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THE IMPORTANCE OF ORGANIZATIONAL STRUCTURE IN ESTABLISHING AN EFFECTIVE MILITARY HEALTHCARE SYSTEM

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JCSP 43

Master of Defence Studies

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PCEMI 43

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CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES
JCSP 43 – PCEMI 43
2016 - 2017

MASTER OF DEFENCE STUDIES – MAÎTRISE EN ÉTUDES DE LA DÉFENSE

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Maj F.J. Kirk

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ABSTRACT

The purpose of this research paper is to determine if the consistent problems that exist in all Canadian Armed Forces (CAF) Field Ambulance Medical Units are a result of organizational structure discrepancies. 2 Field Ambulance Medical Unit is used as the primary study case for emergent issues that exist at all medical field Units. The study is divided into three sections. Section one generates a basic understanding of organizational design theory and a foundation to understand the current organizational structure used by the Canadian Forces Health Services Group to structure its field medical clinics. Section two examines the key Health Services policy document (Rx2000) that outlines clinical structures, reporting relationships and the organizational structures currently in use and how CAF medical clinics should function within them. Section three considers the specific problems observed at Field Ambulance medical clinics and how they are related to organizational structure conflicts. A revision to the Field Ambulance organizational structure is proposed as a solution to the fundamental problem sets that currently exist. Consideration of the current governance system as well as system strengths and weaknesses align the proposed system changes with current Rx2000 policy. The major finding is that Field Ambulance Units employ a divisional organizational structure imposed upon its subordinate medical clinic. CAF medical clinics are designed to be lone command entities, led by a qualified Commanding Officer, designed to function as a departmental organizational structure according to Rx2000 policy. This finding is consistent with all Field Ambulance Units and subordinate medical clinics. As such, the recommendation to sever all medical clinics from parent Field Ambulance Units is made with a view to creating a consistent departmental organization structure among all CAF medical clinics. A consistent organizational structure will enable good governance and the development of an accredited, high-level of health service delivery among all CAF medical clinics.

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INTRODUCTION

The Canadian Forces Health Services Group (CF H Svcs Gp) is a national level military organization that exists to provide health services to members of the Canadian Armed Forces (CAF). The provision of military health care has evolved considerably over the past few decades whereby the latest health care delivery system is structured largely to mirror the organizational models used in civilian health care. Yet in many ways, CAF's health care system is unique and exclusive to CAF members only. It is considered an independent system because military members are excluded as "insured persons" under the *Canada Health Act*.¹

Formerly known as military hospitals, the Rx2000 project initiative of the late 1990s attempted to standardize the delivery of care in all CAF medical clinics. The Primary Care Renewal Initiative (PCRI) was borne out of Rx2000. The initiative was aimed at refining the healthcare system to ensure that medical resources were utilized proportionally based on the military population size being served in the region regardless of environment or operational mandate of the end-user units. From an Army perspective, medical services would no longer be decentralized with each unit within an operating base, having its own medical facility and staff. The centralized Care Delivery Unit (CDU) concept emerged and centralized all medical assets into base clinics. This was a long process that was believed to be completed by the mid 2000s and marked the most current modernization of the CAF health care system.

By 2010, the CF H Svcs Gp comprised of 6,400 personnel, most of which were military as well as 500 civilian contractors, had grown to account for the required reforms outlined in Rx2000. The new organization was to represent a culture of evidence-based treatments, best-practices, and performance measurement with a three-fold mandate: deliver healthcare, provide

¹Canadian Forces Health Services, *Surgeon General's Report 2014: Consolidation, Innovation, Readiness: Canadian Armed Forces*, 2014, 6.

a deployable health services capability to operational commands, and provide healthcare advice.² Under the new mandate, the delivery of healthcare to a large and mobile military population would prove to be challenging. Health services needed to be flexible enough to meet operational demands in all geographical and climate conditions yet the new system that was established prioritized structure, standardization, consistency, and function. Military operational mandates, although implicitly understood in the development of the new health care system, was not the primary driver for the restructure and evolution of CDUs.

Although the principles of health care delivery are similar for all operational environments, each environment poses distinctive challenges based on its population. For example, the Navy will deploy large numbers of personnel on ships, either for training or operations, ensuring that health services are available on board of these ships to manage the crews' healthcare needs. The Air Force demands that pilots and air crew are medically fit and safe to fly to support operations (both domestic and international). The Army represents the largest element and has the highest health care system usage rates due to the emphasis placed on land operations and large-scale, prolonged deployments. Injury rates are high and the volumes of users to the system increases based on the declining health of an aging population and their continuous involvement in prolonged combat operations, such as Afghanistan.

In all cases, PCRI was established, resources were centralized, and all operational bases (regardless of environment) were allocated a number of CDUs based on military population size. The smallest bases (Meaford, Ontario; Yellowknife, North West Territories; and Greenwood, Nova Scotia) were entitled to one CDU. Large bases, such as Valcartier, Quebec or Ottawa, Ontario were entitled to five CDUs. The number of CDUs had nothing to do with the type, frequency, or level of operations. CDU allocation was purely based on population and

² Ibid., 4-5.

proved to be a complication to the model as certain bases became decisively involved in prolonged operations – meaning more was expected of its military operators and military operational tempo increased. Furthermore, CDU allocation did not take into account transient population. For example, during summer Reserve Force training concentrations, Area Support Unit (ASU) Petawawa will have an influx of 4,000 military personnel during the summer months. The provision of care required for these individuals was never accounted for in PCRI planning and execution. Furthermore, the human resource component (staffing) for the PCRI model was based on the CDU model. It did not account for the many nuances that exist between air, sea, and land operations.

The most concerning revelation is how the large bases in Petawawa, Valcartier, and Edmonton was deemed hybrid clinics from a chain of command perspective. Although structured using the PCRI model, and broken down into CDUs based on population size (with the appropriate specialty functions to service the needs of local populations), they are uniquely structured as part of a parent Unit – The Field Ambulance (Fd Amb. All other CAF clinics are independent clinics, led by a Commanding Officer (either Lieutenant-Colonel/Commander or Major/Lieutenant-Commander in rank) and delegated appropriate responsibility and accountability commensurate with command. The aforementioned clinics are technically led by a Company Commander (Major or Lieutenant-Commander), who is designated as a Resource Control (RC) Manager and as such ultimately responsible for a separate budget (\$22 Million). In the case of Petawawa, the Clinic Manager does not hold the designation of Commanding Officer and therefore reports to two superior officers or bosses. The first superior is an operational-level commander known as a Health Services Group Commander. This individual is a Captain/Colonel by rank and all clinic commanding officers report to this position as part of

the PCRI model. This individual is ultimately responsible for the provision of garrison health care for their operational region. For the select Army clinics described above, the Clinic Manager is responsible to the HSG Commander; however, receives routine direction (orders) and functions as a subordinate to the Commanding Officer (CO) as a Company Commander (OC) operating a clinic. This dual chain of command is problematic and inefficient at best, and imposes unrealistic demands on a staff that must satisfy the needs of a garrison clinic as well as an operational Brigade Unit. From an organizational design perspective, namely structure, the current clinic organization within a Fd Amb structure appears to be illogical and counterproductive – especially considering that the provision of healthcare in garrison involves continuity of care, a concept best realized by functional consistency and availability of clinicians.

This illogical structure is also the root cause for many of the ongoing issues that hamper daily clinic operations. The key issues in Army (Fd Amb) clinics are: leadership continuity; a lack of uniformed clinicians; a lack of qualified managers; and inefficient training. The current organizational structure and lack of clinical human resources (doctors and staff) does not allow for the proper allocation of clinical staff to fulfill the expected functions of an Accredited CAF clinic within a Fd Amb construct.

The demand for military health services is increasing yearly due to the combination of increasing operational and an aging military workforce. Clinics have undergone numerous changes within their scopes of responsibility to test initiatives to meet the rise in demand for clinical services and offset the disruption caused by supporting operational tasks not related to clinic function. The current hybrid clinic structure that exists facilitates the ongoing power

struggle to routine garrison medical operations (family medicine), Brigade operations, and strategic tasks and training support simultaneously.

THESIS

This research project, therefore, will demonstrate that all Fd Amb units must be lone entities similar to all other clinics in the CAF. They cannot continue to be part of Fd Amb units if national standardization and credible governance is to evolve. Clinic standardization using the current departmental Rx2000 model will ensure the delivery of the highest level of garrison health service support possible to the Army's military populations in accordance with the Accreditation Canada clinical healthcare standards.

