the gap between the present and envisioned future state, priorities for change, the identification of change drivers, and the role of social justice in my vision for change.

Vision for Change

Systems thinking ignites a cyclical learning process as “knowledge is never complete or static” (Stroh, 2015, p. 33). This describes the approach to medical education for health care providers in that learning and development is a lifelong process. Based on research which supports global medical education frameworks (Brouwer et al., 2020; Slavkin, 2010; Sweet & Palazzi, 2015), my vision for change is the creation of a comprehensive global medical education strategy. One component of this strategy will be to address the lack of consistency in the design, development, delivery, and evaluation of medical education programs, representing a major priority in the overall education strategy. The intention of curriculum standards is to enhance learner knowledge translation which leads to change in practice settings (Graham et al., 2006; Graham & Tetroe, 2007), improving the quality of care provided to patients. This vision for change is supported by the organization as demonstrated in my executive leadership role and associated responsibilities and will include broad consultation with stakeholders.

Gap Between the Present and Envisioned Future State

The key to driving organizational change is the correct diagnosis of the problem (Armenakis & Harris, 2009). At World Medical, this is the lack of curriculum standards which results in insufficient data, processes, documentation, and understanding by those who develop education programs, as well all stakeholders such as the staff in the Education division. The result is an inability to understand how programs are being delivered, and therefore creates barriers to making improvements which is outlined as a best practice in the creation of medical education programs (Thomas et al., 2016).

Senge et al. (2015) described the importance of collaboration in systems theory in the context of organizational learning. The authors proposed that two questions should be asked,

"What do we really want to create? *And* What exists today?" (Senge et al., 2015, p. 31). Posing these questions will bridge the gap between the present and future state; the vision with reality, in an effort to foster creative tension to drive change (Senge et al., 2015). The root cause at World Medical of the lack of a global medical education strategy, including curriculum standards, is the absence of this requirement by the organization to implement such practices. Some steps have been taken to build this bridge to a future state, by hiring an executive leader in the Education division with experience in this area and documenting the task of creating such a strategy in the job description of this position. This demonstrates World Medical's commitment to addressing the gap between the present and envisioned future state.

The future state will improve the situation for all stakeholders (e.g., medical volunteers, patients, staff, etc.) by establishing the implementation of evidence-based, best practice in the design of global medical education curriculum (Davis, 1998). Increased rigour in the design, development, implementation, and evaluation of education will demonstrate a commitment by the organization to provide optimal and measurable education that will benefit medical volunteers through quality improvement. Ultimately, this supports patients as the end recipients and beneficiaries in the provision of safe surgery and comprehensive care.

Priorities for Change

The creation and implementation of medical education programs has been managed by both World Medical's headquarters and program countries where missions take place. Therefore, one of the main priorities for change will be incorporating both local and global education requirements (Brouwer et al., 2020). While there is support for the implementation of global requirements within the organization, a collaborative approach is needed in developing the requirements so as the intention is a framework rather than a prescriptive approach to program development. This allows the regionalization, culturalization, and contextualization of global programs for individual program countries, and for locally developed programs to be repurposed for different countries and considered for a global audience, where appropriate.

Another important component in driving change will be the establishment of an education committee. Literature supports the importance of curriculum committees in the creation of medical education programs (Homeyer et al., 2018; Karle, 2006). There also exists support for the use of such committees to prevent an individual dictatorship approach in the decision-making process (Thurmann et al., 1997). My position in the Education division at World Medical has tremendous oversight, autonomy, and accountability in the processes and standards set for the organization in education. It is therefore important to establish a committee to extend this decision-making power more globally, and include representatives across the specialties of medical volunteers, program and partner countries, education staff, and other staff at headquarters that have a direct tie to the work of the division (e.g., Medical Oversight, Quality Assurance).

The implementation of a strategy requires an approach that has been studied and applied in medical education to garner credibility and stakeholder support. Competency-Based Medical Education (CBME) is such an approach. It is a process which defines and measures clinical outcomes to improve the quality of care of patients (Bandiera et al., 2006). CBME is a framework that was introduced in 2005 (Bandiera et al., 2006), and has been used extensively in medical school and residency training programs in many countries across the world (Pangaro & ten Cate, 2013). It has been studied in low resource settings in surgical training (McCullough et al., 2018) and focuses on effective, real-time measurement of improvement as an outcomes-based approach to education (Frank et al., 2010). As World Medical provides clinical care, CBME reflects the direction of the organization to take medical education a step further from producing medical education programs to assessing the impact of those programs through an outcomes-based approach. Therefore, the third priority will be ensuring that the solution to the PoP includes CMBE as a foundational element.

Change Drivers

The primary driver for change at World Medical is the need to increase the number of health care professionals qualified to provide care to more patients around the world. This is supported by recent literature that points to the topic of global surgery being long neglected in the broader discourse of global health, particularly highlighting the extreme international disparities (Bath et al., 2019; Meara et al., 2015). The envisioned future state at World Medical in education will therefore address these disparities in collaboration with stakeholders. Presented as one of the priorities for change, the establishment of an education committee will constitute the creation of a formalized and for the first time in the organization a shared decision-making process in education and will be included as part of the change implementation plan.

As outlined in the Lancet Commission to address the gaps in the current approach to global surgery, some change drivers have already been established such as access to surgery and surgical volume (Meara et al., 2015). The work of Meara et al. (2015) is used by the organization in its current strategic plan, as are the Sustainable Development Goals (SDGs) of the United Nations (United Nations, n.d.). Some of SDGs that directly tie to the work of World Medical include good health and well-being, quality education, and reduced inequalities (United Nations, n.d.). The implementation of a global medical education strategy will include leveraging the diversity and power of the education committee to drive change in the organization such as increasing surgical volume.

Social Justice

Advocates in the field of social medicine describe the importance of the promotion of human rights and social justice in global health (Pentecost et al., 2021). Founded on the opportunity to bring dignity and equity through free, safe surgery to patients all over the world, World Medical strongly adheres to social justice. This includes being at the core of the organization’s focus, specifically in medical education (Hixon et al., 2013), in the way programs

are spoken of by those currently designing, developing, implementing, and evaluating education on behalf of the organization. The vision for change at World Medical should therefore include not only the sentiment that medical education curriculum is created based on a social justice lens but ensure that it is embedded throughout the global medical education strategy as a requirement of curriculum standards. Most importantly, social justice should be built into the strategy in a way that can be tangibly measured, reported, analyzed, discussed, and refined in medical education at World Medical. This process will begin with a review of organizational change readiness.

Organizational Change Readiness

Change readiness requires a thorough analysis of the fundamental elements of transformational change to assess what needs to be changed to move forward (Nadler & Tushman, 1989). Katzenbach and Smith (1993) stipulated that, “the best teams invest the time and the effort to explore, shape and agree on their purpose that is to be internalized both individually and collectively” (p. 54). From a global health care perspective, change readiness includes “measurement of both the capacity and the motivation of those organizations to engage in initiatives” (Dearing, 2018, p. 1). Fortunately, at World Medical, both the desire and the need to increase capacity within the organization to ensure current and expanded access to safe, high quality global surgery are present to facilitate organizational change. This section includes the assessment of organizational change readiness at World Medical and competing internal and external forces that shape change.

Readiness for Change and Change Planning

World Medical’s strategy over the next ten years includes an organization-wide plan to implement major changes, which were developed in collaboration with program and partner countries, with the ultimate goal of treating more patients (World Medical, 2021b). This includes new executive leadership in the Education division to reimagine the approach to global medical education through the creation of a strategy, therefore reflecting strong organizational readiness

for change. The role of the Vice President of Education is to ensure oversight of education across the entire organization, translating to the commitment of the organization to enhance oversight and accountability. The purpose of organizational change is to advance organizational effectiveness and reflect the ability of an organization to adapt (Deszca et al., 2020). There is a significant amount of literature on the importance of organizational readiness to facilitate the "successful implementation of complex changes in healthcare settings" (Weiner, 2009), therefore supporting this process of analysis in planning for change at World Medical.

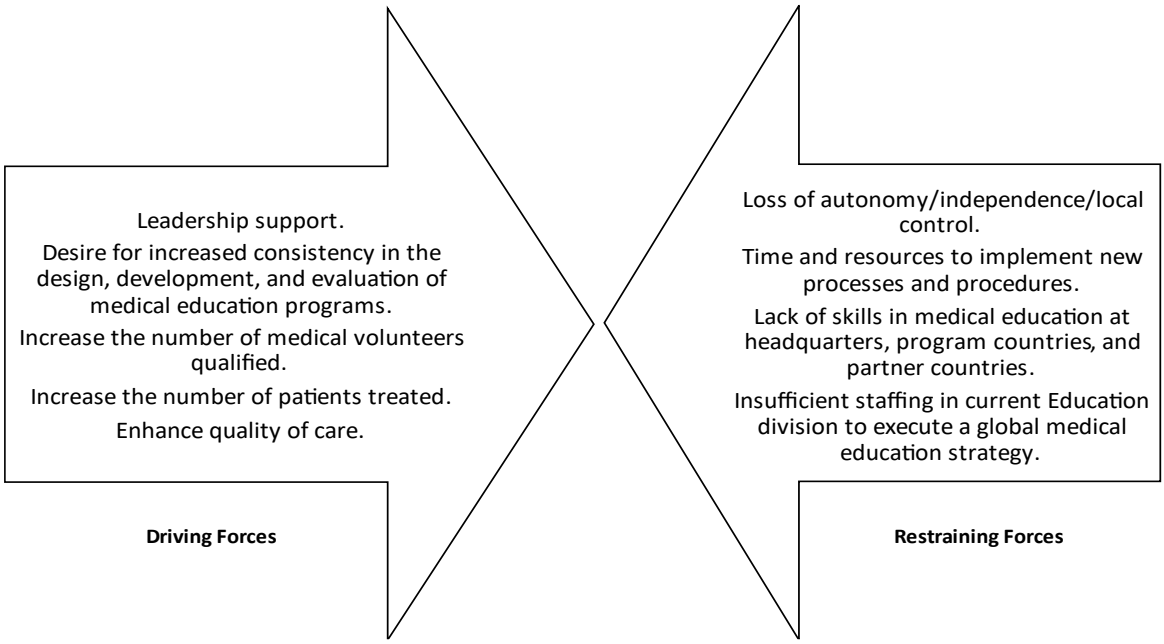
Change Readiness Assessment at World Medical

To facilitate best practices in change management, a force field analysis (Lewin, 1951) and a stakeholder analysis should be conducted to identify change readiness (Deszca et al., 2020). These tools support change leaders in understanding the "people, systems, and structures that interact according to different forces at play" (Deszca et al., 2020, p. 209). This approach goes beyond identifying a problem that exists and creating a vision for change, to understanding the forces at play to balance the equilibrium as change is implemented.

The first step is conducting a field force analysis to analyze the driving and restraining forces against change (Deszca et al., 2020). This includes both internal and external sources, with external factors often creating internal pressures (Deszca et al., 2020). As outlined in Figure 2, driving and restraining forces relevant to the PoP at World Medical are presented. While typically internal and external driving and restraining forces carry different weights, the intention with the depiction in Figure 2 with them all being represented equally is to demonstrate that all forces contribute to the change and will vary along the change timeline continuum. These forces will be examined as part of the global medical education strategy to develop enhanced awareness of how people, structures, and systems affect change. Several studies have used the force field analysis within health care organizations, particularly as it relates to enhanced communication and enhanced patient care (Ash et al., 2000, MacDuffie & DePoy, 2004).

Figure 2

Force Field Analysis



Note. Force field analysis adapted from "*Field Theory in Social Science*", by Lewin, K., 1951. Harper and Row.

As represented in the field force analysis, many of the restraining forces such as the lack of skills and insufficient staffing are challenges that are addressed through the driving forces such as strong leadership support and the interest in changes to medical education at the organization. It is anticipated that the loss of autonomy by program countries in developing medical education programs will be outweighed by the collective good that will be accomplished in implementing a global medical education strategy to enhance patient care.

The second step in assessing organizational change readiness is a stakeholder analysis to identify the people "who can influence or who are impacted by the proposed change" (Deszca et al., 2020, p. 209). The purpose of this approach is to understand interdependencies between individuals to better examine the systems and structures of organizations (Deszca et al., 2020). Figure 3 represents a stakeholder analysis, which includes both internal and external stakeholders of the Education division and how they will contribute to the desired results of

change. The chart identifies stakeholder's readiness to take action with components such as predisposition to change and current commitment profile. The analysis of stakeholders creates the opportunity for change leaders to identify strategies to move people along the continuum where appropriate to get on board with the change (Deszca et al., 2020).

As depicted in Figure 3, there exists great interest and a desire to see change in education across all stakeholder groups, reflecting the deficiencies and challenges in the current and previous approaches to the design, development, delivery, and evaluation of medical education programs. While the Education division has been tasked with taking action, the support by stakeholders as depicted represents the need for change. Importantly, on the scales of predisposition to change and current commitment profile, no stakeholders have been identified as anything less than supportive or open to change.

Figure 3

Stakeholder Analysis

Analysis of Stakeholder's Readiness to Take Action					
Stakeholder Name	Predisposition to Change (innovator, early adopter, early majority, late majority, laggard) Current Commitment Profile (resistant, ambivalent, neutral, supportive or committed)	Aware	Interested	Desiring Change	Taking Action
Education Division Staff	Innovators, committed			☑	☑
Chief Officers	Innovators, supportive		☑	☑	
Program Countries	Early adopters, supportive		☑		
Partner Countries	Early adopters, supportive		☑		
Staff at headquarters	Early majority, supportive		☑	☑	

Note. Stakeholder analysis adapted from "*Organizational Change: An Action Oriented Toolkit* (4th ed.)", by Deszca, G., Ingols, C., & Cawsey, T. F., 2020. Sage Publishing.

Extensive research exists on the importance of conducting a stakeholder analysis in health care, including a focus on quality improvement (Leviton & Melichar, 2016), policy and

practice in low- and middle-income countries (Makan et al., 2015), and global health care (Pereno & Eriksson, 2020). The combination of the force field analysis and stakeholder analysis provides as assessment of change readiness at World Medical. The driving forces for change and the desire for change among stakeholders becomes more apparent from such an analysis. Additionally, the factors that may restrain changes in medical education have not only been acknowledged but can be addressed through a change management approach and will be supported by the organization. One of the important factors to consider will be the importance of engaging all stakeholders in such a large, broad, and diverse group. This will need to include the competing internal and external forces that shape change in the context of World Medical beyond the walls of the organization.