METHODOLOGY

The current divisional structure used by 2 Fd Amb is unsuitable for a clinic organization. By generating an understanding of basic organizational design theory and how it has evolved to encompass the many requirements of modern business (throughput, information management, standards, consistency, and safety), a foundation will be created for the analysis of the current 2 Fd Amb structure. The analysis will consider the strengths and weaknesses of the current organization in terms of traditional organizational design models and suggest a revised model that allows 2 Fd Amb medical clinic to function in accordance with the CDU clinic model outlined in the PCRI initiative. The results of this comparison will determine if the clinic is best situated to remain under the command and control of 2 Fd Amb, or re-organize as a separate command entity/clinical organization.

This project will be divided into three sections. Section one will explore the importance of organizational theory and the significance of organization design foundations and structures in all organizations. The fundamental structures of organizations and design alternatives (divisional,

functional, matrix, and geographic) will be explored in order to understand the roots of organizational design theory and concepts that are necessary for modern organizations.

Section two will explain the organizational structure of the Rx2000 policy for CF H Svcs Gp in order to understand a generic military structure of medical clinics and the advantages and disadvantages of this structure within a military environment. Within Rx2000 policy, healthcare governance issues and its relation to structure will be explored. By extension, 2 Fd Amb's current organizational structure, namely the medical clinic, will be examined in order to illustrate how the internal operating problems are a result of ineffective organizational structure and governance issues.

Section three will determine how best to resolve the issue of integral medical clinics within Fd Amb structures by using an organizational structure suited to the capabilities and mandated requirements of the organization as outlined in part one. Strengths and weaknesses of the proposed structure will be discussed in this section and implementation considerations will outline the activities required to address the internal issues discussed throughout the analysis portion of this report.

ASSUMPTIONS

There are several assumptions that are relevant to the recommendations portion of this analysis. They are as follows: First, CF H Svcs Gp retains the authority to structure its Fd Amb units in accordance with routine direction from Military Personnel Command (MPC). Second, yearly operating budgets will not likely increase regardless of the rising cost of healthcare and the aging population of the CAF. Third, the identification of structural or personnel deficiencies will not be used to investigate or reprimand those that may have been personally responsible for

these deficiencies. This report is designed to identify issues and offer timely solutions, not attribute blame.

SCOPE

The scope of this report will be to use organizational design theory and managerial experience as the basis to critique an appropriate organizational healthcare structure and propose a revised structure to create efficient and effective garrison healthcare while supporting the external operational needs of the CAF.

PROBLEM SET

The current organizational structure is deficient and inhibits Fd Amb medical clinics the ability to provide the best healthcare possible to its garrison population while supporting Brigade-level operational tasks as well as strategic activities for the Health Services Group occupation. The following six problems are consistent among all Fd Amb medical clinics and will provide the focus of the analysis in consideration of a common organizational design problem that links all of these problems together.

Leadership Continuity: There is a lack of leadership continuity within garrison clinics due to the requirement to support operational tasks;

Uniformed Clinicians: There is a lack of uniformed clinicians available to perform clinical functions within garrison clinics;

Lack of Qualified Managers: There is a lack of trained professionals to track trends, manage data, and implement mandated performance measurement metrics within garrison clinics; and

Ineffective Training: There is a need to train new staff and mentor existing staff in clinical procedures.;

The problem set will be examined in detail in section three of this project.

SECTION ONE–THE FOUNDATIONS OF ORGANIZATIONAL THEORY

Modern organizational theory has evolved considerably from traditional bureaucratic models, originally pioneered by Max Weber, to complex models that rely on advanced technology networks to support them. Weber's concept of an ideal organizational structure was what he referred to as a bureaucracy. Weber's ideal bureaucracy is an efficient and rational construct of an organization that exists to facilitate the common good.³ His concept of bureaucracy is further categorized by its impersonal nature, focus on administration, the ability to level social and economic differences, and an authority system that is rigid. To enable the aforementioned tenets of Weber's notion of bureaucracy, a specific definition of individual responsibilities must be clearly articulated and understood by all participants within the system. Additionally, clear regulations are used to define and assign the realm of responsibility as well as the allocation of tasks and control of those tasks within each specific realm.⁴ Those that work within the bureaucratic system must possess core capabilities for the system to work. Firstly, position appointments occur based on exemplary conduct; work is full-time and rewarded by the promise of advancement with a suitable compensation attached, technical ability and qualification drives job appointments and placement within the system; and established rules drives the delegation of authority where loyalty is a product of the execution of official duties and has nothing to do with personal decisions. In order to demonstrate these listed capabilities, leaders must demonstrate personal judgment at all times, but be completely loyal to the

³Hal Draper, *Karl Marx's Theory of Revolution: State and Bureaucracy*, Vol. 1 (New York: Monthly Review Press), 28-30.

⁴Max Weber, *The Theory of Social and Economic Organization* (New York: Free Press), 36.

execution of assigned tasks that are necessary for the credibility and core function of the organization.⁵

It is easy to see how modern military command and control systems share their roots with Weber's vision of an ideal bureaucracy. Initially, Weber's classical approach to organizational design was suitable for environments with minimal conflict where subordinates had no power within the system they work. Weber's purist concept of bureaucracy does not exist in modern organizations, although many of the base concepts partially exist. Therefore, his model was a useful concept for the basis of an idealistic approach to organizational design in that it considered the philosophical question of what is possible in terms of how to structure an organization to support a bureaucratic construct.

Critics of bureaucratic structures, such as Karl Marx, believe that bureaucracies were used to control social classes and had little to do with supporting the common good. The dominant capitalist class sought to control the lower social classes within the developed organizational structure and use the structure to manipulate personal greed. According to Marx, bureaucracies are characterized by, "strict hierarchy and discipline, veneration of authority, incompetent officials, lack of initiative and imagination, fear of responsibility, and a process of self-aggrandizement."⁶ Marx's extreme opposing view of bureaucracy, compared to Weber's view, speaks to the influence of commerce and technology in organizational structures. Where early bureaucracies were developed to maintain order, the social evolution that empowered the state to keep order among numerous social classes continually centralized more power to the state. Such power enabled the enforcement of legal rules, laws, and taxation thereby allowing

⁵ Hal Draper, *Karl Marx's Theory of Revolution: State and Bureaucracy*, Vol. 1 (New York: Monthly Review Press), 38.

⁶ *Ibid.*, 40.

commerce to flourish and the advent of new technologies to facilitate new commerce and the creation of wealth.⁷ The expansion and growth of wealth sees an increase in bureaucracy and a need to further regulate systems using licensing, laws, fees, and taxes to control social order. In this way, bureaucracy is an offshoot of society and evolution, and relevant in any modern organization.

There is some semblance to this construct and the military chain of command, which relies heavily on command and control to enable the enforcement of discipline using a strict hierarchy of positions. Of note is the notion of control, or influence, getting people to do what needs to be done at the right time. Therein lies considerable debate about bureaucracy, as power brokers within the system can lose perspective on the greater good which lends itself to a corrupt and self-serving entity. Bureaucracy may, in theory, illustrate a perversion of means and ends so that means become ends in themselves, and the actors lose sight of the greater good. Weber felt that bureaucracy could be motivated by the collective good whereas Marx argues that competition and conflict would always prevent bureaucracy from being effective. The suggestion here is that, left uncontrolled, the bureaucracy will become increasingly self-serving and corrupt, rather than serving society. Similar concerns are emerging in large military healthcare organizations, where the provision of care should be focused on the client, yet the organization is set up in a way to allow for self-serving decision-making and the exploitation of situations by a few privileged power brokers indicative of rank.

Weber's and Marx's perspectives should both be considered when analyzing four of the most important characteristics in a bureaucracy that are present in all modern organizations: specialization in the division of labour, a hierarchy of positions, a system of defined rules, and

⁷ Ibid., 58.

the existence of relationships. These characteristics, although first identified by classical social theorists, remain the precursors to organizational issues that are managed in part by the alignment of organizational design and structure with internal culture.⁸ The consideration of internal structure in the larger realm of organizational decision, therefore, becomes paramount in understanding what a well-running organization looks like regardless if it is military, healthcare related, or a combined institution such as the CF H Svcs Gp.

SPECIALIZATION IN THE DIVISION OF LABOUR

Specialization in the division of labour in a healthcare setting is critical to meeting the unique needs of patients and no different than providing a military force key enablers to defeat the enemy as part of an operation. Weber describes specialization in the division of labour as a “specified sphere of competence [that] exists whereby there are obligations to perform functions which have been marked off as part of a systematic division of labour”⁹ Specialization can be both positive and negative, but is especially important in a modern organizational environment as specialization is necessary for long-term organizational sustainment. In one sense, specialization can increase productivity and overall efficiency. Yet specialization may also create conflict and competition between specialized units, thereby leading to the detriment of the entire organization.

A HIGHERARCY OF POSITIONS

All positions within a bureaucracy are under the power and control of higher ranking positions and every member, therefore, within this bureaucratic structure is under some form of hierarchical control due to the nature of complex organizational structures. A hierarchy “maintains unity of command, coordinated activities and personnel, reinforces authority, and

⁸ Henry Mintzberg, *The Structure of Organizations*, New Jersey: Prentice-Hall, 294.

⁹ Fred Luthans, *Organizational Behaviour*, 10th edition, New York: McGraw-Hill, Inc., 67.

serves as a formal system of communication.”¹⁰ Although designed to work with both upward and downward communication, often hierarchies such as a military chain of command emphasize communication in a downward direction. In such structures, horizontal communication is informal at best and individual participation and initiative is limited. This scenario works within certain environmental conditions depending on the kind of organization in question; however, history is proving that the most productive and innovative organizations have a more balanced approach to communication between subordinates and superiors.¹¹ Within a healthcare setting, especially among specialist clinicians (such as surgeons), a less-hierarchical structure that enables two-way communication in complex situations ensures better outcomes.

A SYSTEM OF DEFINED RULES

Formal rules are required in order to enhance internal coordination and ensure uniformity throughout the organization. Rules and regulations are important pre-requisites to create stability and continuity within an organization. Yet rules are the primary contributor to what Peter Drucker, an expert in modern management, considers “bureaucratic red tape...that often becomes the ends in themselves, rather than the means for a more effective goal attainment.”¹² Rules for the sake of rules impedes production; however, rules that link to specified goals are necessary for the attainment of performance measurement and critical in the delivery of healthcare.

¹⁰Fred Luthans, *Organizational Behaviour*, 10th edition, New York: McGraw-Hill, Inc., 70.

¹¹ Ibid., 71.

¹² Peter Drucker, *The Practice of Management: A Study of the Most Important Function in American Society*, New York: Harper Collins, 137.

THE EXISTENCE OF IMPERSONAL RELATIONSHIPS

Emotional attachments are neither encouraged nor required in order for bureaucrats to make rational decisions in an ideal bureaucratic environment. Emotions often cloud judgement, yet the impersonal nature of large organizations causes considerable conflict among both employees and consumers.¹³ In an industry, such as healthcare, where compassion is often at the heart of healthcare delivery, it is difficult to function with impersonal relationships. Yet, relationships that become personal often cloud judgment and may hinder the efficiency of a healthcare organization.

THE MODERN BUREAUCRACY

Classical bureaucratic organizations are often said to be inflexible and unable to adapt to rapid changes and competition due to technological advancement; however, a combination of flexibility, adaptability, and continuous learning are necessary requirements for modern bureaucratic organizations to survive within their competitive environment.¹⁴ In order to achieve this critical combination of factors, organizational structure must be considered to allow for those aforementioned conditions to exist in some form of harmony. Traits that are requisite for classical bureaucratic organizations are similar to those required in modern health service organizations and may be broken down into one of two methods: centralized and decentralized organizations.

The concepts of centralization and decentralization are important aspects of organization structure and design. According to Luthans, there are three types of centralization and decentralization: geographic, functional, and the analytical use of the concept.¹⁵ Geographic

¹³ Fred Luthans, *Organizational Behaviour, 10th edition*, New York: McGraw-Hill, Inc., 84-85.

¹⁴ Richard Daft, *Essentials of Organization Theory and Design*, Scarborough: Thomson Ltd, 21.

¹⁵ Fred Luthans, *Organizational Behaviour, 10th edition*, New York: McGraw-Hill, Inc., 89.

centralization and decentralization refers to the physical location of operations, either within one or many complexes (infrastructure) or regions. As globalization increases, location becomes important in determining organization structure. Functional centralization refers to tasks occurring from one source (e.g. mental health services emerging from a military clinic). Functional decentralization refers to an integrated component of a work unit (e.g. individual mental health services being offered in each care delivery unit at the base medical clinic instead of in a specialized mental health services building). Additionally, centralization and decentralization as a concept refers to decision-making delegation and retention within an organization.¹⁶ Both geographic and functional centralization and decentralization are readily determined by the organizational structure as indicated on a flow chart. The analytical use of the concept, however, is not reflected in an organization chart as it is difficult to determine how much decision-making occurs at the top of the organization compared to the bottom.¹⁷ Decentralization, therefore, is generally believed to be better suited to behavioural management theories and structures that thrive off of behaviour as opposed to rules and regulations.¹⁸ Decentralization tends to empower employees and create autonomy and a feeling of ownership not necessarily felt in highly centralized and controlled organizations. Some of the advantages of decentralizing, according to Daft, are: increased motivation among employees; effective decisions as a result of enhanced information management and accurate knowledge; leaders and managers dispersed at lower levels that have the ability to make more decisions and gain valuable experience; and top-level or high-ranking leaders are afforded more time to focus on

¹⁶ Ibid., 90.

¹⁷ J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 8.

¹⁸ Fred Luthans, *Organizational Behaviour, 10th edition*, New York: McGraw-Hill, Inc., 91.

strategy and innovation.¹⁹ Although the concept of centralization and decentralization emerged as a result of classical bureaucracy theory, it has stimulated many behavioural management theories to explore its boundaries.

In order to transform centralized and decentralized concepts into physical work structures, departmentalization must occur. Departmentalization refers to the horizontal working portion of the organization within any level of a specified organizational structure.²⁰ Although there are several forms of departmentalization, functional and product departmentalization are the two primary, but distinctly different forms that yield similar results.

FUNCTIONAL DEPARTMENTALIZATION

Functional departmentalization is widely used and recognized throughout most forms of organizations. According to Charles Albano, a project management and communications network expert, “all businesses, hospitals, universities, government agencies, and religious organizations, as well as the military, contain vital functions that can be functionally departmentalized.”²¹ The positive aspects of specialization are often realized by using functional departmentalization. Functional structures should, in theory, lead to high efficiency levels and the most economical use of employees within the structure.²² In the healthcare industry, patient safety and delivery of care are as important as efficiency and must be taken into account. It is also possible, however, to create internal competition and conflict that disrupts the structure and detracts from organizational goals. Potentially debilitating to an organization, conflict also has the potential to cause significant disruption which facilitates long-term change and positive

¹⁹ Richard Daft, *Essentials of Organization Theory and Design*, Scarborough: Thomson Ltd, 103.

²⁰J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 22.

²¹ Charles Albano, “Project Management and the Matrix,” retrieved 26 Jan 17 from <http://leader-values.com/Content/detail.asp?ContentDetailID=959>.

²² Fred Luthans, *Organizational Behaviour, 10th edition*, New York: McGraw-Hill, Inc., 106.

growth.²³ In the health care industry, this kind of change was prevalent in the 1980s during the time the federal government was changing healthcare funding models between the federal government and the provinces. Governance issues were beginning to emerge, as the cost of provincial healthcare was ballooning relative to the level of services being provided. Funding caps were emplaced in order to ensure that a greater volume of services would occur at a fixed price point.

PRODUCT DEPARTMENTALIZATION

Many organizations function along product lines within their established structures and hierarchies. Large and complex organizations are able to adapt to the product form of departmentalization. Larger organizations can be sub-divided into smaller groups to concentrate efforts on specific products and reap some benefits that occur with large and small size functions within larger organizations.²⁴ In terms of structure, the behavioural approach to organization structure is more compatible with product departmentalization than it is with functional departmentalization.²⁵ Product departmentalization, therefore, has the potential to provide greater self-control, personal growth, and personal development to those involved and working within its structure.