Competing Internal and External Forces that Shape Change

Mosadeghrad (2014) addressed the complexity of internal and external factors affecting medical service quality and patient outcomes such as the availability of resources. The impetus for implementing changes in global medical education and more specifically in curriculum development are often multifactorial (Schneiderhan et al., 2019). Examples of internal factors that contribute to addressing the PoP include the desire for a global and broad-based education strategy (World Medical, 2021b), and the desire to follow best practices in global medical education such as an enhanced focus on evidence-based medicine and competency-based education (Davis, 1998). External forces that are driving the proposed changes include recent literature on the need for global medical education guiding principles (e.g., gender equity) (McNabb et al. 2021), global medical education frameworks (Brouwer et al., 2020; Slavkin, 2010; Sweet & Palazzi, 2015), increased access through technology to global resources (Adam et al., 2019), and The Lancet Commission on Global Surgery's call to action for organizations to come together to address the need for surgery in low- and middle-income countries (Meara et al., 2015).

World Medical's primary driver in the current strategic plan is to ensure enhanced access to safe, high quality global surgery (World Medical, 2021b). The organization's commitment to change through internal and external force alignment in global medical education position the organization as ready for change. This, along with the force field analysis and stakeholder analysis (Deszca et al., 2020), serve as a formalized and documented approach to support organizational change. The reality is that like many organizations, World Medical will implement the global medical education strategy in conjunction with multiple projects concurrently. As such, assessing organizational change readiness including both internal and external forces that shape change becomes increasingly important to facilitate change management efficiently and effectively.

Chapter 1 Conclusion

World Medical has established itself as a renowned organization that provides highly specialized surgery and comprehensive care internationally through medical volunteers (World Medical, 2021a). However, the lack of an overarching approach to the design, development, delivery, and evaluation of a medical education curriculum has resulted in significant challenges at the organization. This includes a lack of consistency and data in the number of education programs delivered, the content of those programs, and evaluations of those programs. As indicated by Schneiderhan et al. (2019), changes in medical curriculum development are generally implemented for a variety of reasons. A global medical education strategy based on a CBME framework is proposed to address the PoP. The vision for a global medical education strategy in the implementation of global curriculum standards to address the PoP was presented based on my leadership agency and an assessment of organizational change readiness at World Medical. The next step is to identify a leadership approach, develop a leadership framework for understanding change, and conduct a critical organizational analysis to address the PoP.

Chapter 2: Planning and Development

The provision of global health care is a complex undertaking and involves research and science to improve health equity for all people worldwide. (Koplan et al., 2009; Ren, 2015). The planning and development of changes to global health care through medical education at World Medical represents an exciting opportunity of great magnitude. As stated by Nilsen et al. (2020), “knowledge of conditions associated with successful organizational change has the potential to improve selection, planning, implementation and management of ubiquitous changes in health care organizations” (p. 1). Having a strong understanding of the what and the why behind change is necessary for the successful implementation of a global medical education strategy at World Medical. The first chapter introduced a problem in the lack of curriculum standards at the organization, and described the context, vision, leadership agency, and leadership lens for organizational change. This second chapter identifies leadership approaches to change, describes a leadership framework for leading the change process, presents a critical organizational analysis, proposes solutions to address the Problem of Practice (PoP), and discusses leadership ethics, equity, and social justice challenges in the context of organizational change.

Leadership Approaches to Change

Strong leadership is a fundamental component to the successful implementation of change (Miller, 2001). Effective leadership in medical education has received increased attention for its importance in the connection to clinical practice outcomes (van Diggele et al. 2020). As World Medical embarks upon a period of tremendous change in the way medical education is designed, developed, delivered, and evaluated, the leadership approach to change is an imperative factor for success and long-term sustainability. This section covers my chosen leadership approaches to drive change at World Medical, through alignment with literature and organizational context, specifically as it relates to the PoP.

Leadership Theories

Kumar et al. (2014) stipulated that in order to build capacity in leaders, it is critical to understand leadership theories. The application of leadership theories should reflect the leadership approach of the individual leading change, as well as the approach to leadership adopted by the organization for optimal success in change management implementation. As outlined in Chapter 1, the approach to change at World Medical will include authentic (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) leadership. Authentic leadership, first discussed by George (2003), represents transparency, self-awareness, and integrity (George, 2003; George et al., 2007; Walumbwa et al., 2008), and authentic leaders possess a deep sense of purpose, ethical values, and focus on meaningful relationships (George, 2003). This description of authentic leadership represents my personal approach to leadership, that of the executive leadership team at World Medical, and the vision and mission of the organization (World Medical, 2021a). Importantly in the context of World Medical, authentic leadership has been found to strengthen the work engagement of employees (Laguna et al., 2019) and increase equity, quality, and safety in patient care (Keroack et al., 2007).

In conjunction with authentic leadership, transformational leadership (Bass 1985; Burns, 1978) is applied to lead change at World Medical. Transformational leadership, initially conceptualized by Burns (1978), was expanded upon by Bass (1985) to include four dimensions: idealized influence, individual consideration, inspirational motivation, and intellectual stimulation. Transformational leaders are role models, inspire and empower others, and encourage thinking outside of the box to bring new ideas to fruition (Bass, 1999). Transformational leadership has been selected as the foundational leadership theory of the OIP because of the significant changes being considered in medical education on a global scale at World Medical, with strong supporting literature on transformational leadership theory to lead

organizational change (Bass & Riggio, 2006; Eisenbach et al., 1999). It is anticipated that the combination of authentic and transformational leadership will provide a complementary approach that blends authenticity and transparency with the need for significant organizational transformation.

Criticism of the combination of authentic and transformational leadership exists due to the conceptual overlap (Avolio & Walumbwa, 2014). The strong link between these two leadership theories is also described as complementary in health care (Day & Leggat, 2018; Heller & Harrison, 2021; Perez, 2021), therefore demonstrating the power of their combined applicability at World Medical. It should be noted, however, that there is a lack of research on authentic leadership in senior healthcare positions (Saxe-Braithwaite & Gautreau, 2020). Authentic leadership has been researched and applied internationally (Walumbwa et al., 2008), supporting its applicability in a global context. Transformational leadership has been studied extensively in health care (Gabel, 2012; Huynh & Sweeny, 2014; Lukas et al., 2007; McFadden et al., 2015; Smith, 2015), representing strong support for its application.

Transformational leadership (Bass 1985; Burns, 1978) is situated as the primary leadership theory to drive change at World Medical, and an important consideration based on my leadership position as the executive leader of the Education division is that of power. Gabel (2012) called for medical education professionals to leverage their positions of power to improve health care delivery. Using Raven's (2008) bases of power and case studies to paint the picture of power and leadership in action by physicians, Gabel (2012) outlined some of the many benefits of using transformational leadership in health care such as increases in staff satisfaction, enhanced perceptions of leader effectiveness, and reductions in burnout. His positional paper was a call to action to the medical education community to incorporate power and leadership to enhance the learning of physicians to improve patient care (Gabel, 2012). The appeal to health care organizations to leverage power for good reflects the vision and mission of World Medical as a non-profit that provides free surgery and comprehensive care to low- and

middle-income countries (World Medical, 2021a). The power differential between patients and medical volunteers; low- and middle-income countries with high-income countries, and the positional power of my role as the executive leader of the Education division versus other staff will be discussed and addressed throughout the organizational change process. This is important because it links back to authentic and transformational leadership in addressing the PoP, specifically the power I have to lead extensive changes in medical education.

Driving Change Through Leadership at World Medical

Transitioning World Medical through an unprecedented amount of change in education will in turn result in extensive changes across the organization. This is because education is such a large component of the work of the organization, and the proposal is to bring significant changes to the way education is planned and delivered. This change will involve not only new policies and processes, but it is also anticipated to inspire change through personal growth (Notgrass, 2014). This includes many of the organization's stakeholders as identified in Chapter 1 such as staff at headquarters, program and partner countries, and medical volunteers. Transformational leadership drives evolution in systems and organizations (Sverre, 2019), including performance (Burns, 1978), representing strong support for its implementation to drive change at World Medical. Transformational leaders demonstrate a high degree of emotional intelligence, are compassionate, and subsequently serve as role models to others (Kouzes & Posner, 2017). Importantly at World Medical, while authentic and transformational leadership reflect the nature of the work at the organization and the medical volunteers who transform lives through surgery and comprehensive care, these leadership theories reflect my own approach to leadership and change management. Authentic and transformational leadership require that I lead by example. This will be demonstrated throughout the creation of a global medical education strategy by incorporating the tenets of these leadership approaches; being open throughout the process to new ideas, making courageous and equitable decisions, and empowering others in the decision-making process (Bass 1985; Burns, 1978; George, 2003).

According to van Diggele et al. (2020), “healthcare education leaders are required to work effectively and collaboratively across discipline and [organizational] boundaries” (p. 1). The application of authentic and transformational leadership, which represent my own approach to leadership and that of World Medical, have extensive literature to support their implementation. In Chapter 1, systems theory (von Bertalanffy, 1968) was identified as the theoretical framework that guides World Medical. Research indicates that systems thinking can better facilitate health systems strengthening by delivering and improving health care more equitably (De Savigny & Adam, 2009). Swanson et al. (2012) argued this should be facilitated through transformational leadership. One of the strategies for both systems thinking and transformational change is to “ensure sufficient priority and investment in capacity development and transformational leadership” (Swanson et al., 2012, p. iv57). As evidenced throughout Chapter 1, the aspiration and investment to transform medical education at World Medical are present. The next step beyond the identification of the leadership approaches to change is the framework for leading the change process.

Framework for Leading the Change Process

Foundational to medical education is the premise that quality improvement in the delivery of medical care will lead to enhanced patient outcomes. Based on scientific advancements and changing societal needs, medical education and the process to designing, developing, delivering, and evaluating curriculum has and will continue to change (Buja, 2019). This ongoing process of change in medical education involves many stakeholders on an international scale at World Medical, representing an organization-wide approach to facilitating change. Bolman and Deal (2017) described the notion of reframing organizations, a process that encompasses viewing challenges and opportunities from more than one perspective and creating alternative ways to tackle organizational situations; an approach that will be needed to successfully implement change at World Medical. This section will address how to drive change

at the organization, including the discussion of organizational change frameworks for leading the change process.

Framework for Change

Systems theory is the theoretical framework underpinning the work of World Medical. According to Stroh (2015), “systemic theory must be rich enough to incorporate multiple perspectives yet simple enough to provide actionable insights” (p. 203). In other words, diversity of input is necessary to drive change, however, the solution to the problem must be simple enough to be applied. Holt and Seki (2012) argue that global leadership requires several developmental shifts, including “becoming adept at managing paradoxes” (p. 196) and focusing on not only implementing new initiatives but representing those initiatives with great awareness and sensitivity to global contextualization. This view reflects that of World Medical, as well as the importance of that lens in my own position of power within the organization. To be an effective change leader, the process involves being both a driver and enabler of change, which requires many aspects such as creating a vision, removing obstacles, the implementation of change, and the evaluation of change initiatives (Deszca et al., 2020).

Similar to the importance of the selection and application of leadership approaches to change, the incorporation of a change management theory is required in addressing organizational gaps to implement change. Several change management theories have been created that exemplify how to create organizational change (Deszca et al., 2020). For example, Lewin’s long-standing, three-stage model of change is comprised of the steps: unfreeze, change, and refreeze and represents a simple yet easily understood approach to manage change (Lewin, 1951). Criticism of Lewin’s model has been its over-simplistic approach to address change and the fact that it should go beyond moving people from current to future state (Deszca et al., 2020) to establish a more sophisticated approach to leading change. Other models, such as Duck’s (2001) emotional transitions through change and Gentile’s (2010) giving voice to values, focus less on the process itself and more on the internal states of individuals

such as emotions and values. Based on the philanthropic nature of World Medical and as demonstrated by the values and support of stakeholders to facilitate change in medical education as outlined in the stakeholder analysis provided in Chapter 1, Duck's (2001) and Gentile's (2010) models have not been selected because a more process-driven approach will be needed to drive a global medical education strategy.

While all change management theories have their strengths and weaknesses, one such framework reflects strong alignment with World Medical; Kotter's (2014) eight-step process for leading change. Kotter's (2014) change management model includes directives to: create urgency, build a guiding coalition, form a strategic vision, enlist volunteers, remove barriers, generate quick wins, sustain acceleration, and institute change. It is a prescriptive model, described as a detailed map for leading change (Deszca et al., 2020), and such a guided step-by-step approach will be useful for planning and implementing large-scale changes at World Medical. Kotter's long-standing framework has been studied in health care (August, 2013; Aziz, 2017; Carman et al., 2019). In fact, early work from Kotter (1990) distinguished between leadership over management to create organizational change as an important factor for implementing quality improvement and fostering a safety climate, demonstrating applicability at World Medical. Additionally, this work spoke to creating a vision and inspiring others to achieve that vision (Kotter, 1990), paralleling the tenets of transformational leadership.

Kotter's (2014) model is loosely applied in the approach to project management and new strategic initiatives at the organization, particularly in change management by the executive leadership team so there is some familiarity with the framework. For example, the current planning of an upcoming milestone anniversary for the organization has incorporated creating urgency, building a guiding coalition, and forming a strong strategic vision to leverage the anniversary as an opportunity to not only celebrate the success of the organization but to establish a plan to help more patients around the world (World Medical, 2021b). Of tremendous significance, Kotter's (2014) model is intended to be driven by individuals in formal leadership

roles. Based on my executive leadership position at World Medical, the selection and application of Kotter's (2014) model is supported.

Carman et al. (2019) applied Kotter's (2014) model to improve preventative care service delivery and reduce health disparities, finding evidence to support the application of steps one through seven in the model, with the main area for improvement being anchoring changes that were implemented. According to Hughes (2016), Kotter's (2014) model was based on the assumption that strong leadership is the solution to change resistance. This statement is applicable to the challenge facing World Medical with a proposed overhaul in the way medical education is designed, developed, delivered, and evaluated. The implementation of curriculum standards is not anticipated to receive resistance. However, as identified in Chapter 1 through the force field analysis, there may be some concerns about the lack of skills, time, and resources by stakeholders to facilitate change which will need to be addressed in the change strategy.

Taking a supportive approach of Kotter's (1996) model, Campbell (2008) provided further evidence of its successful application in health care. He made an important connection and distinction between Kotter's (1996) model as being business-oriented and focused on cost-savings and efficiency, compared to health care systems, which emphasizes service orientation and the desire to provide care above all else. Campbell (2008) deliberated on Kotter's (1996) eight-steps through a health care lens, breaking down each step for health care managers and leaders using examples from medicine, such as engaging several allied health care providers including nurses, doctors, administrators, and patients as requiring different approaches for buy-in through varying messaging and communication channels. Through Campbell's (2008) positive experience of applying Kotter's (1996) model, he noted it is essential to focus on the recipients of change in medicine. Additionally, and perhaps most importantly in terms of applying an organizational framework to drive change, Campbell (2008) stipulated that Kotter's

(1996) model can be iterative, allowing some flexibility and importantly, requires strong and continuous leadership to implement changes in health care.