Modern behavioural theorists have done considerable work studying successful companies and determining how effective work structures are derived. Ulrich, Kerr, and Ashkenas' book entitled, *GE Workout: How to implement GE's Revolution Method for Busting Bureaucracy and Attacking Organizational Problems – Fast!* explores the methods used by General Electric's CEO, Jack Welch, to dismantle GE's inefficient bureaucracy. Welch believed

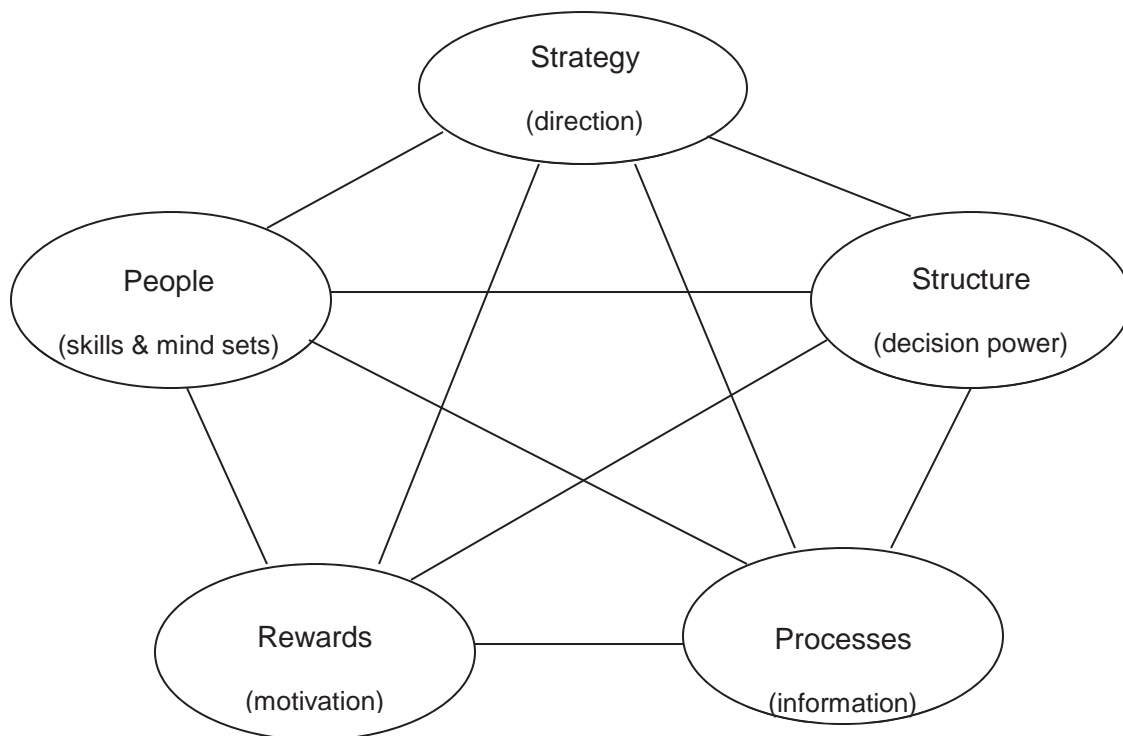
²³ J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 62-63.

²⁴ Henry Mintzberg, *The Structure of Organizations*, New Jersey: Prentice-Hall, 62.

²⁵ J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 22.

that “[when] the ideas of those people, irrespective of their functions and places in the hierarchy, are solicited and turned into action – on the spot- an unstoppable wave of energy, creativity, and production is unleashed throughout the organization.”²⁶ Welch’s management concepts reflect the importance of the evolution of organizational theory and design and the need for a multi-faceted framework as the foundation on which any company establishes its design and structure choices. Galbraith’s Star Model takes into account Welch’s key principle of people and demonstrates a foundation that is made up of five categories that require theoretical harmony in order to create and maintain an effective organization.²⁷

Figure 1A – Galbraith’s Star Model



²⁶ David Ulrich, Steven Kerr, and Ron Ashkenas, *The GE Workout: How to Implement GE's Revolution* (New York: McGraw Hill), 286.

²⁷ J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 73-77.

STRATEGY

Strategy is comprised of the mission and values of the organization and how they translate into goals and objectives. Strategy provides overall direction for a company and properly addresses markets, competition, customers, and service/product offerings.²⁸ Selection of an appropriate strategy is important for organizational success as it provides a basis for choosing an organizational form that best suits the mission and goals of the organization and its people. Senior military officials are beginning to understand the power of a long-term strategy and articulating mission, intent, goals, value, and objectives from not only independent unit business plans, but also command strategy documents. Each year the CF H Svcs Gp Surgeon General publishes a detailed report that acts as strategic guidance, providing a mission, vision, and values deemed important for setting the direction of healthcare within the CAF.

STRUCTURE

The power and the authority within an organization are determined by the structure itself, which becomes paramount in the assignment of suitable qualified individuals to fill key positions. Structure involves careful analysis of specialization abilities, shape of the organization, distribution of power within the organization, and Fd Amb.²⁹ Specialization refers to the types of jobs required to do the work within the organization. Shape refers to personnel numbers and allocation within each level of the organization. Distribution of power refers to centralization/decentralization issues within the organization. Departmentalization refers to how each level within the organization structures departments to satisfy the needs of the organization and has the ability to interact with each other.³⁰

²⁸ Fred R. David, *Strategic Management: Cases and Concepts (9th ed.)*, New Jersey. Pearson Education, Ltd., 3-4.

²⁹ J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 82-88.

³⁰ Ibid.90

PROCESS

Process refers to how the organization is able to function as a result of how information and decisions move throughout the organization. Processes are both vertical and horizontal in nature. Vertical processes consist of budgeting and business planning. Funding requirements are usually centrally collected. Budgeting priorities are a result of a vertical decision based on capital, resources, product development, and the provision of services.³¹ Horizontal processes, also known as lateral processes, are centered on work activities within the organization – for example, methods of creating training delivery in training organizations. Horizontal processes can be creating using many different methods and are of primary importance for managing modern organizations due to the amount of coordination required³²

REWARDS

Reward systems are designed to align the goals of an employee with the goals of the organization in accordance with the strategic direction. Rewards include salary, profits, bonus, profit sharing, vacation time, and vacations, to name a few.³³ The Star Model requires a reward system in order to manage employee incentive systems to facilitate employee loyalty and long-term growth.

PEOPLE

The people portion of the star model encompasses human resources management to include recruiting, training, professional development, and firing. Human resources elements are required to generate and refine talent within the organization as outlined by assigned and implied strategic guidance. Human resources management often relies on various policies and

³¹ J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 84.

³² *Ibid.*, 85.

³³ Susan Carter, Charles Greer, *Strategic Leadership: Values, Styles, and Organizational Performance*, Midwest Academy of Management – SAGE Journals, Volume 20, Issue 4, 4-7.

entitlements pertaining to time available and funding for activities. To be effective, policies must be synchronous with all elements within the Star Model so not to favour or inhibit any one point of the star and thus causes an imbalance in the organization. Once the leadership within star model organizations select a strategy, the selection of an appropriate structure becomes crucial in determining exactly how the organization will function and meet the goals and objectives set out by the initial strategy. Galbraith makes it quite clear that no one point on the star is any more or less important, as all must be addressed and relatively balanced in order for organizational efficiency to occur.³⁴

In order to translate strategy into productive behaviours, organizational design construct must be present. The design of any organization should consider three areas: the activities required for work, reporting relationships, and departmental groupings.³⁵ Daft states that “departments are created to perform tasks considered strategically important to the company...defining a specific department is a way to accomplish tasks deemed valuable by the organization to accomplish its goals.”³⁶ There is often a misconception that the conversion of strategy into design and process results from management and senior executives only, when in fact some of the best solutions to solve design and structuring problems often come from the lowest levels within the organization.³⁷ Once work activities are determined and reporting relationships are formed, departmental grouping must occur. Although departmental grouping theory has evolved over time, recent research indicates that there are main forms of grouping: functional, divisional, geographic, and multi-focused (also referred to as matrix).³⁸

³⁴ Ibid., 86.

³⁵ Richard Daft, *Essentials of Organization Theory and Design*, Scarborough: Thomson Ltd, 32.

³⁶ Ibid.

³⁷ (Ulrich et al, 2002).

³⁸ Richard Daft & Ann Armstrong, *Organization Theory and Design*, Toronto: Nelson Education Ltd., 94-102.

FUNCTIONAL STRUCTURE

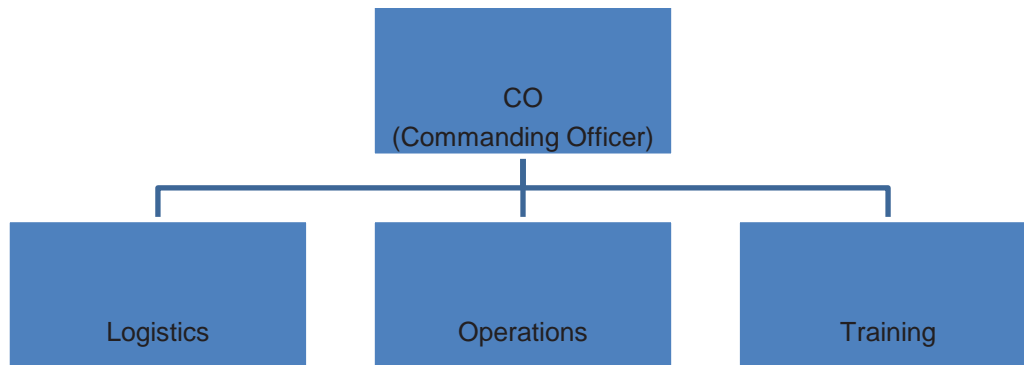
A functional structure groups activities by common function throughout the hierarchy within the organization. Considerable depth of knowledge is created within the organization because activities are consolidated to maximize the use of human knowledge and skills pertaining to the specific activity. According to Daft, a functional structure is most effective under the following conditions: experience is critical in meeting pre-determined organizational goals; vertical integration is required to control and coordinate the activities within the organization; and efficiency is important for productive results.³⁹ Galbraith complements Daft's thoughts by providing the following conditions under which functional structures work best: small, single line of products or services exist; there is an undifferentiated market for products or services; specific expertise and scale is required within the established function; there is long product development and life cycles for products and services; and common standards are required for both products and services.⁴⁰

Figure 1B illustrates a function structure seen in a traditional military context using an organizational chart.

³⁹ Richard Daft & Ann Armstrong, *Organization Theory and Design*, Toronto: Nelson Education Ltd., 102-103.

⁴⁰ J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 23-24.

Figure 1B – Functional Grouping



There are various strengths and weaknesses associated with a functional structure. An economy of scale is created within each function meaning employees are able to exploit the advantages of working in the same place and sharing the same facilities. In the above example, taken from a typical tactical-level military field unit, only trained logistics staff occupy logistic positions. Senior trade-trained personnel, with operational experience, work in the operations cell. The above functional structure promotes the skill development necessary for the tasks required within each of the functions in the military unit. Personnel are exposed to various activities within their own departments that further refine and develop their skill sets to build an experience base. Additional activities in the form of professional development are provided, or expected by individuals, to further enrich one's training experience.

Daft summarized the strengths and weaknesses of a typical functional structure. Strengths include: functional departments create economies of scale; skill development and depth of knowledge are realized; functional goals are accomplished within the organization; the system works well with one or few products or services. In the example from figure 2B, the most important strengths are economies of scale created by functional structures. Economy of scale is

created largely due to the combination of grouping as well as the expertise found within each grouping. Without the experience base within the grouping, overall efficiency and economy of scale would suffer. As Jack Welch stated previously, it is people that are responsible to create the unstoppable wave of production due to their energy and empowered by an organizational structure that stimulates innovation.

There are weaknesses of a functional structure that include: organizational response time to environmental change is slow; the ability for the hierarchy to make decisions is reduced; departments are unable to efficiently coordinate horizontally; overall, the structure reduces innovation, and organization goals are somewhat inhibited, and overridden by functional goals.⁴¹ Due to a lack of coordination across departments, functional structures generally respond poorly to environmental changes. The established vertical hierarchies have a tendency to become overloaded, further debilitating top management ability to make prompt decisions.⁴² Few purely functional structures exist in modern business due to the pace of change and competition as a result of globalization.⁴³ Those companies that use a more functional approach to structuring create flatter organizations with horizontal linkages to facilitate communication and coordination between departments.

DIVISIONAL STRUCTURE

The divisional structure, also known as the product structure, is organized according to the diversification of specific products into product lines. When there are too many products to realize any kind of economies of scales, multiple functional work units tend to be organized

⁴¹Richard Daft & Ann Armstrong, *Organization Theory and Design*, Toronto: Nelson Education Ltd., 104.

⁴²Henry Mintzberg, *The Structure of Organizations*, New Jersey: Prentice-Hall, 108-111.

⁴³*Ibid.*, 381-382.

around a specific product.⁴⁴ This structure has evolved considerably so that divisions can be organized according to individual products, product groups, major projects, services, and profit centers, to name a few.⁴⁵ Figure 1C illustrates a divisional structure in a military context using an organizational chart.

Figure 1C – Divisional grouping

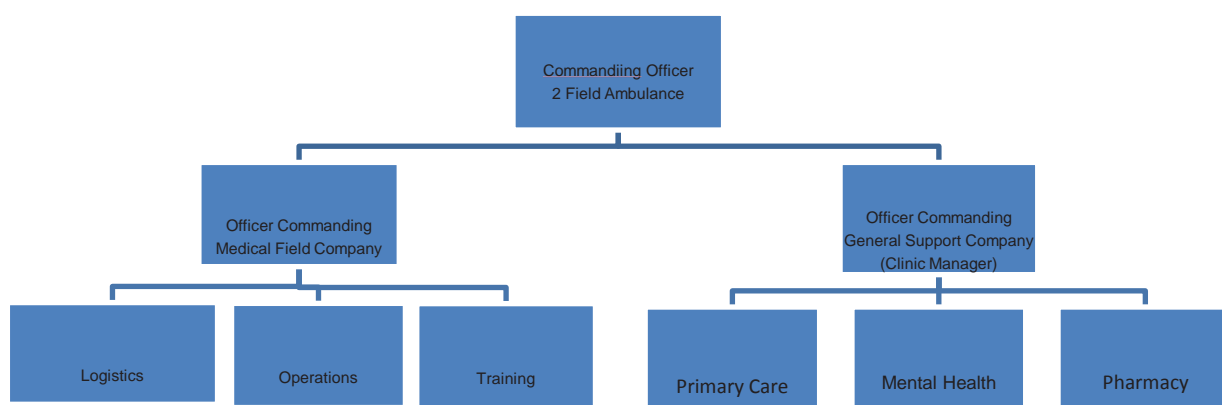


Figure 1C illustrates, how within one command structure within a military Fd Amb unit, each side of the organization is designed to work within its own unique environment. The left side of the organizational construct (Medical Field Company) exists to provide operational medical support to an Army Brigade. The right side of the organization exists to provide garrison clinical healthcare to the base population. Both sub-units exist as part of an overall unit, yet the tasks, structures, and mandates of each sub unit is fundamentally different. Overall, divisional structures promote internal flexibility due to the reduced size of units and as such

⁴⁴ J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 17-19.

⁴⁵ Richard Daft & Ann Armstrong, *Organization Theory and Design*, Toronto: Nelson Education Ltd., 106-107.

allows for vast differences in functions and services within the same organizational construct. Since the lines of authority are present at a lower level within the organization, decision-making is decentralized. Also, coordination within function departments is maximized, as each department requires the necessary staff to resolve issues.

The strengths associated with divisional structures are as follows: the ability to thrive in unstable environments due to the ability to make prompt changes; product accountability and contact points are clear to end-users or clients, leading to client satisfaction; coordination across functions is high; the structure works best in large organizations with many products/services; and decision-making is decentralized and therefore faster. The main strength of divisional structures is that it enhances the ability of an organization to compress the product/services development life-cycle for new products/services thereby expanding business with the development of a new division.⁴⁶ This is done to increase productivity and overall profits. Although there are considerable strengths to divisional structures, there are also key weaknesses.

Daft summarized the weaknesses of divisional structures as follows: functional department are unable to realize economies of scale when dealing with products and some services; coordination across product lines/services is often poor; technical specialization and in-depth competence is often reduced; and standardization and integration across product lines is often complicated. As product managers require more autonomy, each division develops processes and methods that differ across departments. Resources are duplicated and opportunities to share cost, time, and resources are lost. Furthermore, as sophisticated clients demand greater services or more products from their business relationships and want to purchase from more than one product line within a company (or experience services from multiple departments), single point of contact relationships are difficult to achieve without a centralized

⁴⁶ Henry Mintzberg, *The Structure of Organizations*, New Jersey: Prentice-Hall, 415-417.

communications function. With the absence of horizontal lines of communication between divisions, illustrated by figure 2C, divisions become segregated within the organization and depending on size have the ability to take on their own culture. Although both the Medical Field Company and the Clinic Manager have separate cultures and conduct daily business in fundamentally different ways, both divisions accomplish their assigned tasks and meet the overall strategic objectives of the organization when assessed at the end of a typical reporting period.