Kotter's (2014) process, while broken down into eight steps, is organized into three distinct phases: creating a climate for change, engaging and enabling the whole organization, and implementing and sustaining the change. The phases allow leaders to understand the bigger picture ideas from Kotter's (2014) model, addressing criticism of its prescriptive nature. Taking organizational change a step further, to obtain buy-in from education providers and medical volunteers to achieve sustained change at World Medical, a framework for leading organizational change needs to be coupled with a theoreticality and practically based approach to medical education that has been thoroughly tested. The implementation of a global medical education strategy through combining an organizational change framework and medical-education framework requires strategic and operational planning. The type of change proposed is what Kindler (1979) coined as incremental, an adaptive change that is gradual in nature to improve systems to align with the vision of an organization. Kiefe and Sales (2006) suggested that an incremental approach results in gains in quality of care and patient safety in health care systems and organizations, and that a strength of incremental change is that it can be facilitated by all levels within a learning organization as opposed to a top-down approach. Stroh (2015) identified an important competency of systems change as continuous learning. Essentially, change is continuous and therefore learning is never finished.

Linking organizational change to the ongoing changes needed in the approach to medical education as a continuous and evolutionary process in delivering patient care is judicious and demonstrates good leadership. Stroh (2015) distinguished between conventional and systems thinking, with the latter focusing on interconnections and relationships between people and parts of the system to foster change. It is this balance of supporting people and processes that will be essential to implement change at World Medical. It will be critical to incorporate *how* the global strategy will be introduced and the *why* behind the rationale;

inspiring program countries and others who create medical education curriculum to engage in a new way of designing, developing, delivering, and evaluating programs. This links back to the importance of transformational leadership to drive change, as change management by definition entails establishing new approaches integrated into current systems (Kotter, 1996). This will foster quality improvement and is in the best interest of patients. The next step is to conduct a critical organizational analysis to determine what needs to change at World Medical to implement a global medical education strategy.

Critical Organizational Analysis

The purpose of organizational change is to advance organizational effectiveness and reflect the ability of an organization to adapt (Deszca et al., 2020). At World Medical, there is a unique opportunity to draw from the approaches of both health care and education to analyze and apply both organizational and clinical processes (Kochevar & Yano, 2006). One of the steps to bring successful change to fruition includes the diagnosis of current organizational challenges that need to be addressed before proposed changes are implemented. This section will discuss needed changes at World Medical including the rationale behind those changes, and the presentation of a selected framework for leading the change process to diagnose and analyze needed change.

Change Readiness at World Medical

To facilitate best practices in ongoing change management, an organizational analysis to identify readiness for change is required (Deszca et al., 2020). Similar to the multiple frameworks for leading the change process that were explored in the previous section, several frameworks for diagnosing organizations have been analyzed. One such framework is the Quinn et al. (2020) competing values model, which is based on organizational culture and modalities of operation. As identified in the stakeholder analysis conducted and the identified mandate of the Education division to expand the amount of staff, financial resources, and medical education programs available, there is little concern about the importance of competing

values at the organization. Stacey's (2003) complexity theory, another framework for organizational analysis, has been studied in health care (Chandler et al., 2016) but has been criticized for being overly simplistic and lacking evidence to demonstrate its effectiveness (Smith & Humphries, 2004). While both of these organizational analysis tools may be useful in other contexts, implementing change at World Medical is viewed as a significant and complex undertaking that will require a more sophisticated approach.

Change readiness requires a thorough analysis of the fundamental elements of transformational change to assess what needs to be changed to move forward (Nadler & Tushman, 1989). The interconnectedness of those fundamental elements requires a balance of systems and structures that lead to outputs. Nadler and Tushman's (1989) long-standing Congruence Model balances the complexity of organizational analysis with a simple approach to action planning (Deszca et al., 2020). This framework emphasizes understanding the dynamics of the interaction between the internal components of an organization and the organization's relationship to its external environment, reflecting the complexity of a global organization. Deszca et al. (2020) described gaps as the organizational liabilities that must be addressed and modified for organizational change to be implemented successfully, which is the essence of Nadler and Tushman's (1989) Congruence Model. As such, it has been selected for the purpose of the PoP to describe the optimal direction for change required at World Medical.

Nadler and Tushman's (1989) Congruence Model is comprised of four critical elements in what is defined as the transformation process: work, people, formal organization, and informal organization. The model constitutes what to change in the diagnosis of an organization through the creation and sustainment of the fundamental components needed to transform inputs into outputs (Nadler & Tushman, 1989). Of appeal with Nadler and Tushman's (1989) Congruence Model is that it creates the opportunity to complete a comprehensive view of an organization and describe how the pieces of the puzzle fit together, and when they do not fit together optimally. The Congruence Model has been studied in health care organizations (Eiser & Eiser,

1996; Sato & Gilson, 2015) demonstrating applicability to World Medical in the provision of patient care. Table 2 provides a brief analysis of the four fundamental elements at World Medical, including the identification of some of the organizational challenges (i.e., outputs) that need to be addressed. This includes the distinction between the four elements as they relate to both the organization and to the Education division specifically, identifying opportunities for change through the addition of more staff, the centralization of processes, and improvement in processes in curriculum development.

Table 2

The Transformation Process: The Four Fundamental Elements at World Medical

Work	**People**
• Organizational level – provides highly specialized surgery and comprehensive care across the world. • Education division level – establishes and advances education operations and strategy. • Development of a new education strategy to be included in the strategic planning of the organization. • Overlap exists between divisions, departments, and across program countries in the design, development, delivery, and evaluation of curriculum (no centralized process).	• Organizational level – a wide variety of knowledge and skillsets exist among staff (headquarters, program countries, and partner countries), often reflected with the most senior positions holding advanced degrees in medicine and other areas (e.g., research, education, etc.). • Executive position in the Education division recently established to create a strategy. • Current and future staff in the Education division will be required to implement the strategy. Current positions include an administrative assistant, coordinators, managers, directors, and clinical specialists/consultants.
Formal Organization	**Informal Organization**
• Organizational level – defined divisions and departments aligned with the vision, mission, goals, and strategic objectives of World Medical. • Education division level – work organized by portfolios/mandates (e.g., clinical specialties such as nutrition, anesthesia, etc.). Roles and responsibilities outlined in job descriptions. • Opportunities for improvement include increased oversight, consistency, planning, and evaluation in curriculum development. Further opportunity for improvement in established processes and procedures.	• Organizational level – commitment to the vision and mission of World Medical. • Education division level – commitment to the mission and vision of the organization. • Opportunity for expansion in the number of Education staff to deliver a new strategy and associated components, representing a cultural shift.

Note. Congruence model adapted from, "*Organizational frame bending: Principles for managing reorientation*", by Nadler, D. A., & Tushman, M. L., 1989. Academy of Management Executive.

World Medical, as outlined in Table 2, has several opportunities for improvement from an organizational analysis perspective. These include reducing confusion regarding the overlap of work between divisions and departments (e.g., Education and Medical Oversight). In the context of interdisciplinary health care teams, Brault et al. (2014) stipulated the importance of role clarity as the lack thereof can lead to conflict and affect the delivery of medical care. Establishing and documenting processes and procedures in the Education division while increasing oversight and rigour in curriculum development through the creation of curriculum standards will be needed. In terms of the importance of curriculum standards, van Zanten et al. (2012) argued that such standards lead to high-quality medical education programs and have the added benefit of institutional improvement based on clearly defined processes and procedures. In their study on global team effectiveness, Gibson et al. (2019) found that formalization of processes were critical to improving team effectiveness when it came to knowledge sharing. Therefore, the identified gaps through the Congruence Model have evidence of their importance in medical care, medical education, and within global organizations. These elements will need to be addressed to drive change in medical education.

Inherent to the foundation of medical education is the notion of continuous learning and improvement. Vera and Crossan (2004) in their examination of strategic leadership and organizational learning, expressed that if organizations are not open to some risk taking and continuous learning, both in the individual and collective, learning will always be reactive. Stacey (2003) noted that organizations will only be subject to change if pressure exists to drive new initiatives; it requires leadership to facilitate the process of ongoing learning and evaluation. Crossan et al. (1999) identified the main challenge of organizational learning (which encompasses both individual and shared) as the friction between integrating new learning and previous learning, a very real concern for medical professionals who have been practicing for many years based on clinical guidelines and research that continues to evolve. Faced with new information, health care providers and organizations that support health care providers must

manage this tension strategically to enhance the continuous learning process and outcomes that will result based on this approach, and as such will be taken into consideration with the creation of a strategy.

Eiser & Eiser (1996) reviewed Nadler & Tushman's (1989) Congruence Model as it applied to health care organizations. The authors emphasized the importance of implementing a strategy in primary care to provide ongoing and comprehensive patient care and described the significance of feedback mechanisms in open systems. They stipulated that both quantitative and qualitative data outputs should be used to inform the process of a gap analysis. This aligns with the current health care model where data is used to inform decisions and highlights a larger gap that exists; the need to use feedback in surgery and comprehensive care to move to a state of more desirable outputs. Through the examination of the four elements of the transformation process, Eiser & Eiser (1996) highlighted the importance of effective leaders to enhance organizational functioning after a gap analysis to improve internal functioning, resulting in improved organizational outputs. Of importance in the discussion of the implementation of a global medical education strategy, they underscored the notion that physicians strive for personal autonomy and the desire to have flexibility and freedom as trained professionals to use their own judgement in the provision of care. It will therefore be critical in the advancement of medical education to incorporate feedback from medical volunteers, and at World Medical this is across many clinical specialties and dozens of countries.

Imperative to the success of any organization let alone one that specializes in providing medical education to facilitate safe surgery and comprehensive care, lies in incorporating continuous feedback and evaluation. This includes all the projects, programs and strategic objectives of the organization. Just as change leaders navigate through uncertainty and complexity, World Medical must be responsive and collaborative to successfully implement change initiatives. Starting the conversation about what needs to change within an organization through purposeful analysis is the catalyst to create respectful dissatisfaction with the current

approach and drive change forward. Based on the organizational change readiness analysis presented in Chapter 1, World Medical is both willing and positioned to embark upon change in medical education that aligns with the desire to expand access to safe, high quality global surgery. The next step is to propose solutions to the PoP that reflect the combination of leadership approaches to change, a critical organizational analysis, and the framework for leading the change process.

Solutions to Address the Problem of Practice

Despite the vast amount of recent literature that exists on the importance of a global approach to education for health care organizations that deliver international medical care (Brouwer et al., 2020; McNabb et al., 2021), more work is required to implement such research. World Medical, through its strategic plan, demonstrates its commitment to global medical education (World Medical, 2021b). This planning is based on relevant literature in the realm of global surgery (Meara et al., 2015), and internal pressure the executive leadership team is putting on the organization, including its respective stakeholders, to reach more patients through the provision of safe surgery and comprehensive care (World Medical, 2021b). All stakeholders have a vested interest in ensuring that medical volunteers are educated based on the highest quality of standards to maintain and improve competence through clinical care. This process is currently defined in the medical education community as Competency-Based Medical Education (CBME), a framework that moves away from a time-based to an expertise-based approach to learning (Frank et al., 2010).

The PoP is the lack of consistency in the design, development, delivery, and evaluation of medical education curriculum at World Medical. CBME aligns with the PoP in the establishment of best practices in curriculum implementation and evaluation, as it focuses on learners and ultimately patients as the end recipients of such best practices. Identified as one of the priorities for change in Chapter 1, CBME focuses on an outcomes-based approach to learning, aligning with the PoP to implement best practices in medical education, and will

therefore be integrated into a potential solution. This section describes solutions to address the PoP, challenges and opportunities associated with each solution, and the resources that are needed to implement each solution. It concludes with one identified solution as being most appropriate to address the PoP in the context of a global medical education strategy.

Building on a Successful Foundation at World Medical

Based on the gap analysis of World Medical using Nadler and Tushman's (1989) Congruence Model to identify readiness for change at the organization, several components of 'what' to change were identified. Before presenting the recommendations for improvement at World Medical, it is equally important to recognize what the organization does well to leverage those strengths when proposing change. As a global organization that provides highly specialized surgery, World Medical holds a unique value proposition. Staff at World Medical headquarters possess a wide variety of knowledge, skills, and experience, with the most senior positions generally holding multiple and advanced degrees. While there exists some overlap of work between divisions, departments, and across program countries in the creation and delivery of medical education, this overlap may be seen as a benefit as there are so many staff committed to supporting medical volunteers through education. This strong organizational composition and framework has led to World Medical continuing to increase its revenue steadily, currently exceeding the one hundred million dollar mark last fiscal year and with close to a quarter of that funding allocated to education (World Medical, 2020a).

One of the most prevailing attributes that contributes to World Medical's success is the power of its people. Whether that be people situated at headquarters, those in program or partner countries, or medical volunteers, there exists a wide variety of knowledge and skillsets internationally, including many long-standing staff and volunteers whose organizational knowledge of and commitment to World Medical have a profound impact on our global footprint. The organization's desire and support to move education in a new direction is evidenced by the commitment of the executive leadership team to grow the size and mandate of the Education

division to create and implement a new global medical education strategy. In their study on change management in health equity, Betancourt et al. (2017) found that some of the most imperative factors for organizational change success include buy-in from leadership and prioritization of the organization, factors that are well supported at World Medical. A study by Nilsen et al. (2020) revealed that successful organizational changes in health care require that medical professionals have the opportunity to influence the proposed change, understand the value of change, feel prepared for change, and see the benefit of the change for patients. Medical volunteers will be the recipients of change to education at World Medical, it will therefore be important to engage this group of stakeholders early on in the vision for change. The mission, vision, and strategic plan coupled with the power of a volunteer, service-based organization that adopts a systems thinking approach to operations and new change initiatives reflects the strength of World to drive best-in-class solutions to complex problems. This process starts with the exploration of several proposed solutions for change, including the selection of the solution that will best address the PoP.