GEOGRAPHICAL GROUPINGS

Geographical structures developed from a need for organizations to expand in new areas while minimizing the costs of travel and distribution, be that of products or services. Where functional organizations traditionally existed in various areas to distribute products, multiple profit centers are being used to service the needs of foreign customers.⁴⁷ As technology continues to improve, additional communication and logistic options now exists for many companies and considerable downsizing of operations has occurred in order to remain efficient and profitable. This trend has extended into the healthcare industry where numerous activities can be done off-site by physicians in order to better satisfy some of the emergent service demands required in rural areas. For example, with improvements in encryptions and bandwidth, internet use to support medical records allows specialist physicians (such as radiologists) the ability to work from home. In doing so, rural areas providing X-ray services are able to send medically confidential imaging to be outsourced to a licensed radiologist who is able to read an X-ray and finalize an X-Ray report without setting foot in a rural clinic.

⁴⁷J.R. Galbraith, *Designing Organizations: An Executive Guild to Strategy, Structure, and Process* (San Francisco, California: John Wiley and Sons, Inc), 30-31.

Geographical structures largely resemble divisional structures, except that they are geographically dispersed, instead of centralized. The strengths and weaknesses of geographical structures are similar to those of a divisional structure. Unlike a divisional structure, however, regional goals and employees are not confused with national goals and agendas; the business focus is on the region⁴⁸

MATRIX GROUPINGS

A matrix structure is created by superimposing a divisional structure onto a functional structure. The matrix structure is particularly effective when product innovation as well as technical experience is important for meeting organizational goals.⁴⁹ Often matrix structures are used when functional, divisional, and geographic structures (when combined with horizontal linkage mechanisms) are ineffective.⁵⁰ The matrix structure makes use of strong horizontal linkages and formalizes the communication and coordination that must occur across these linkages to reduce organizational conflict. Yet the structure also simultaneously uses vertical linkages as established within divisions. Therefore, both product/service managers and functional managers have equal authority and clearly established lines of communication within the organization. Employees report to both sets of managers on the horizontal and vertical communication and authority lines. Although the concept of dual hierarchy contradicts classical social management theory, matrix structures will most likely be effective under the three key conditions according to Daft:

⁴⁸Richard Daft & Ann Armstrong, *Organization Theory and Design*, Toronto: Nelson Education Ltd., 111.

⁴⁹ Ibid., 114.

⁵⁰Henry Mintzberg, *The Structure of Organizations*, New Jersey: Prentice-Hall, 168-169.

First Condition

A medium-sized organization exists with a moderate number of product lines. Resources are scarce across product lines. People and equipment should be shared across the product lines in order to complete tasks.

Second Condition

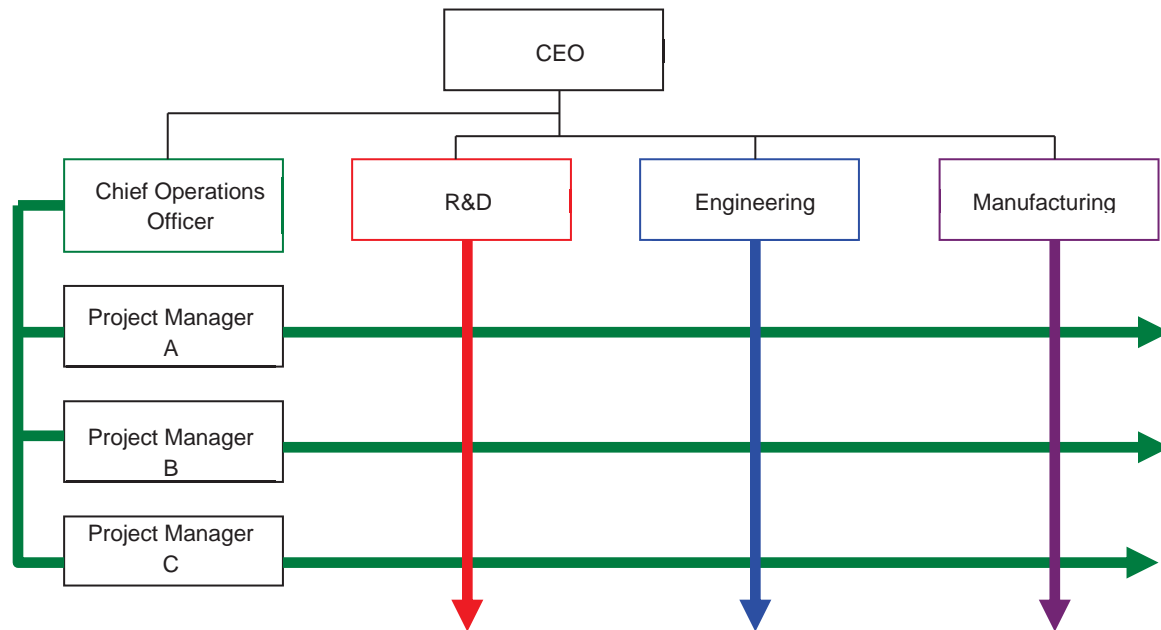
There exists pressure for the exploitation for the best traits in both functional and divisional structures (e.g. specialization as well as product diversity). Therefore, a dual authority is needed to balance power between the functional and divisional aspects of the organization.

Third Condition

The business environment in which the organization exists is both complex and volatile. Frequent changes as well as high levels of autonomy between departments require constant coordination and information passage both vertically and horizontally. Only when these three conditions are met can the vertical and horizontal lines of authority be given equal recognition and a dual chain of command exists for balance and order within the organization.⁵¹ Figure 2D illustrates a matrix structure.

⁵¹Richard Daft & Ann Armstrong, *Organization Theory and Design*, Toronto: Nelson Education Ltd., 114-115.

Figure 2D – Matrix structure



There are various stages of the matrix structure. One stage is represented by the use of temporary task forces - teams are set up with dual chain of command to work on particular tasks. In military health services, Tiger Teams are used as special project teams. The next stage is represented by permanent teams or groups created to complete various tasks or problems. The last stage, as indicated in figure 2D, is the appointment of managers who are held responsible to coordinate the activities of teams and groups. This group of managers must be experienced and versatile in order to deal with a barrage of issues and “tolerate ambiguous power relationships within the matrix.”⁵² These positions should be reserved for more senior managers/leaders that have a proven track record of maturity and emotional intelligence, as the complexity of the reporting relationships and disjoint lines of communication creates organizational frictions among employees that must be resolved by persistent and strong personalities in key roles.

⁵²Henry Mintzberg, *The Structure of Organizations*, New Jersey: Prentice-Hall, 174-176.

In real terms, a pure matrix is difficult to implement and maintain since one of the structures (functional or divisional) often tend to dominate. Dominating structures are frequently based on personalities of employees and manager within the structure.⁵³ A functional or product matrix usually forms the basis for the organization. A more functional matrix will use product managers to coordinate activities while functional bosses maintain authority over a project.⁵⁴ In a product based (divisional) matrix the opposite is true. According to Daft, the strengths of the matrix organizational structure are as follows: multiple customer/client demands are met due to increased coordination; human resources are well coordinated and shared across product/service lines; the structure is ideal in unstable environments where complex decisions are made and frequent changes occur; both functional and divisional skill development occurs among employees; the structure works well in mid-sized organizations where many products are made or services are generated. In general, matrix organizations tend to perform to high standards when dealing with complex products and services. Additionally, matrix organizations involve higher levels of responsibility for workers resulting in greater job satisfaction for workers due to the realization of intrinsic values.⁵⁵

Weaknesses of the matrix organization structure are as follows: frustration and confusion often results from dual authority and ambiguous lines of communication; extensive training and refined personal skills are required by staff to function within the matrix; increased coordination results in more meetings and additional conflict tends to become exposed as a result of these meetings; in order to function all participants must understand the structure and form horizontal relationships as opposed to hierarchical relationships; and it is difficult to maintain the balance of power within a dual structure. The complicated nature of matrix organizations, therefore, largely

⁵³ Richard Daft & Ann Armstrong, *Organization Theory and Design*, Toronto: Nelson Education Ltd., 117.

⁵⁴ Ibid.

⁵⁵ Fred Luthans, *Organizational Behaviour, 10th edition*, New York: McGraw-Hill, Inc., 107.

in part to dual authority, makes it difficult to implement and maintain relative to other organizational structures.⁵⁶ The numerous strengths presented in the matrix structure relates well to a healthcare organization where complex patients are the centre of the system and numerous activities (depending on medical severity) may need to be structures around a specific individual regardless of how the system set up.