Proposed Solutions for Change

Based on several factors, such as the augmented availability of advances in medical technology and research (Filipe et al., 2014), and the call to action in global surgery (Meara et al., 2015), World Medical is under pressure by staff, medical volunteers, and other stakeholders to provide surgery and comprehensive care to more patients. A large component of the strategic plan to treat more patients rests within the Education division, as one of the pillars of the organization. As identified in the organizational analysis based on Nadler and Tushman's (1989) Congruence Model, several opportunities for improvement exist within the fundamental elements of work, people, informal organization, and formal organization. These apertures represent current challenges; confusion regarding the overlap of work between divisions and departments such as Education and Medical Oversight; the lack of documented processes and

procedures in the Education division; and the absence of processes, oversight and evaluation in curriculum development. These gaps present the opportunity to make several recommendations to enhance and develop formal structures and systems that reflect a strong understanding of World Medical's organizational mandate. This will in turn increase the organization's ability to deliver on strategy and get work done more efficiently and effectively, with the end goal of treating more patients through the education of medical volunteers.

Solution One: Status Quo

World Medical started with one mission to one country almost forty years ago, and since then the organization has grown in size with hundreds of international employees and thousands of local and international volunteers (World Medical, 2021a). While no formal or centralized curriculum standards have been established since the organization was founded, the current model of having a combination of education programs created by headquarters, through partnerships with organizations such as universities and other Non-Government Organizations (NGOs) across the world, and the creation of programs at the local level by staff and volunteers reflects the depth and breadth of a multi-pronged approach to the education of medical volunteers. Maintaining the status quo of how medical education programs are designed and delivered would not require additional time, human resources or financial costs, resulting in the simplest solution to address the PoP.

As identified in Chapter 1, this decentralized process of the creation and delivery of medical education at World Medical results in incomplete data about the number of education programs delivered, the content of these programs not being available to the Education division, and the lack of evaluation of these programs. This poses a significant challenge not only as the organization is entering a new era of enhanced innovation through technology platforms including more robust data collection, but also it does not align with best practices in global medical education which describe the need for standardization (Brouwer et al., 2020; Davis, 1998; Giuliani et al., 2021; McNabb et al., 2021; Sweet & Palazzi, 2015). Without oversight by

headquarters, where the Education division sits with its mandate of the operations and strategy of global medical education, the lack of processes and procedures in the organization's approach to education has resulted in a lack of clarity of all that the organization offers when it comes to education for medical volunteers. As the Education division is tasked with growing its mandate to create a global strategy and expansion of program offerings, the danger is that it is unclear what currently exists and what the gaps are in programs which is needed for such a complex global organization. Therefore, maintaining the status quo does not support the strategic plan or vision of the organization and will therefore not be an acceptable solution.

Solution Two: Establishment of Curriculum Standards by Program Countries

According to Navajas-Romero et al. (2020) in their research on NGOs, these organizations "tend to prioritize a work culture in which workers are mainly concerned with the specific actions they translate to society" (p. 15). Based on the organizational analysis and culture at World Medical, this emphasis on patients as the focus of all strategic and operational planning is apparent. One of the other challenges faced by NGOs is the high level of turnover of staff and volunteers (Lewis, 2014). At World Medical, this is the case at headquarters and at program and partner country offices. Navajas-Romero et al. (2020) suggested that to reduce such a challenge, NGOs need to adapt their human resource strategies to engage staff to increase productivity and efficiency. Research on the importance of employees, particularly in the NGO sector, is a critical factor in the successful implementation of not only change management, but in the long-term sustainability of an organization. The second proposed solution is therefore to have individual program countries establish their own curriculum standards, as they possess the greatest understanding and engagement of the education needs within their countries.

Currently, program countries are responsible to create and deliver their own education programs as the need for such interventions are identified, with support primarily from local and sometimes international medical volunteers. Program countries vary in when they were

established, however, most of them have been creating education programs since their inception. Many program countries have been creating and delivering education programs for decades. Staff from program countries provide administrative support of education programs, including the scheduling of logistics such as travel and event management (e.g., location, venue, catering, etc.). The current model is intended to provide localized medical education that reflects appropriate considerations such as language, cultural relevance, and medical applicability (e.g., some of the surgery techniques vary from country to country). There is some support for the creation of local medical education standards as a global model may not address inequities in education and provide enough flexibility to the rapid changes that occur in health care (Brouwer et al., 2020). However, these standards are not always shared with the Education division. This local model has been managed by World Medical for several decades and establishes the opportunity and flexibility for programs to be truly representative of local needs and resources when it comes to planning education. However, this process has resulted in inconsistency as education programs vary substantially in their design, development, delivery, and evaluation, posing challenges when it comes to understanding World Medical's catalogue of education programs, particularly from both a quantitative and qualitative data perspective.

Research is abundant in demonstrating the importance of standardized policies and procedures in medicine, including decreasing human error (Geriaine, 2007; Guinane & Davis, 2004; Pexton & Young, 2004). Having a global headquarters, World Medical is poised to respond to challenges that arise through oversight and accountability across all locations (Hinds et al., 2011), including the Education division. While this formalization increases accountability and oversight of the organization, there is concern that local teams want to maintain flexibility and responsiveness (Gibson et al., 2019). In fact, the World Health Organization (2000) identified responsiveness as one of the fundamental goals of health care systems. Gibson et al. (2019) suggested that it is in fact a balance of formalization and processes that should be implemented for international organizations; it is about optimal functioning and local

responsiveness to address tensions that may arise. Importantly, World Medical has implemented global standards in other areas, such as the department of Medical Oversight's medical standards of care (World Medical, 2020b). These standards reflect World Medical's surgery requirements such as medical equipment, patient selection criteria, and medical record documentation (World Medical, 2020b). Therefore, global organizational governance, particularly when it comes to safety and quality of medical care, has successfully been implemented and supports a global approach to standards.

Braithwaite (2018) advocated using a collective mindset to change health care systems to improve performance, with health care as the most complex type of system in existence. While the establishment of curriculum standards by program countries may have some benefits, it is anticipated that it would take several years for the dozens of program countries to collectively create and implement their own standards. Additionally, this has not been a requirement of those offices and the skillset to design medical education standards is minimal or non-existent in these program countries. Hiring new staff or providing education to current staff would be required to create curriculum standards, resulting in financial costs across all the program countries. Therefore, this is not an ideal solution to address the PoP.

Solution Three: Establishment of Curriculum Standards by Headquarters

Like the call to action of health care providers to address the current crisis in global surgery (Meara et al., 2015), medical education providers are receiving the message that there are best practices and standards when it comes to global medical education (Brouwer et al., 2020; Davis, 1998; Giuliani et al., 2021; McNabb et al., 2021; Sweet & Palazzi, 2015). Continuous quality improvement in health care is based on the premise that there is always an opportunity to enhance effectiveness and efficiency (Berwick, 1998). This reflects the shift in medical education all over the world in recent decades from quality assurance to continuous quality improvement; there always exists room for improvement for both learners and the medical education programs created for learners (Goldstone, 1998). As identified in Chapter 1

as the leadership PoP, there exists a lack of consistency in the design, development, delivery, and evaluation of medical education at World Medical. The commitment of the executive leadership team is present to support extensive change and growth in education, and the establishment of global medical education curriculum standards represents the opportunity to address a significant gap in the Education division that will benefit all stakeholders, including patients as the indirect recipients. Medical education standards is clearly delineated as the responsibility of the Education division, representing agency and accountability to implement such a solution. It is important to note that as mentioned in Chapter 1, World Medical creates medical education programs at the local and global levels, with some of these programs being reused or repurposed for other regions. Additionally, World Medical coordinates programs delivered by other organizations such as the American Heart Association (AHA), and the introduction of global curriculum standards may not be applied to all programs such as those created by organizations like the AHA. Fortunately, there exists commonality in general medical curriculum standards (Davis, 1998; Giuliani et al., 2021) and based on a preliminary review of those local programs, they generally adhere to best practices in the design, development, delivery, and evaluation of medical education.

Complex challenges require complex solutions, with health care organizations being no exception. According to Kotter (2014), it is the misalignment of existing systems and structures that cause more of an issue than individuals resisting change; precisely why the recommendation of global medical education curriculum standards are needed. The introduction of curriculum standards presents an evidence-based, educational approach to organizational development. This approach, combined with the expertise of executive leadership in the Education division in medical curriculum standard-setting, is anticipated to be well received at World Medical. This positive framing of a solution-focused approach to address a systemic operational challenge at World Medical is an important element to move forward with a much-needed change. As previously noted, one of the important components to be included in the

implementation of global curriculum standards will be ensuring that such an approach is not dominated by a western medical model (Whitehead, 2013), and will be incorporated as part of change planning. The financial costs associated with the introduction of curriculum standards is expected to be minimal, as the opportunity is to create a framework rather than a prescriptive model that will not require significant investment such as the introduction of a new technology platform. Staff and identified key stakeholders will be needed such as a selection of medical volunteers to review and provide feedback on the curriculum standards. This process will include time and resources for editing, branding, translation, and a communication strategy. The current Education division operational budget has these line items covered as part of the overall bucket in marketing and communication.

One of the considerations in introducing curriculum standards is recent literature and the implementation of CBME in medical education. CBME is an expertise-based approach to learning, as opposed to a time-based approach, and is anchored on practice competencies through the measurement of clinical outcomes to improve the quality of care to patients (Bandiera et al., 2006). It has been touted as having the potential to transform medical education (Frank et al., 2010). Identified as one of the priorities for change in Chapter 1, CBME aligns with the PoP to implement best practices based on research in medical education. Carraccio and Englander (2013) addressed the paradox of the term, in that the goal of CBME is not competence, but rather the pursuit of continuous quality improvement, supporting its application at World Medical in the provision of patient care. The framework, though not empirically tested, offers the opportunity to plan changes to medical education curriculum standards at World Medical. CBME has been studied on a global scale (Nousiainen et al., 2020), with recognition there is a balance in CBME “framed by the principle of local implementation being guided by global considerations” (Van Melle et al., 2019, p. 1007). It is recommended that CBME is incorporated as a component of global curriculum standards based on its extensive application in medical school and residency training (Pangaro & ten Cate,

2013). This will include the incorporation of the establishment of learner competencies expected in the design and measurement of education programs. This supports the approach to medical education under discussion at World Medical to develop a strategy that can be both globalized and localized, and to have a methodology to changes at the organization that has direct research and applicability to a medical education framework.

One of the main challenges faced by implementing CBME is insufficient research in its application to health care providers in practice, though it has been widely used internationally in medical school and residency training (Pangaro & ten Cate, 2013). In recognition of this deficit, Van Melle et al. (2019) established a means to evaluate the implementation of CBME through the creation of a core components framework across all physician specialties. The five core components identified include: outcome competencies, sequenced progression, tailored learning experiences, competency-focused instruction, and programmatic assessment (Van Melle et al., 2019). The framework offers the opportunity to plan changes to introduce global medical education curriculum standards at World Medical. CBME embraces the notion of learner-centredness (Frank et al. 2010), an important consideration in the implementation of a medical education strategy at the organization as learners are volunteers.

Comparison of Proposed Solutions

To compare the three proposed solutions to address the PoP, a table was created that examines the time, human resources, and financial costs associated with each solution (Table 3). As evidenced in the comparison, there would be no additional resource requirements to maintain the status quo, outlined as the first potential solution. The second solution, having program countries create their own curriculum standards, is anticipated to take several years to develop and roll out, and be the highest financial resource cost to implement. Additionally, the second solution will result in inconsistency in the way medical education is designed and delivered, exacerbating the current situation and PoP. The solution of the establishment of curriculum standards by headquarters stands out as the optimal solution as it can be

implemented in a reasonable timeframe with minimal human and financial resources, and most importantly reflects best practices in the creation of global medical education for international health care providers (Brouwer et al., 2020; Davis, 1998; Giuliani et al., 2021; McNabb et al., 2021; Sweet & Palazzi, 2015).

Table 3

Proposed Solution Resource Requirements

Solution	Time	Human Resources	Financial Cost
Solution One: Status Quo	Not applicable	Not applicable	Not applicable
Solution Two: Establishment of Curriculum Standards by Program Countries	Several years	Large amount due to all program countries being involved	Moderate amount due to human resource requirements based on lack of current expertise
Solution Three: Establishment of Curriculum Standards by Headquarters	Approximately one year	Small amount as the Education division will add this to the current portfolio of work	Small amount based on time and resources of already established staff

Identified challenges to the establishment and implementation of curriculum standards by the Education division at headquarters include some resistance to new requirements in the education program development process. However, the benefits are expected to outweigh any challenges encountered by providing a structure that will result in fulsome quantitative and qualitative data and analytics to share with stakeholders. This will increase the credibility and accountability of the Education division and the entire organization and will be used to make further improvements to medical education programs and the operational efficiency across the organization. Therefore, the solution not only directly addresses the PoP, but it is also expected to have both a short- and long-term impact on medical education programs. The curriculum standards will easily be shared across current technological platforms, with ongoing communication, engagement, and feedback of stakeholders embedded into the process. This includes feedback from the Education division staff as important stakeholders. This solution

represents the most evidence-based solution that directly addresses the PoP and the strategic priorities of World Medical by reflecting the mission, vision, and strategic plan of the organization. This includes the approach needed to address such an important and significant change through authentic (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) leadership. The introduction of global medical education curriculum standards by headquarters is therefore the chosen solution to address the PoP. Importantly, this will be approached ethically and equitably to align with the vision and mission of the organization.

Leadership Ethics, Equity, and Social Justice Challenges in Organizational Change

As a non-profit organization that provides free surgical and comprehensive care globally, World Medical was founded on the premise of leadership ethics, equity, and social justice. This reach includes World Medical's partnerships with many other organizations such as hospitals, academic institutions, pharmaceutical organizations, and other NGOs to not only extend the work of our organization but also to provide comprehensive care beyond surgery and focus on health systems strengthening through our program country model. This comprises developing the resources and skill sets required of health care providers and administers to build local infrastructure and capacity.

Research is abundant on the importance of the social determinants of health (e.g., access to food, safe housing, etc.) having a major impact on health outcomes (Daniels et al., 2004; Marmot, 2004). In other words, there are numerous non-medical factors that influence global health care. World Medical confronts these factors directly through our strategic plan which includes the Sustainable Development Goals (SDGs) of the United Nations (n.d.) such as good health and well-being, poverty, and hunger in our global efforts to implement change beyond surgery. The report by the Lancet Commission on Global Surgery (Meara et al., 2015) is already used by the organization in its strategic plan, as are the SDGs of the United Nations

(United Nations, n.d.). Some of the SDGs that directly tie to the work of World Medical include good health and well-being, quality education, and reduced inequalities (United Nations, n.d.), reflecting the vision of the organization to address health care and dignity (World Medical, 2021a). This section will explore the considerations and challenges in the change process, the responsibilities of World Medical, the commitments of the different organizational stakeholders, and how the responsibilities of the organization and different organizational stakeholders will be addressed.

Ethical Decision-Making Review and Process

Founded on the provision of free medical care to enhance well-being and save lives, World Medical is a global leader in ethical decision-making. Shapiro and Stefkovich (2016) addressed four ethical paradigms of educational organizations; justice, care, critique, and profession, echoing the work of World Medical. The paradigms as represented by the organization include justice (e.g., human rights; the right for everyone to have access to safe surgery), care (the well-being of others; the organization focuses on care of all people across the world), critique (addresses inequities; the organization focuses on international care where it is needed most), and profession (professional codes and ethics; the organization supports various health care professions that abide by professional codes of ethics). The ethical paradigms will serve as the ethical framework for educational leadership in the implementation of global medical education curriculum standards, including how to address complex and challenging ethical dilemmas as they arise. Each paradigm will represent a pillar in this new era at World Medical, to be viewed from the lens of all stakeholders (e.g., medical volunteers, financial donors, patients, etc.). This ethical decision-making lens will be embedded not only into the change process in medical education, but into the curriculum standards themselves to align with World Medical's current approach that patients are the centre of our decision-making model.

Responsibilities and Commitments of World Medical

Organizational change, “requires change agents to focus, develop support and delivery capacity, test their thinking, see things as opportunities, adapt to changes in the environment, and take appropriate risks” (Descza et al., 2020, p. 348). Importantly, Descza et al. (2020) noted that this must be done ethically to maintain trust. One of the strengths and necessities at World Medical is the medical volunteers who perform surgery and comprehensive care on behalf of the organization. It will therefore be critical to include them as part of the change-making process in the proposed solution. In a recent systemic review and meta-synthesis of literature on the benefits of volunteering in a low-resource setting, Tyler et al. (2018) found that volunteer experience develops a broader range of clinical skills, management skills, communication and teamwork, and patient experience and dignity. This demonstrates the strength of World Medical to leverage volunteers to provide surgery and comprehensive care, including the benefits to the volunteers themselves and to health systems strengthening. Enhanced knowledge and skills carry forward into other areas such as local medical care settings, positively benefitting more patients as recipients of care in the local communities of medical volunteers.

While significant advancements have been made to include patients in health care research and education, there is still tremendous work that needs to be done to engage patients as true partners. This is the case at World Medical. Szumacher (2019) advocated that patient engagement is critical in the medical education curriculum development process. Notably, there is limited research about patients’ involvement in medical education development even though it is associated with improved patient care, patient satisfaction, treatment adherence, and positive health outcomes (Happell et al., 2014). Important to consider is that several studies have demonstrated potential harms and adverse experiences of patients, including tokenism and fear of stigmatization (Dijk et al., 2020). Therefore, while consideration to engage patients as stakeholders in the development of curriculum standards may have advantages to enhance the process, such a recommendation must be taken with caution. It is crucial to World Medical that

its responsibilities and commitments safeguard the well-being and treatment of all patients, so this balance of patient engagement with the intention of leading to better outcomes for learners, patients, and health care systems must be considered in the application of ethics, equity and social justice in medical education.

An important factor in the proposed changes to medical education will be in addressing disparities. Building on the necessity of a change management approach to implement curriculum standards, World Medical will need to address disparities that exist across program countries in particular, which has been a gap in organizational change management (Betancourt et al., 2017). Addressing disparities such as access to technology, medical equipment and supplies, translation of information/materials, and human resources to implement change is an important consideration when striving for consistency in the application of medical education programs to achieve equity. In their examination of inequities of global health care through a critical social justice lens, Anderson et al. (2009) argued that there is a lack of concern, whether intentional or unintentional, about the social disadvantages of others that have contributed to health disparities. As the executive leader of the Education division, it is my role to engage and consult all stakeholders identified in the stakeholder analysis to address leadership ethics, equity, and social justice challenges in the creation of global curriculum standards. This will be embedded into the ‘how’ of addressing the PoP through the implementation, evaluation, and communication of the organizational change process to gain trust and enhance accountability.

Evidence has shown that in the non-profit sector, transformational leadership results in a positive and significant relationship in employees trust and the capacity of an organization to change (Yasir et al., 2016). The combined approach of authentic leadership (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational leadership (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) is required to introduce global medical education curriculum standards at World Medical. Authenticity of leaders to implement significant organization change captures the current approach at the

organization, an approach that embodies leadership ethics, equity, and social justice in the provision of medical care and larger mandate of health systems strengthening. According to Franczukowska et al. (2021), “ethical leaders show interest in the well-being of their followers, listen to their concerns and provide support when needed” (p. 232-233). It is my role as the executive leader of the Education division to lead with courage and compassion as the organization embarks upon its next chapter in medical education.

Chapter 2 Conclusion

Significant planning and development will be required to implement global medical education curriculum standards by headquarters through consultation with stakeholders at World Medical. This will be accomplished through the application of authentic and transformational leadership theories, and systems theory as the theoretical framework underpinning the work of the organization. In Chapter 2, Kotter’s (2014) eight-step process for leading change was reviewed in the context of World Medical, and Nadler and Tushman’s (1989) Congruence Model was used to conduct an organizational analysis. Several solutions to address the PoP were proposed, with the establishment of centrally developed curriculum standards presented as the optimal solution to lead the global medical education strategy at World Medical. The chapter concluded with a review of the leadership ethics, equity, and social justice challenges in the context of organizational change, identifying the significant contribution of World Medical in this domain on an international scale, including how the introduction of curriculum standards by headquarters will further contribute to the success of the organization in this arena. The final section of the OIP is the plan for implementing, evaluating, and communicating the organizational change process.

Chapter 3: Implementation, Evaluation, and Communication

Increased attention has been given to the prioritization of health care change efforts, including the importance of implementation, evaluation, and communication to achieve internal and external organizational objectives (Harrison et al., 2021). In fact, health care has more recently recognized change management as a necessary competency for health care providers and administrators (Figueroa et al., 2019). The significance of this recent literature provides support for the necessity of an evidence-based, change management approach to the implementation of a new era in medical education at World Medical. The first chapter introduced a problem in the lack of curriculum standards in the organization, and described the context, vision, and leadership agency for organizational change. The second chapter identified leadership approaches to change, described a leadership framework for leading the change process, presented a critical organizational analysis, and proposed a solution to address the Problem of Practice (PoP). The third and final chapter will describe a plan for implementing, monitoring, and communicating the organizational change process to introduce global medical education curriculum standards. Kotter's (2014) eight-step process for leading change discussed in Chapter 2 will pave the way, starting with the change implementation plan. The chapter concludes with next steps and future considerations of the Organizational Improvement Plan (OIP).

Change Implementation Plan

Research on change management in health care organizations indicates that efforts will be successful if recipients feel prepared for change and understand the benefits of change to patients (Nilsen et al., 2020). The change implementation plan for global curriculum standards at World Medical will therefore ensure all stakeholders are involved in the process. The strategy for the way World Medical designs, develops, delivers, and evaluates medical education programs will be created with a key message identifying patients as the ultimate recipients and beneficiaries of change. This section describes the context for change at World Medical, a

change implementation plan, the required resources and associated timeline to implement change, the importance of stakeholder engagement throughout the process, and implementation issues that may arise with proposed solutions.

Context for Change at World Medical

To advance change at World Medical, the approach must align with the vision, mission, and strategic plan of the organization; be based on research, theory and practice in medical education; and signify the desire to create a new education strategy that reflects the highest of standards in education programs with the ultimate goal of providing more care to more patients around the world. World Medical's strategic plan is centred around the goal of treating more patients in the next decade than in the last several decades combined (World Medical, 2021b). Significant commitment to this goal has been demonstrated through hiring an executive leader in the Education division and several other roles on the team over the past year, such as a Director of Education. The purpose of these investments in the Education division is to develop and disseminate a new education strategy, representing organizational commitment to a new era in medical education that aligns with the strategic plan.

Identified in Chapter 1, the PoP is the lack of consistency in the design, development, delivery, and evaluation of medical education curriculum at World Medical. The solution identified in Chapter 2 included the introduction of global curriculum standards by headquarters, reflecting an evidence-based approach to medical education. Additionally, this approach addresses the call to action by the World Federation for Medical Education (WFME) and the World Health Organization's Institute for International Medical Education (IIME) for global standards in medical education to enhance patient care (Giuliani et al., 2021). Importantly, as discussed in Chapter 2, the global curriculum standards should include Competency-Based Medical Education (CBME), used to define and measure clinical outcomes to improve patient care (Bandiera et al., 2006). Learner competencies will be incorporated into the design, development, delivery and evaluation of education programs.

The framework discussed in Chapter 2 to lead this significant undertaking was Kotter's (2014) eight-step process for leading change based on its extensive application in health care (August, 2013; Aziz, 2017; Carman et al., 2019). Importantly, Kotter's (2014) framework is currently loosely followed by the organization in the introduction of large-scale change initiatives such as the strategic plan. For example, Kotter's (2014) step of creating urgency has been implemented through marketing campaigns across all World Medical countries to enlist volunteers. The next section discusses a formalized change implementation plan.

Change Implementation Plan at World Medical

Based on the global leadership work by Holt & Seki (2012), Deszca et al. (2020), articulated that to be an effective change leader, the process involves being both a driver and enabler of change. The implementation of global curriculum standards will be managed with Kotter's (2014) model by the executive leader of Education, based on leadership agency and positionality as discussed in Chapter 1. Without formal governance such as a committee to oversee education policies and procedures, I hold extensive responsibility and opportunity for influence and authority. In a recent study on the delivery of education in health care, McKimm et al., (2020) emphasized the need for systems thinking, strong leadership, and the application of Kotter's eight-stage process. This included the call for global leadership (Javidan & Walker, 2012) when implementing systems change and to address both micro and macro systems changes to strengthen health systems (McKimm et al., 2020). This supports the direction for education at World Medical in the creation and implementation of both local and global education programs. Authentic (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) leadership will be critical to underpin change efforts including the formalization of the change management plan by the executive leadership in the Education division (i.e., Vice President and Director) through transparency, communication, and commitment. The following section articulates the specific actions associated with driving

change at World Medical in education, including Table 4 which captures the associated timelines based on Kotter's (2014) model.

1. Create a Sense of Urgency

The vision for global curriculum standards will be presented by the Vice President of Education to the Education division staff and the Chief of Research, Innovation, and Education for conceptual approval and feedback within one to two months. Formal documentation in the form of a slide deck will be created and shared for input, with evidence to support the development of global curriculum standards as an urgent priority for the organization. Additionally, this will be presented to the Chiefs level, representing those who hold positions as Chief Officers at World Medical. The vision will next be presented to other departments and divisions, as well as program and partner country teams with the opportunity for dialogue and feedback.

2. Build a Guiding Coalition

The Education division will represent the guiding coalition from a staff perspective. A clear mandate of the division will be established with defined roles and responsibilities for driving change (e.g., identification of stakeholders to draft the global curriculum standards, review the standards, disseminate and evaluate the standards) by the Vice President and Director within the first three months, with input by all Education team members. Recent research by Giuliani et al. (2021) provided strong support for the importance of engaging multiple and diverse stakeholders in global medical education curriculum development. Under the direction of the Vice President and Director of Education, a formal education committee, comprised of representatives from diverse backgrounds such as across countries and medical specialties, including staff (e.g., Education, Medical Oversight, and Quality Assurance), volunteers, and patients will be established in a period of three to sixth months. Terms of reference for the committee will be drafted by the Education division leadership with input from staff, formally approved by the committee, and shared with Chiefs at the organization. Work of

the committee will begin after sixth months and include the review and approval of the global curriculum standards.

3. Form a Strategic Vision

A new position for a Communication Specialist to join the Education team will be established, under the oversight of the Director of Education within two to three months. A formal communication plan will be drafted and presented by the Communication Specialist to elicit excitement and engagement. The communication plan will first be presented to the Education division followed by the newly formed education committee for approval. Importantly, this vision for the future must address the need for change and align with the strategic plan of World Medical.

4. Communicate the Vision

The first draft of the curriculum standards will be written by the Vice President and Director of Education, with input by Education staff. Regular status reports to describe updates on the global curriculum standards will be created by the Director of Education and Communication Specialist for distribution across organizational stakeholders and discussed at the weekly Education division team meetings. The vision will be presented consistently at organization-wide events, such as the bi-annual summit meetings at headquarters which include participation by program and partner countries. This will incorporate the description of a process to monitor and evaluate the curriculum standards, including a survey that will be distributed with the roll-out, and as a follow-up one-year post implementation to receive feedback on the standards themselves as well as related processes, procedures and communications. This will assist with fine-tuning the standards themselves, as well as tracking progress, and as a means to nurture ongoing engagement with stakeholders.

5. Empower Action by Removing Barriers

A brainstorming session will be facilitated by the Vice President, Director, and Communication Specialist with the Education division and education committee to identify

barriers and explore solutions to address those barriers to the curriculum standards. These will be included as part of the communication strategy for change. Inefficient processes will be addressed, with ongoing communication to all stakeholders who have defined roles across the organization (e.g., consultants in the Education division developing curriculum, program country staff who have roles related to education program development and implementation, etc.). This process is particularly important for an organization offering health care globally to understand and collectively establish plans to address local and global barriers to implementation.

6. Generate Short-Term Wins

The creation and adoption of global curriculum standards by the Education division leadership team will be shared with stakeholders, including financial donors, in an effort to demonstrate evolution in medical education through an evidence-based approach to global curriculum design. They will be drafted based on the extensive experience of this group in establishing medical curriculum standards. The communication channels will include presentations via webinars with the opportunity for questions and answers. This will also involve email updates to share the curriculum standards and ongoing tips and tricks, as well as data tracking progress of implementation. Through the ongoing communication and presentations organization-wide, the work of the Education division staff, and education committee will be highlighted, recognizing both individual and group contributions. The creation of a monitoring and evaluation plan will take place during this timeframe in collaboration with the Research, and Monitoring and Evaluation departments and will include a survey to stakeholders.

7. Sustain Acceleration

The change implementation plan will be monitored and fine-tuned as ongoing feedback is received, as well as any challenges and opportunities that arise that need to be addressed. This will include the curriculum standards themselves in terms of their content, as well as processes related to implementation. For example, is more support required by the Education team to provide education sessions on the standards and their implementation? Are new templates and

processes required to support education program developers? Ongoing communication and updates will continue by the Education team under the direction of the Vice President and Director.