PART ONE SUMMARY

Part one provides a brief overview of the history and foundation of organizational design theory and how its roots are based in traditional bureaucratic models, as critiqued by influential academics such as Max Weber and Karl Marx. Weber and Marx have distinctly different views of classical bureaucracy and the issues that they highlight, most of which derive from the maintenance of power and control and the personal motivations of personnel within organizations. It is clear to see how and why organizational design theory is able to trace its roots back to classical thinkers.

Important subject areas that exist in all organizations are explored by both Weber and Marx, including the specialization in the division of labour, the hierarchy of defined positions, the maintenance of a system of rules, and interpersonal relationships. All of these factors affect organizational structure. Furthermore, the concepts of centralized versus decentralized structures are considered in modern versions of bureaucracy. Unfortunately, Weber and Marx are silent on concepts such as the ability of technology to influence structure, as technology in their era had minimal enabling effects on organizational efficiency. That is not the case today in modern organizations where technology has the power to evolve and refine structure.

The appreciation for bureaucratic structures enables the consideration of specific organizational design models based on key organizational theorists such as Richard Daft, J.R.

⁵⁶Henry Mintzberg, *The Structure of Organizations*, New Jersey: Prentice-Hall, 180.

Galbraith, Harry Mintzberg, and Fred Luthans. These authors focus on specific structures and the specific ingredients that allow an organization to optimally function depending on the environment that they exist within. As such, four organizational structures are considered: functional structure, divisional structure, geographic structure and a matrix structure. There are advantages and disadvantages to each structure, as outlined by various authors, and in some cases, the complexity of human relationships and product specialization requirements make it difficult for many of these structures to exist in their purist form. Notwithstanding the potential blending of organizational systems, there are blatant parallels between the aforementioned system and the complex health system that exists within the CAF. Although the Rx2000 policy document suggests that the CAF healthcare system is a functional structure (departmental) that works in harmony with the military chain of command, the reality of a dual chain of command based on the existing (and necessary) professional technical network among clinicians complicates the use of purist models in the analysis of a singular system. An appreciation of the various, traditional organizational design systems of production, however, allows for the analysis of the Rx2000 CAF healthcare system relative to real systems in various industries. Regardless of the outputs, organizationally variables (structure) that make up any system are based on authority, positions, rules, and relationships. In any organizational theory model, these elements require consideration if optimal efficiency and output is to be achieved

SECTION TWO –HEALTHCARE STRUCTURE IN THE CAF

The CFHS Gp’s primary policy document that explains the structure and complexity of the healthcare system used in the CAF is Rx2000. The Rx2000 document represents a complete renewal of healthcare in the CAF, formally known as the Primary Care Renewal Initiative (PCRI). PCRI, which is an ongoing initiative as part of the Rx2000 framework, represents a modernization of military healthcare and a restructuring of clinical medicine within the CAF to ensure that the system is able to provide “what is right for the CF member.”⁵⁷

The healthcare model used by the CAF was derived from the provision of a full range of healthcare services to its members from the date of enrolment to their date of release. This system is reflected in the CAF Medical Clinic Model, which is considered to be a departmental structure according to current policy. This section will explore how the CAF defines its departmental structure according to Rx2000, the methods used to standardize this structure across CAF medical, the process used to measure performance, structural contradictions based on design theory, and the structure of PCRI clinics within Fd Ambs.

CAF HEALTHCARE DEPARTMENTAL STRUCTURE

A departmental structure is what defines the CAF medical clinic model as outlined in Rx2000 to enable the CAF healthcare system to provide a coordinated approach to the delivery of a broad range of services that are required to support the concept of a care continuum. In order to accomplish this task, the CAF medical clinic was re-defined with a view to providing the highest level of medical care to patients while supporting operational chains of command in the location where those services are provided. Rx2000 confirms that “the department structure is a functional structure.”⁵⁸ As Fred Luthans highlights in part one, a functional structure should lead

⁵⁷ Canadian Forces Health Services, *Rx2000: The Canadian Forces Medical Clinic*. Ottawa, forward.

⁵⁸ *Ibid.*, B-1-1.

to elevated efficiency levels and the most economical use of employees within the system. This is a pre-requisite in a healthcare environment due to the evolution and importance of patient safety. Where previous failures in healthcare systems derived from a systems inability to focus specifically on the patient, healthcare reform now uses patient safety as the cornerstone for healthcare excellence. Specifically, a medical staff culture that is acutely focused on a patient safety culture has the ability to create better outcomes by ensuring medical practices and procedures evolve for the benefit of patient health. Furthermore, increased safety translates into less patient infections, injury and/or deaths and negates medical malpractice lawsuits. In the case of the CAF, it also enhances institutional credibility and maintains the morale of CAF members.

The previous military healthcare system, like many other civilian medical systems, did not place patient safety at the centre of its clinical medical culture. Rather, competing priorities in a system and the inability to offer a reasonable spectrum of medical care defined previous systems. A refined system was required to ensure that the volume of medical services was similar to those available in public, non-military healthcare facilities. The increase in medical programs translated into a need for more qualified clinicians, enhanced infrastructure, additional training and programs, and an oversight methodology to ensure that the treatment that was occurring in garrison was of the highest standards and in accordance with the College of Physicians based on the province within which medical procedures are occurring.⁵⁹ This enhanced level of oversight redefines the role of the Base Surgeon within garrison healthcare and formalizes another line of command, control, and communication to the existing military chain of command.

⁵⁹ College of Physicians and Surgeons of Ontario, "The Practice Guide: Medical Professionalism and College Policies," retrieved 10 February 17 from <http://www.cpso.on.ca/Policies-Publications/The-Practice-Guide-Medical-Professionalism-and-Col>

The Professional Technical Network

Rx2000 shifted administrative responsibility for clinic operation away from Base Surgeons to qualified Health Care Administrators (HCAs) and Health Services Officers (HSOs) so that the key roles and responsibility of the Base Surgeon focused on professional technical leadership and the provision of military advice to clinicians within the system. The previous healthcare system in CAF clinics relied on the Base Surgeon position to provide the administrative responsibility for the function and daily operation of a military clinic. That system did not allow for the unifying healthcare principle of patient safety, as there was no qualified single stakeholder mandated to oversee the new system. The new system, however, added an additional layer of necessary communication and authority to the existing military chain of command.

In the clinic construct, intermediate-level managers have a responsibility to create and maintain a culture of patient safety. Intermediate managers are not normally practicing clinicians, and therefore viewed as enabling staff for the clinical teams who deal directly with patients. Patient safety issues and observations about sub-systems and current policies and practices, as well as specific issues regarding actual and specific patients must be reported to a clinical team leader in order to ensure the delivery of competent, ethical, consistent and safe healthcare within a department.⁶⁰ Clinical team leaders, in turn, collect patient safety information and meet with the overall clinical team leaders, the Base Surgeon, to discuss aspects of patient safety that require improvement. Examples include: creating situational awareness for complex patients and situations, reviewing policies that are ineffective among patient populations, and discussing treatments that created adverse or questionable outcomes. Meetings among the clinical team also highlight positive outcomes or situations that may lead to system improvements. Examples

⁶⁰ Canadian Forces Health Services, *Rx2000: The Canadian Forces Medical Clinic*. Ottawa, B-1-2.

include: departmental initiatives that save resources and time, the developing of training that enhances clinician-patient outcomes, structural changes that improve overall efficiency such as a reduction in wait times. The Base Surgeon is also responsibly to exploit his or her relationship with the Regional Surgeon.⁶¹

The Base Surgeon's technical professional network is complex, with significant linkages both internal and external to the clinic within which they work. Internally, the Base Surgeon must be familiar with the numerous departments and the key roles of the personnel who manage their departments. These roles include: Primary Care Services, Diagnostic and Therapeutic Services, Support Services, Mental Health Services, Operations and Training, and In-Patient Surgical Services (only at large CAF clinics). The Base Surgeon must also be able to provide the Clinic Manager with medical advice regarding policy. In a Fd Amb environment, the Base Surgeon also provide the Commanding Officer (CO) with a similar level of medical advice for not only Unit members, but also medical situations that involve members from other Units. Externally, the Base Surgeon is technically responsible to, "report to the CFHS chain-of-command via the [Clinic Manager], and through the CF Surgeon General through the Prof Tech network."⁶² As a policy document, Rx2000 does not delve into the complexity and volume of the relationship with its vague reporting chain. The policy fails to mention the link between the Base Surgeon and the various Unit COs (approximately 13 in Petawawa alone). Additionally, the Base Surgeon must consult and update the Regional Surgeon on both routine and significant information. Finally, the Base Surgeon as the most experienced clinician must reach out to local stakeholders in local healthcare facilities and maintain a situation-relevant relationship to

⁶¹ A Regional Surgeon is a senior clinician who is responsible to provide advice and mentorship to Base Surgeon's within a broad geographic grouping of military bases, as well as to provide medical advice to senior military officials operating within the region in question. i.e. Regional Surgeon Halifax provides 2 Division Commander medical advice when required.