Table 4

Change Implementation Plan

First 6 Months	6-12 Months	12-18 Months
Step 1: Create a sense of urgency • Vice President to present research-based vision for change • Vision presented to Education division staff, executive leadership, staff at headquarters, program and partner countries **Step 2: Build a guiding coalition** • All Education division staff to represent one part of the guiding coalition • Education division leadership to establish an education committee including terms of reference **Step 3: Form a strategic vision** • Director of Education to hire a Communication Specialist and establish a more formalized vision and communication plan • Vision will include consultation and feedback from Education division staff	***Step 4: Communicate the* vision** • Creation of draft curriculum standards by the Vice President and Director of Education, with consultation from Education division staff • First Education committee meeting takes place • Regular status reports created by the Director of Education and Communication Specialist to share with stakeholders **Step 5: Empower action by removing barriers** • Vice President, Director and Communication Specialist to establish incorporation of addressing barriers to change and solutions to overcome barriers **Step 6: Generate short-term wins** • Creation of monitoring and evaluation plan and distribution of survey by Education division leadership to capture feedback (collaborate with Research, and Monitoring and Evaluation leadership) • Ongoing communication of short-term wins with stakeholders by Communication Specialist to celebrate successes and milestones	**Step 7: Sustain acceleration** • Implementation of new curriculum standards by Education division • Implementation of processes and templates by Education division staff on curriculum standards **Step 8: Institute change** • Ongoing communication and refinement of curriculum standards by Communication Specialist • Monitoring and evaluation of curriculum standards including survey across stakeholders • Formal project debrief conducted and project wins celebrated across the organization

Note. Change implementation plan adapted from "*Accelerate: Building Strategic Agility for a Faster-Moving World*", by Kotter, J. P., 2014. Harvard Business Review.

8. Institute Change

The final step is to anchor the change into the culture of the organization. A formal evaluation will be distributed, and the results used to inform refinement of the global curriculum standards and ongoing communication strategy. A project debrief will be conducted by the Education leadership team with the extended project team (e.g., Medical Oversight, Research, etc.) to learn and apply knowledge gained into future education and organization-wide change initiatives. Results from the project debrief will be shared with the global leadership team.

As illustrated in Table 4, there are three stages and associated timelines for the change implementation plan. The first focuses on the initial planning stage to get immediate resources and priorities in place within the first six months. The second stage represents the central phase of the implementation plan with an emphasis on the development and implementation of the global curriculum standards. The final stage will close off the project yet allow the opportunity for ongoing refinement of the curriculum standards and key learnings to apply to future change projects. This final phase will include a celebration of the introduction of curriculum standards.

Inclusion and Importance of Stakeholders

As a non-profit, international organization that relies heavily on funding from donors and on medical volunteers all over the world to deliver patient care, the significance of stakeholders cannot be understated. Founded on the premise of ethics, equity, and social justice, World Medical's vision is to deliver safe surgery and comprehensive care, particularly in low- and middle-income countries. Embedded throughout Kotter's (2014) change management model is the importance of early and ongoing communication with stakeholders. As such, the description presented in each step of Kotter's (2014) model as applied in the context of the development and implementation of global curriculum standards at World Medical embeds various stakeholders throughout as imperative to the change management plan. The primary stakeholders include staff at headquarters and within program countries who create medical

education programs, and in particular the Education division team who support Education initiatives as the core focus of their work.

The intention behind the solution to implement global curriculum standards is to improve the current design, development, implementation, and evaluation of education programs at World Medical. The beneficiaries of this approach will be the medical volunteers who participate in education programs, and ultimately patients as the end recipients of the care provided by medical volunteers. The pursuit of global health care is geared at health equity and achieving equity in global medical education is foundational to the work of educators and administrators (Adams et al., 2016). Based on the stakeholder analysis presented in Chapter 1, the readiness of stakeholders to take action represents not only receptiveness but an eagerness to support change in medical education. Indicative of the culture of the organization to support medical volunteers and ultimately patients, the proposed change aligns with the vision of the organization to contribute to global health equity through excellence in the provision of care.

Potential Implementation Issues and Proposed Solutions

Nohria and Khurana (1993) identified three different strategies to implement change: programmatic, discontinuous, and emergent change. The implementation of global curriculum standards at World Medical represents a programmatic change; a straightforward and structured solution (Nohria & Khurana, 1993). While the stakeholder analysis in Chapter 2 articulated strong support for changes in global medical education, like any change initiative, there will be anticipated challenges. Potential issues with this programmatic change at World Medical include inflexibility with a one-size-fits-all solution, resource issues across the organization, adherence by all stakeholders to the curriculum standards, and competing priorities, all of which are briefly discussed below. To identify proposed solutions to these challenges, feedback from stakeholders will be imperative to successful change implementation.

Ford and Ford (2009) stipulated that all resistance is a form of feedback and that there is always much to be gained by receiving feedback. Examining potential implementation issues

through feedback provides the opportunity to enhance change outcomes and gain credibility (Ford & Ford, 2009). Research has demonstrated that successful change implementation plans require consideration of systems thinking (Kang, 2015), building on the systems theory model applied at World Medical. This contributes to change implementation plans being successful because they consider, in addition to the specific change requirements, the macro level or strategic vision of the overall organization, particularly when it comes to more senior level positions as change agents to maximize the change effort effectiveness (Kang, 2015).

A One-Size-Fits-All Solution

Resistance may arise from a global framework intended to be applied to all education programs, particularly those at a local level. To address this issue, the incorporation of an evidence-based approach of the need to implement global curriculum standards will be imperative. This will include the call to action by the WFME and the IIME for global standards in medical education (Giuliani et al., 2021), research that articulates the need to balance both local and global education requirements (Brouwer et al., 2020), and the fact that global curriculum standards have long been touted by scholars as a best practice in the development of global medical education programs (Davis, 1998).

Resources

Based on the incredible diversity of staff and resources across all program countries, addressing the imbalance of resources from an equity perspective is critical. The Education division will provide learning opportunities for medical education program developers to engage with staff to discuss the curriculum standards, including how the standards are intended as a broad framework to enhance program development. Brouwer et al. (2020) stipulated that the key is adaptability, allowing flexibility with local medical education needs which is the intention of the curriculum standards and will be emphasized to stakeholders. Supplementary resources such as how to create learning objectives will be developed and discussed, including the

support of the Education team to review and provide feedback on the implementation of curriculum standards to programs.

Adherence to Curriculum Standards

Multiple factors may contribute to adherence by all stakeholders to the curriculum standards, such as a lack of resources and insufficient knowledge on how to implement the standards. Khanna et al. (2021) proposed that a systems thinking approach is required by medical education program developers from "conceiving of a curriculum as a single mechanical entity that can be 'fixed' by attending to individual elements to understanding the ecology of how various intersecting and interrelating curricular components impact a learner's trajectory" (p. 2). In other words, the emphasis in the communication message to those tasked with adhering to the curriculum standards will be on the larger impact of the changes to the end recipients of those changes; medical volunteers and ultimately patients. To support this approach, ongoing review of medical education programs will take place by the Education division staff and updates will be communicated with stakeholders, protecting anonymity, to instill a shared accountability model.

Competing Priorities

The reality is that organizations undergo multiple changes at any given time which results in competing priorities. Creating the initial and ongoing communication plan and providing learning opportunities on the curriculum standards is one way to address this challenge. The Education division will speak to the competing priorities of stakeholders and emphasize the importance of the curriculum standards to enhance the learning of medical volunteers and ultimately patient outcomes. This aligns with the mission, vision and strategic plan of the organization, and by positioning the curriculum standards as a broad framework, it is intended to complement and enhance as opposed to impede efforts in medical education.

The development of a research-based, change implementation plan that aligns with the vision, mission and strategy of an organization is critical to successful change initiatives. This is

particularly important for change efforts in health care organizations (Nilsen et al., 2020), including those implementing patient care on a global scale. Research on change management models in health care has demonstrated that guiding principles are insufficient, and that sound methodologies with the explicit application of implementation plans is critical to success (Harrison et al., 2021). Specific, measurable, achievable, and realistic goals as outlined in the establishment of a change implementation plan are imperative. The application of Kotter's (2014) model for leading change through authentic and transformational leadership will be essential to the success of the introduction of global curriculum standards at World Medical. This will include my own leadership approach and positionality to influence change at an executive level by addressing some of the barriers to implement change such as adequate resources and tools on a global scale. The next step is to create a change process monitoring and evaluation plan to track changes, measure progress, and perhaps most importantly, to use that information to refine the implementation plan. Broad consultation and engagement with the Education division team will be critical as part of this process.

Change Process Monitoring and Evaluation

The planning, implementation, monitoring, and evaluation of global health care initiatives is a significant undertaking. Reynolds and Sutherland (2013) spoke to the importance of establishing a systematic approach, reflective of health care systems, to monitor and evaluate progress. They emphasized that monitoring and evaluation supports teams to prioritize decision-making and resource allocation, ultimately forming the evidence of needs in health care systems (Reynolds & Sutherland, 2013). This echoes what Kaplan and Norton (1992) stated many years ago, "what you measure is what you get" (p. 71). This section describes a change process monitoring and evaluation plan for the introduction of global curriculum standards at World Medical. This includes a discussion on the tools and measures that will be used to track and assess change, and how that information will be used to refine the change implementation plan.

The Selection of a Monitoring and Evaluation Tool

Since the introduction of Kaplan and Norton's (1992) balanced scorecard to monitor and evaluate change efforts, much literature has been published on the practical effectiveness of this measurement tool and its evolution over many decades (Rabe & Ali, 2019). Kaplan and Norton's (1992) evaluation framework has been selected to monitor and evaluate the implementation of global curriculum standards at World Medical for several reasons. First and foremost, the model anchors the vision and mission of an organization to the evaluation, which is linked to the change vision and strategy. This is the current approach used at World Medical with new, large-scale initiatives requiring linkage to the strategic plan and alignment with the vision, mission, and values of the organization. Secondly, the model is structured yet flexible, providing an outline as opposed to a prescriptive approach of objectives, measures, targets, and initiatives, emphasizing both quantitative and qualitive measurement (Quesado et al., 2018). These multiple measures will reflect a more balanced perspective of various areas affected by the change. Thirdly, the balanced scorecard was selected based on its ability to capture both short-term and long-term measures (Quesado et al., 2018), recognizing the importance of both in the introduction of global curriculum standards. Finally, the balanced scored has been applied and researched in health care (Bohm et al., 2021; Inamdar et al., 2002; Kollberg & Elg, 2011; Voelker et al., 2001), representing both an evidenced-based and practical application of its effectiveness.

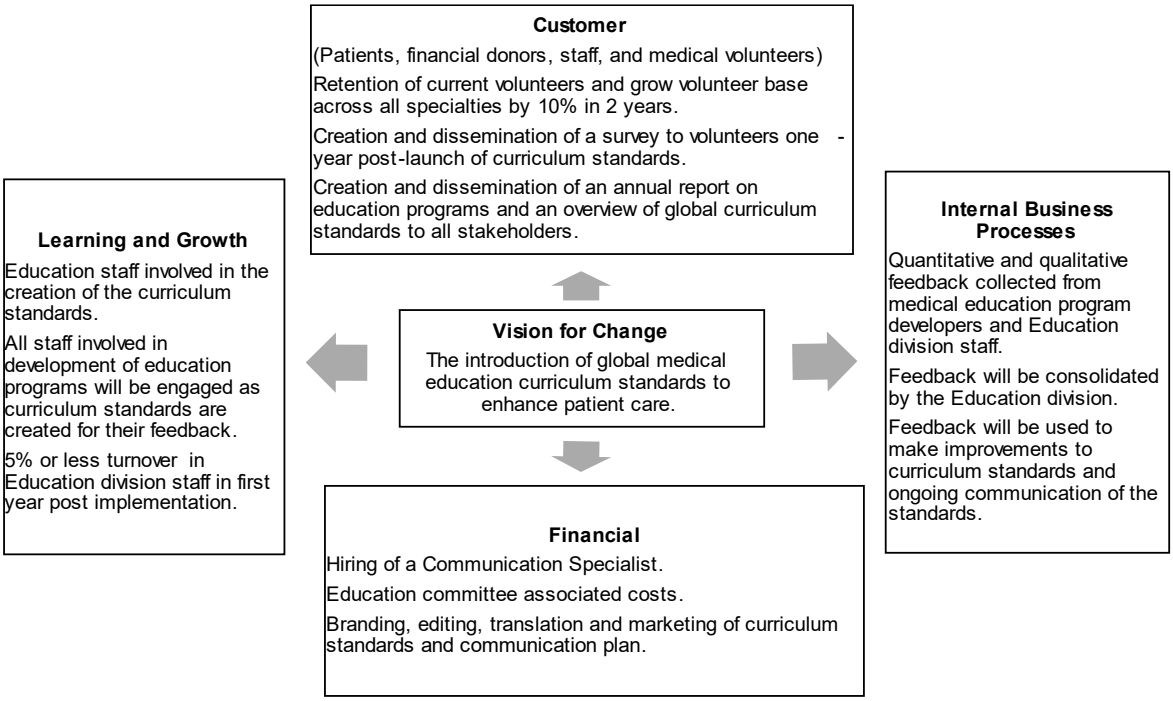
Overview of the Balanced Scorecard

Kaplan and Norton's (1992) balanced scorecard contains four main categories of measurement: financial, customer, internal business processes and, learning and growth. These categories parallel how new projects and programs are informally and formally measured at World Medical, with multiple and competing components that are concurrently taken into consideration. Additionally, the newly implemented organizational strategic plan (World Medical, 2021b) places emphasis on all four categories, aligning with operational activities at

headquarters, as well as program and partner country offices. Figure 4 outlines the change process monitoring and evaluation plan to be implemented at World Medical based on Kaplan and Norton's (1992) balanced scorecard. As depicted, the original categories by Kaplan and Norton (1992) have been used, with the same number of goals created in each category to balance the scorecard.

Figure 4

Change Process Monitoring and Evaluation Plan



Note. Balanced scorecard adapted from "*The Balanced-Scorecard—Measures that Drive Performance*", by Kaplan, R. S., & Norton, D. P. (1992). Harvard Business Review.

Customer

Based on Kaplan and Norton's (1992) model, the *customer* category consists of elements such as time, quality, performance, and service as they relate to customers. To create global curriculum standards, customers (including patients, financial donors, staff, and volunteers) have been placed at the top of the model based on their importance to World Medical as a volunteer-based, non-profit organization. According to Kaplan (2001), "success for

nonprofits should be measured by how effectively and efficiently they meet the needs of their constituencies" (p. 353). For many organizations, the *customer* category is where membership or customer retention rests as a goal to measure (Kaplan, 2001). As a medical volunteer-based organization, retention is critical and a goal at World Medical is to increase the number of volunteers so that more patients can be treated (World Medical, 2021b). Therefore, a goal has been set to retain the current volunteer base of approximately 6,000 individuals globally across all medical specialties and to grow that number by ten percent in two years. The process will include a review at the one-year mark to ensure the target is on track. This will entail robust discussions and planning between Volunteer Services, Medical Oversight, Programs and Operations, and Education division leadership to create a strategy on recruitment and retention.

The volunteer-base is one of the strongest assets of World Medical, with ongoing and new membership reflecting a commitment by health care professionals to the vision, mission and strategic plan of the organization. Based on this, volunteer surveys will be created and disseminated by the Education division leadership and Communication Specialist to capture feedback from learners as part of the robust communication strategy planned for the introduction of global curriculum standards. The messaging will go beyond sharing information on the introduction of global curriculum standards to articulate the benefits to learners of a standardized and measurable approach to learning in an effort to provide optimal patient care. The surveys will be distributed in partnership with the Volunteer Services team one year post implementation of the curriculum standards.

A benefit of volunteer membership with World Medical is the free, medical education programs provided by international experts across multiple specialties on an ongoing basis. Other benefits include the opportunity for international collaboration, travelling, and providing health care globally where it is most needed. In addition to the surveys, an annual global medical education report will be created, as part of the larger overall strategy within the Education division to share an overview of programs, learning participation, feedback on

education from global administrators and volunteers, and include information on the new global curriculum standards. The purpose of the report is to share education trends and demonstrate to all stakeholders an overview of education including best practices such as the implementation of standards. The report will be created by the Communication Specialist with input from the Education division and distributed via email and social media channels, as well as on World Medical's website. The report is meant to elicit excitement, reflection, and solicit attention to the education offerings at World Medical, to highlight its robustness, importance, and most importantly, its evolution. It will be used by the Development department in their efforts to attract corporate funding for education endeavours, such as education program development and volunteer recruitment.

Internal Business Processes

The *internal business processes* category refers to activities conducted and influenced by staff within an organization, including elements such as productivity, quality, and the development and delivery of products and services (Kaplan & Norton, 1992). Critical to this category is the design and implementation of an effective, comprehensive means to solicit stakeholder feedback, as well as an evaluation of the standards, all of which will include both quantitative and qualitative measures. Feedback from medical education program developers will be tracked by the Education division Coordinators and adhere to a response time of twenty-four to forty-eight hours during business days to acknowledge receipt of feedback. The feedback will be consolidated by the Coordinators and the Communication Specialist and shared at monthly Education division meetings, as well as with the new education committee. Information collected will include questions from education program developers pertaining to clarification of the curriculum standards, and feedback from medical volunteers on the education programs which will be consolidated by the Communication Specialist and shared with all education developers. This information will be used to clarify questions and feedback from program developers and added to the ongoing communication strategy. Finally, a post-launch

evaluation of the curriculum standards will be conducted at the one-year mark, with the purpose of driving continuous quality improvement. World Medical has recently brought on a Monitoring and Evaluation executive leader, who will co-lead this project with the Education division leadership team. Modifications to the curriculum standards will be implemented based on this feedback, under the direction of the education committee and Education division leadership team.

Learning and Growth

The category of *learning and growth* focusses on staff satisfaction, aptitudes, and development, along with the implementation and capabilities of new innovations (Kaplan & Norton, 1992). The focus of this category will be the Education division staff who will be fully involved in every step of the process of creating and disseminating the global curriculum standards. Additionally, this includes staff across headquarters, program countries, and partner countries who develop education programs. This feedback will be collected via written communication on the draft standards, and on the quarterly education meetings that have been established by the Education division with program and partner countries. Based on the change implementation plan, the curriculum standards will be completed within a six-to-twelve-month period. In addition to being involved in the creation of curriculum standards, the Education division will participate in an education program to learn the standards, delivered by the Education division leadership within three months of development. This learning will also be scheduled for all staff across the organization involved in medical education program development, as well as departments and divisions that work closely with the Education division. In their meta-analysis of learning organizations, Thomas and Allen (2006) noted that engaging staff in critical inquiry, connection, and self-reflection contribute to the capacity for organizations to learn. This underpins systems theory and contributes to learning within health care administration (Trbovich, 2014) through what Senge (2006) refers to as the art and science of a learning organization.

Should gaps exist from a learning perspective, the change implementation plan will be modified to carve out additional time for staff learning and development opportunities. Finally, with the launch of global curriculum standards, a goal of 5% turnover or less in the Education division staff is targeted in the first year. Retaining staff was identified by Thomas and Allen (2006) as critical to the success of an organization's ability to continue learning to enhance performance. Staff retention will be maintained through the ongoing use of annual performance reviews based on established performance goals, professional development planning, strong leadership of the Education division under the direction of the Vice President and Director, as well as regular meetings, communications, and feedback from all Education staff.

Financial

The final category, *financia*l, includes return on capital, member value, and asset utilization (Kaplan & Norton, 1992). Kaplan and Norton (2001) originally created the balanced scorecard for the private sector with the ambition of pushing organizations to strive for measurement beyond financial factors. As a not-for-profit organization and with free education being one of the benefits of volunteering, the financial category has been situated at the bottom of the balanced scorecard. While the financial category is important, it is perhaps less so than for other organizations driven by growth and market share. However, fiscal responsibility, including monitoring and management of the budget, is critical to a not-for-profit organization and the importance of financial donors as the primary source of revenue cannot be understated.

Financial measurements will be the cost of hiring a Communication Specialist, costs associated with travel and meeting requirements for the new education committee, and branding, editing, translation, and marketing of the curriculum standards. Budget has been requested and approved from the Finance and Operations departments to hire the Communication Specialist and to establish the education committee. These will be ongoing expenses within the Education division budget year-over-year. The division consistently maintains a balanced budget related to expenses such as translation, editing, branding, etc.,

therefore no further financial requests are needed for the global curriculum standards. These line items in the budget will be tracked in monthly, quarterly, and annual reports to determine if more investment will be required and the change implementation plan will be updated accordingly under the direction of the Vice President and Director of Education. Table 5 represents the respective monitoring and evaluation activities and associated schedule.

Table 5

Monitoring and Evaluation Schedule

Customer	***Internal Business Processes***	***Learning and Growth***	***Financial***
• Increase the volunteer base by 10% in two years • Volunteer survey distribution one year post launch of curriculum standards • Annual global medical education report distributed six to twelve months post curriculum standards launch	• Collection of quantitative and qualitative feedback from medical education program providers (ongoing) • Post-launch evaluation of curriculum standards after one year	• Education division and all education program developers to receive training on curriculum standards once developed within the first month • Feedback will be consolidated by the Education division monthly and shared at quarterly education meetings with program and partner countries	• Hire a Communication Specialist within two to three months • Education committee expenses to start at six months with the first official meeting

Note. Monitoring and evaluation schedule adapted from "*The Balanced-Scorecard—Measures that Drive Performance*", by Kaplan, R. S., & Norton, D. P. (1992). Harvard Business Review.

Research and Application of the Balanced Scorecard

Inamdar et al. (2002) explored the application of the balanced scorecard in several health care provider organizations. The authors found the process of using the model garnered organizational consensus of the strategy being implemented, and increased credibility of senior leaders with board members. This is an important finding from the study, with the high-profile nature and accountability held by World Medical in the global arena of health care organizations. The implementation of the balanced scorecard to measure the success of global curriculum standards will continue to build on the credibility of the Education division, and the organization overall. Inamdar et al. (2002) found that participants of the study determined that the application of the balanced scorecard evolved from an evaluation framework to a strategic

management system, resulting in considerable performance results. This presents a tremendous opportunity to more strategically and quantifiably measure performance results in education at World Medical as this process has been lacking due to limited data and consistency in the design, delivery, implementation, and evaluation of medical education programs.

Criticism of the balanced scorecard includes that the process of creating such an extensive review is very involved and requires a deep level of understanding of the organization and a deep commitment to its process (Chavan, 2009). Importantly, Chavan (2009) emphasized the significant cultural changes within organizations that may need to take place, including support from the top down. Reflective of the balanced scorecard categories themselves implicating a broad range of goals and objectives, the challenge of instituting cultural change indicates a need for the change leader to be a champion of change. This includes the initial proposal of change as well as supporting the process of change within an organization. Fortunately, a newly envisioned education strategy at World Medical including the implementation of global curriculum standards is strongly supported by the Chiefs and has already received conceptual approval.

In 2007, Kaplan and Norton introduced what they referred to as four new management processes that may be used individually or in parallel to build on the evolution of the balanced scorecard as a strategic management tool. The first process, *translating the vision*, creates the opportunity for change managers to build and maintain consensus on the vision and strategy of the organization. This is a process imperative to the success of global curriculum standards at World Medical as such a consensus will support the resources needed to execute the required changes. The second process, which encompasses *communicating and linking,* will be pivotal in sharing the planned changes in medical education at all levels within the organization with the intention of positioning them as being important not only to the Education division, but to the organization as a whole. The balanced scorecard is a dynamic document and process, which

will evolve over time, demonstrating the accountability of the organization to its long-term strategy in the provision of patient care. The third process, *business planning*, will create the opportunity to prioritize changes in education with other departments at World Medical, setting out a realistic timeline for implementation with competing organizational initiatives. This step reflects the importance of a documented change implementation plan. Like the communication plan, the change implementation plan should be refined and revised along the way. The fourth and final process, *feedback and learning*, is a step that involves the application of real-time learning. The global curriculum standards will be modified regularly based on ongoing formal and informal feedback, reflection, and evaluation. It is this capacity for organizational learning that distinguishes the balanced scorecard as a monitoring and evaluation tool. The balanced scorecard creates a strategic management system capable of more than measurement of change (Kaplan & Norton, 2007), but rather ongoing refinement, mirroring best practices in change management and medical education.

Change leaders must identify how change will affect stakeholders personally or how it should be of interest to them in the organizational context (Deszca et al., 2020). This includes ensuring that measures are clear and concise, in addition to mirroring the elements most valuable to the organization (Descza et al., 2020). The balanced scorecard provides a concrete and concise framework to manage strategy implementation and evolution through measurement (Kaplan & Norton, 2007). While outcomes of the global curriculum standards will be measured, the vision and strategy must be anchored to the vision and strategy of the organization and undergo a continuous process of refinement and evolution to reflect the changing landscape of World Medical and global health care. This process requires strong authentic (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) leadership from the executive leader of the Education division, and will demonstrate to staff, financial donors, medical volunteers, and patients, the organization’s ongoing commitment to excellence in medical

education through best practices in leading change. The next step is to create a communication plan to articulate the need for change and the change process.

Plan to Communicate the Need for Change and the Change Process

There is a multitude of research demonstrating the importance of effective communication in medicine in both business and medical education environments, highlighting transparent communication as a critical component to success (Beliveau et al., 2015; Dannefer et al., 1998; Kahan, 2010). A communication plan should be viewed as a strategic tool for organizational change as effective communication connects all organizational processes (Christensen, 2014), demonstrating applicability to organizations such as World Medical that follow a systems approach (Trbovich, 2014; von Bertalanffy,1968). This section describes the plan to communicate the need for change and the change process at World Medical in medical education. This includes building awareness of the need for change within the organization and for stakeholders, framing the issues that may arise for stakeholders with anticipated questions and responses, describing a knowledge mobilization plan, and the establishment of a communication path containing key milestones and channels for implementation.

Building Awareness of the Need for Change

When implementing new initiatives in health care organizations, clear communication increases the chance for success (Nilsen et al., 2020). Stroh (2015) noted to focus on the why instead of the how in the application of critical systems thinking when implementing change. The primary driver for change at World Medical is to increase the number of health care professionals to provide care to more patients around the world through best-in-class medical education (World Medical, 2021b). This will form the basis of the communication plan as to the why behind the introduction of global curriculum standards, presenting a strong link to the organization’s vision, mission, and strategic plan. The successful implementation of medical education interventions requires organizational support, teaching on the foundation of quality improvement, and participation in quality improvement initiatives (Herman et al., 2020).

Essentially, the key to success includes strong leadership and the overall focus in any medical education endeavor which is to improve the quality of care delivered. These elements have been embedded throughout the OIP and remain at the forefront of communicating the need for change. The executive leadership of World Medical strongly supports facilitated change in education to strengthen health systems and improve the quality of care to patients around the world, as noted in the strategic plan (World Medical, 2021b). The next step is to engage all stakeholders to build the case of the need for change.

Deszca et al. (2020) identified several purposes of communication change plans; disseminating the need for change across the entire organization, creating the opportunity for staff to understand the impact of change to them as individuals, communicating structural and procedural shifts, and to ensure people are informed along the continuum of change. This aligns with von Bertalanffy's (1968) systems thinking, and Trbovich's (2014) more recent application of systems thinking specifically in health care. The interrelatedness of people and systems is critical in the establishment of a communication plan, and therefore both will need to be integrated to demonstrate understanding and appreciation of the new global curriculum standards. Building awareness of the need for change requires planning, thoughtful consideration, and ongoing communication with all stakeholders. The creation and implementation of a communication plan will build the awareness of the need for change in medical education.

Framing Change with Anticipated Resistance and Feedback

Communication planning is critical to activate support for upcoming change and to create a sense of excitement and commitment, facilitating the process of bringing a vision for change to life (Isern & Pung, 2007). Klein (1996) outlined several principles for communicating change, including message redundancy for information retention, face-to-face communication being highly effective, the importance of leadership and the roles of leaders throughout the process, and identifying individual impact that reflects personally relevant information. These

components will be included in the communication plan, which will comprise distinct phases, and messaging will be tailored based on the target audience. van Ruler (2021) stipulated that communication planning requires an agile approach, creating space to adapt the plan as the project unfolds. Three questions that should be asked repeatedly throughout the planning process include; Is it feasible? Is it desirable? Is it viable? (Bland & Osterwalder, 2020). These questions will be embedded in the communication plan and are applicable to all stakeholders.

The stakeholders as presented in Chapter 1 include Education division staff, Chief Officers, program countries, partner countries, and staff at headquarters. The questions outlined by Bland and Osterwalder (2020) are addressed here, followed by specific questions anticipated at World Medical and the associated high-level responses included.

Is it Feasible?

For almost forty years, World Medical has designed and delivered local and global medical education programs without global curriculum standards. World Medical staff across the world will need not only the rationale and assurance that the change is needed, but the resources, tools, and support to ensure the standards can be easily implemented. This requires dedication and a strong communication plan by the Education division, in additional to supportive tools such as how to create learning objectives for medical education programs and how to create medical education program evaluations.

Is it Desirable?

Research indicates that best practices in global medical education require standardization of program development (Brouwer et al., 2020; Davis, 1998; Giuliani et al., 2021; McNabb et al., 2021; Sweet & Palazzi, 2015). World Medical prides itself on being an organization that is responsive to patient care through research, education, and innovation (World Medical, 2021a). The priority will be to ensure this message on the desirability of global curriculum standards to enhance patient care is communicated broadly and repeatedly, with a consistent message that change is needed.

Is it Viable?

The introduction of global curriculum standards represents a macro-scale change as World Medical is an international organization with offices all over the world. However, the cost to implement the change is minimal as existing resources such as current staff will be leveraged, and tools created by the existing Education division that can be communicated through no additional cost channels such as email and webinars. The monitoring and evaluation of the standards, including both quantitative and qualitative measures, will determine if the standards have been successfully implemented.

The widescale availability of health care literature online means that patients, health care providers, and administrators all have more access than ever to information (Kumar et al., 2015). This transparency and accessibility to information also means that the public and all stakeholders will have questions of health care organizations that administrators should not only anticipate but be prepared to answer (Kumar et al., 2015). In the case of World Medical, in addition to the more general questions noted above related to feasibility, desirability, and viability, stakeholders at World Medical will come with specific questions pertaining to the global curriculum standards. Those are anticipated to include; What exactly will change? How will this affect my work/workload? What timeline is required to apply the changes? How will we know if the changes were worth it? These questions will be incorporated into the communication plan and addressed. This will include speaking to the fact that the changes will be applied only to new medical education programs being created, retroactive changes will not be required. Workload will vary according to numerous factors such as role, volume of medical education programs created and delivered, involvement in the creation, dissemination, and evaluation of medical education programs, and current knowledge of best practices in medical education curriculum standards. Mobilizing planning into action will be imperative to success.

Knowledge Mobilization Plan

Knowledge mobilization represents the link between applied research and planned action (Lavis et al., 2003). At organizations such as World Medical, it represents the connection between research findings and making informed decisions in health care (Lavis et al., 2003). Straus et al. (2009) distinguished that medical education is a strategy for implementing knowledge while knowledge translation is aimed at making systems changes beyond learners such as patients and policy makers. For the purpose of implementing global curriculum standards at world medical, knowledge translation is required to integrate research-based evidence into translatable action as to how medical education programs are designed, developed, delivered and evaluated.

Lavis et al. (2003) created a framework for organizing knowledge transfer containing five elements which can be measured in short-term and longer-term increments. Those questions will be addressed here as they apply to the implementation of global curriculum standards at World Medical.

What Should be Transferred to Decision Makers (the Message)?

World Medical conducts primary research in global health care and applies both primary and secondary research to its strategic planning (World Medical, 2021b), representative of a broad body of research knowledge implemented. Research on global surgery (Bath et al., 2019; Meara et al., 2015; Watters et al., 2018) and on global medical education standards (Brouwer et al., 2020; Davis, 1998; Giuliani et al., 2021; McNabb et al., 2021; Sweet & Palazzi, 2015) will be applied to describe the importance of implementing global curriculum standards.

To Whom Should Research Knowledge be Transferred (the Target Audience)?

The primary target audience for the implementation of standards is those who create and deliver medical education programs for World Medical volunteers. Therefore, most messaging will be created with this audience in mind. Additional messaging, such as step one of Kotter's (2014) model to create a vision for change, will be tailored to the audience e.g., a

concise, evidence-based, executive summary for the Chiefs of staff at World Medical that aligns with the strategic plan, vision, and mission of the organization.

By Whom Should Research Knowledge be Transferred (the Messenger)?

The Vice President of Education is tasked with leading the global medical education strategy and will therefore serve as the primary messenger. This will be supported by the Director of Education and Communication Specialist, through support from the Education division. The credibility of the Vice President tasked with implementing global medical education standards will be enhanced through the publication of the OIP.

How Should Research Knowledge be Transferred (the Knowledge-Transfer Process and Supporting Communications Infrastructure)?

Interaction and engagement between the Education leadership team developing global curriculum standards and those developing education programs for World Medical will be critical to the success of knowledge transfer. This will include regular, two-way exchanges such as meetings between all stakeholders to ensure that everyone feels consulted in the decision-making and development process of creating and implementing the standards.

With What Effect Should Research Knowledge be Transferred (Evaluation)?

Imperative to implementing global curriculum standards will be measurement of whether the standards are being applied in practice. The ultimate objective of any change to medical education standards is to lead to improved patient outcomes (Moore et al., 2009). However, such expectations are incredibly lofty, and Lavis (2002) recommends stand-alone research endeavors to measure such outcomes. For the purpose of evaluating the successful implementation of the standards, the monitoring and evaluation plan has included a measure of adherence by those applying the standards.

The five questions posed by Lavis et al. (2003) facilitate organizing the process of knowledge translation. They serve as a means to communicate clearly and persuasively to relevant audiences in the development and dissemination of global curriculum standards. The

next section will describe a formalized plan to communicate the path of change, with specific details related to milestones and the channels through which to communicate change.

Communication Strategy for Change

Table 6 represents the communication plan for the implementation of global curriculum standards at World Medical based on Klein's (1996) framework. The plan is designed to be applied in conjunction with the change implementation plan and the change process monitoring and evaluation plan. It includes Bland and Osterwalder's (2000) three questions that should be regularly addressed throughout the communication plan, as well as the four phases covered in Klein's (1996) model.

Pre-Change Approval Phase

To begin the process of change at World Medical, a literature review of global curriculum standards in medical education will be conducted by the Vice President of Education. This will be presented to the Chiefs at the Organization to articulate a research-based vision for change. The presentation will include a robust slide deck that links the vision to the strategic organizational plan. This work will take place over a period of three months.

Developing the Need for Change Phase

During the next three to six months, the first meeting will be scheduled with the new education committee to plan for the upcoming changes to medical education. Presentations and supporting documents (e.g., executive summary) will be created by the Education division leadership team and Communication Specialist. The rationale for the implementation of global curriculum standards will be included, as will be a message of urgency and enthusiasm to elicit excitement toward the change. The messages will speak to the lack of current data in medical education (e.g., the total number of global programs created, delivered, and evaluated), impeding the organization's ability to make more informed decisions based on medical education programs. Metrics available such as the number of health care providers needed to achieve the organization's goal of reaching one million patients (World Medical, 2021b) will be

emphasized, linking the change in education back to the strategic plan. This will build on the strength of World Medical to use storytelling to demonstrate the need to help people across the world through the support of medical volunteers.

Table 6

Communication Plan

Pre-Change Approval Phase 0-3 Months	**Developing the Need for Change Phase 3-6 Months**	**Midstream Change Phase and Milestone Communication Phase 6-12 Months**	**Confirming and Celebrating the Change Phase 12-18 Months**
Literature review of global curriculum standards by Vice President **Vice President to present research-based vision for change to executive leadership (i.e., Chiefs at World Medical)** • PowerPoint slide deck • Links to strategic plan • Presentations in-person and online based on schedules, travel, etc.	**Regular meetings scheduled with the education committee to plan for change** **Communication presentations and documents (e.g., executive summary) created for wider audience by Education division leadership and Communication Specialist** • Rationale for change included • Vision to convey urgency and enthusiasm • Lack of current data included (e.g., total number of programs created, delivered, and evaluated to-date) • Targeted strategic plan data on number of health care providers needed to reach one million patients (World Medical, 2021a) • Elevator pitch to be provided including storytelling from medical volunteers, medical education program developers, and patients	**Education programs designed by the Education division staff to introduce global curriculum standards to medical education program developers** • E.g., webinars (slides and tools to be circulated, sessions recorded) **Progress of change to be shared with stakeholders by Communications Specialist and Education leadership team (including newly formed education committee)** • Opportunity for questions, answers and feedback • Sharing of milestones, celebrating of successes through individual and group acknowledgement via World Medical intranet which contains an electronic bulletin board • Social media campaign to focus on impact on medical education and health care of patients, linking to vision and mission (information to be tracked e.g., open and click rate)	**Formal project close including a debrief and lessons learned collaborative brainstorming session facilitated by Education division leadership** • Debrief documentation shared with broad project team **Celebration of the implementation of global curriculum standards** • Personalized messages to contributors and supporters from Education staff • Social gathering organized with the Education division staff
Is it feasible? Is it desirable? Is it viable? (Bland & Osterwalder, 2020)			

Note. Communication plan adapted from "*A management communications strategy for change*", by Klein, S. M., 1996. Journal of Organizational Change.

Midstream Change Phase and Milestone Communication Phase

In the period of six to twelve months from the beginning of the change process, the Education division staff will create learning programs to introduce the global curriculum standards to medical education program developers (e.g., webinars with slides circulated and the sessions recorded for distribution). Progress on change will be shared with stakeholders by the Communications Specialist and Education leadership team, including dissemination to the education committee. There will be the opportunity during all discussions for questions, answers and feedback by stakeholders, representing the incorporation of authentic and transformational leadership by demonstrating organizational commitment and engaging staff throughout the process. The Education division will share milestones and celebrate successes through individual and group acknowledgement, such as recognition on the organization's intranet, accessible and visible to all staff. A social media campaign will be created within the communication plan to focus on the impact of medical education to patients.

Confirming and Celebrating the Change Phase

During the final phase between twelve and eighteen months, the Education division leadership team will design and facilitate a formal project debrief and lessons learned session with the Education division. This project management document will be shared with the broader project team throughout other departments and divisions at headquarters (e.g., leadership in Medical Oversight, Quality Assurance, Research, Volunteer Services, etc.). As a celebratory close to the project, personalized messages to contributors will be sent by the Education division staff, and a social gathering will be organized with the Education division. Importantly, while this phase marks the end of the formal project, communication, change management, and monitoring and evaluation will continue on an ongoing basis. This phase therefore presents a tremendous opportunity for me as an aspiring authentic and transformational leader to create the opportunity for stakeholders to reflect, be acknowledged and appreciated for their efforts,

and to celebrate the implementation of global curriculum standards as an organization-wide achievement.

Organizations such as World Medical are continually striving to change and adapt as the external landscape and research-based best practices in the delivery of global medical care evolve. This last section of the OIP has provided a specific timeline and key deliverables in the implementation, evaluation, and communication in a new era of medical education at World Medical. The process for the implementation of global curriculum standards included Kotter's (2014) eight-step process for leading change, Kaplan and Norton's (1992) balanced scorecard to monitor and evaluate change and concluded with Klein's (1996) management communication strategy for change. Woven throughout this process is the foundational theoretical framework of systems thinking to implement large-scale changes at World Medical (Trbovich, 2014; von Bertalanffy,1968;) through authentic (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) leadership being required as aligning with the executive leadership in the Education division and the current and needed approach at World Medical to implement change. To close the OIP, next steps and future considerations are provided on the introduction of curriculum standards at World Medical.

Next Steps and Future Considerations

Health care providers are required to maintain and enhance their clinical expertise as an ongoing commitment to their profession and in providing patient care. Health care organizations such as World Medical that support health care providers to deliver patient care are responsible for ensuring that there is continuous evolution as best practices and research evolve in medicine. This OIP is representative of the commitment of World Medical, deeply embedded throughout the vision, mission, and strategic plan of the organization to provide high quality health care to patients around the world (World Medical, 2021a; World Medical, 2021b). This significant commitment and investment provides great promise to elicit change in an effort to

enhance patient care through medical education. The final step is to outline what will happen next in the change process and identify future considerations for the organization in the context of the OIP.

Aligning with authentic (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) leadership, my role as the executive leader of education at World Medical presents a tremendous opportunity to not only lead the implementation of significant changes in medical education but to do so with authenticity, compassion, commitment, and perseverance to the change process. Upon completion of the OIP, the document will be used as the foundation to the planning, implementation, and evaluation of global curriculum standards at World Medical as part of the overall strategy in global medical education. Future considerations include the ability to adapt and change what has been outlined based on feedback from stakeholders and ongoing changes within and external to the organization. Beyond the post-launch evaluation of the curriculum standards after one-year, ongoing work will be required to review the standards on a regular basis by the Education division and the committee. This process will be added to the terms of reference of the committee and added to current education policy documentation. This ongoing work will require a systems thinking lens to consider competing priorities and external factors, such as evolving research in global surgery and global medical education. World Medical can apply this OIP as a pilot to implement other global programmatic changes through a theoretical framework and leadership theories.

Organizational Improvement Plan Conclusion

The PoP addressed throughout this OIP was the lack of consistency in the design, development, delivery, and evaluation of medical education curriculum at World Medical. The solution selected was the establishment of global curriculum standards created by headquarters at the organization for dissemination across all countries where medical education is designed, delivered, and evaluated. The curriculum standards will incorporate the tenets of CBME, which

has been studied in several countries (Pangaro & ten Cate, 2013) including in low resource settings in surgical training (McCullough et al., 2018).

In a recent study on the determinants of successful organizational change management, Errida and Lotfi (2021) found that five factors stood as being the most important; leadership, stakeholder engagement, motivation of change drivers and change agents, a plan for managing change, and effective and constant communication. This OIP on the introduction of global curriculum standards at World Medical has woven all five of these factors throughout, in recognition of the complexity of a systems theory approach (Trbovich, 2014; von Bertalanffy,1968) by changing the way a global organization designs, develops, implements, and evaluates medical education programs.

A consistent theme of the importance of authentic (Avolio & Gardner, 2005; George, 2003; George et al., 2007; Walumbwa et al., 2008) and transformational (Bass, 1985; Bass & Avolio, 1990; Bass & Avolio, 1995; Burns, 1978) leadership as foundational to this process has been present, representative of my personal approach to leadership, aligning with the leadership at World Medical, and encompassing the tenets of what is needed to drive change in medical education at a global health care organization. A recent study by McKinsey & Company (2021) found that even successful transformations fall short because change initiatives are treated as side projects as opposed to integrated within business operations through a systematic approach. Fortunately, at World Medical, a holistic approach is the way all major change efforts are treated, based on the nature of the strong global culture as a non-profit, health care organization.

There is an undeniable need for global essential surgery (Bath et al., 2019) with literature demonstrating that undertaking this work is not only feasible, but will save lives (Meara et al., 2015). Organizations such as World Medical are being called up to deliver safe surgery where it is needed the most to address this gap, and to facilitate equity, ethics, and social justice in the provision of health care. One of the most critical factors in this process is ensuring that

health care providers are equipped with the knowledge and skills required to deliver global patient care through evidence-based medical education. This new era in medical education at World Medical will make a significant impact in the provision of global surgery and comprehensive care to medical volunteers and ultimately to patients. It extends beyond the walls of the organization to contribute to global health systems strengthening, addressing the worldwide call to action in global essential surgery.

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