⁶² Canadian Forces Health Services, *Rx2000: The Canadian Forces Medical Clinic*. Ottawa, B-1-2.

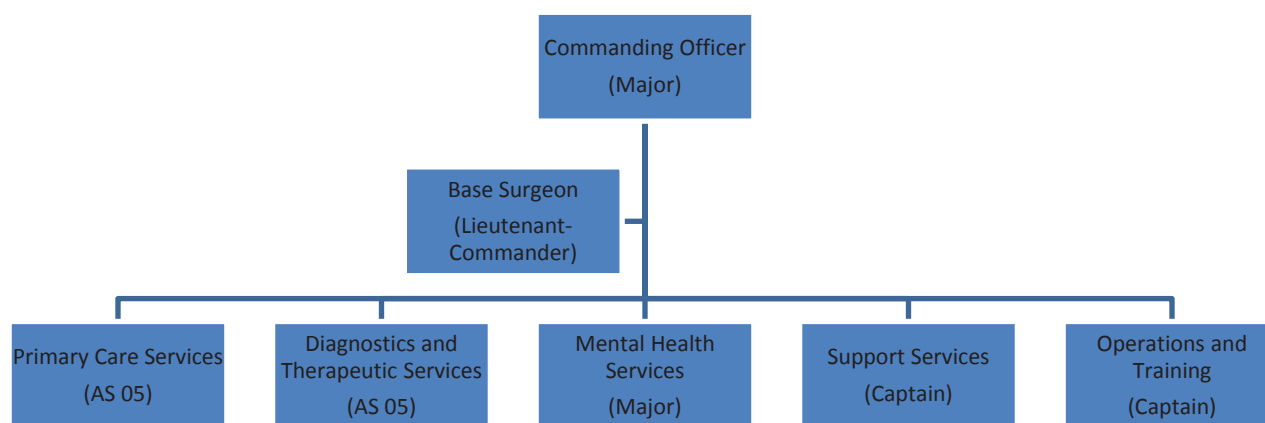
routinely communicate mass casualty situations and evacuation plans if such a situation were to occur. This involves consultations with hospital CEOs and heads of departments, government agencies that track and monitor health trends, and local emergency services entities that facilitate patient evacuation. The defined departmental structure, illustrated by a functional framework, does not articulate critical Base Surgeon relationships as noted above and therefore does not illustrate an organizational structure that supports both the time and the level of activities necessary to sustain a level of readiness and competencies in those described areas.

A similar situation exists for the most senior leader and administrator within the clinic healthcare system. Clinic managers - the administrative, training, operational, and finance experts within the clinic organization must be similarly plugged into the connection that the Base Surgeon has established. In fact, they should be dually plugged in for redundancy and continuity reasons. Although the nature of activities for a clinic manager is administrative, many of the functions that must be performed in a crisis situation deal in specialized medical logistics and the legislation and rules that surround decisions about the provision of care for patients in unique situations. Again, the complicated network of relationships that must exist for a clinic manager to be effective at his or her job is not reflected in the institutionally defined organizational structure and framework. These relationships are not depicted graphically and therefore often not captured in terms of a formal job description (terms of reference for military members). As such, there is an argument to be made the defined departmental clinic system, organizational by function, is inaccurate and does not depict the depth of services and volume of responsibility required of both clinical and non-clinical professional staff.

DEFINITION OF A HEALTHCARE DEPARTMENTAL SYSTEM

The defined departmental healthcare system, as outlined in Rx2000, is similar to the graphic depiction used by Galbraith's functional grouping. Figure 2.1 illustrates a departmental functional grouping based on the clinic structure established by Rx2000.

Figure 2.1 – Rx2000 Clinic Functional Structure



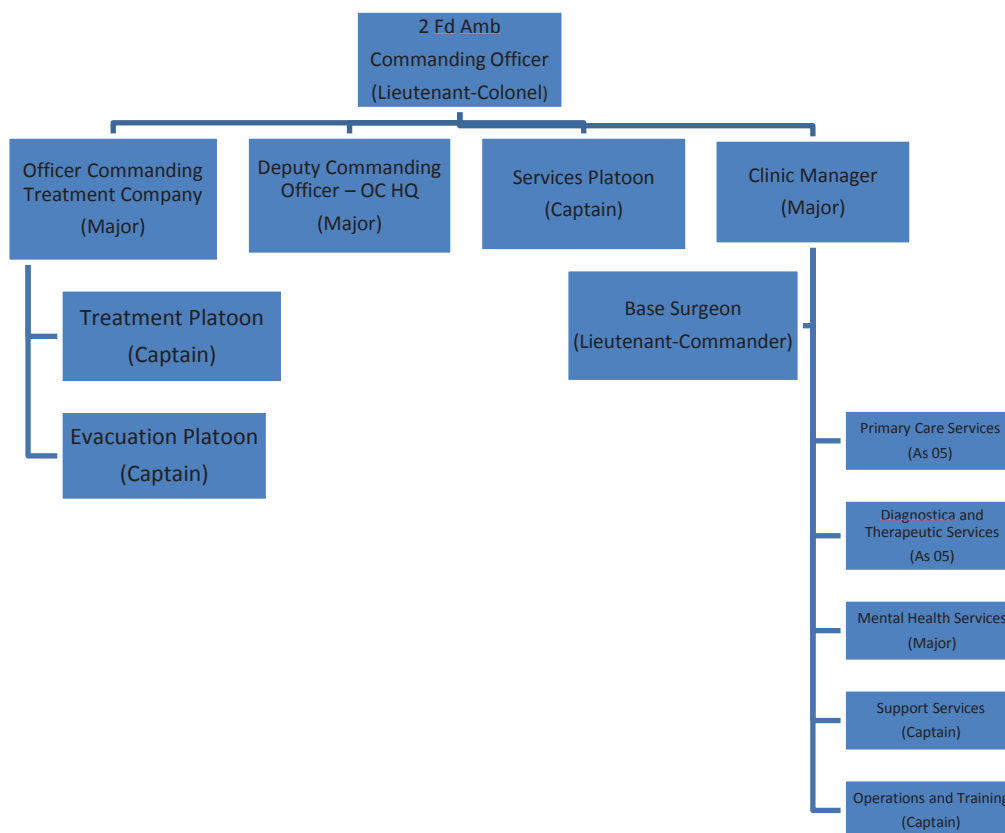
The above structure depicts the typical structure used across CAF clinics regardless of size and the population that the clinic supports. A typical functional structure should create certain advantages within a healthcare organization, as this is the structure normally used within the industry. Large civilian hospital will use a similar structure to organization programs, people, and medical care outputs. The largest advantage provided by a functional structure is the most efficient use of its people, in this case clinicians and leadership, creating specialized departments to focus on the unique needs to patients requiring the services of a particular department. The clear lines of communication and reporting channels facilitate system changes and rapid improvements at the department level. Note that top of the hierarchy is controlled by a Commanding Officer holding the rank of Major/Lieutenant-Command in small to medium sized clinics and the rank of Lieutenant-Colonel/Commander in large medical clinics. A CO is an

appointed position for those senior officers who possess the depth of experience, ethics, judgment, technical skills, trust, credibility, and financial authority to make necessary decisions to lead and manage his or her medical Unit. The Base Surgeon, although subordinate in position slightly, is semantically treated like an equal and empowered to facilitate all things of a medical nature to the Unit and its many stakeholders. The CO, on the other hand is accountable for all things clinical and administrative that occur within the Unit.

The functional (based on department) structure depicted in figure 2.1 is largely effective as it was based on successful civilian health care organizations that were structured in the same manner. This is not the same structure that exists in Canada's key operational field Unit, namely Valcartier, Edmonton, and Petawawa. On paper, and based on the business plans submitted by these Units, these clinics are similar to military medical clinics in Canada. That is a blatant misrepresentation, which is depicted accurately in figure 2.2 on the following page. Although the right side of the organizational charts depicts a clinic structure similar to the functional structure at figure 2.1, the clinic exists as a company within a separate Unit. Specifically, unlike figure 2.1, the Clinic Manager is a company commander and does not have the powers, control mechanisms, or responsibilities of a CO. The CO in figure 2.1 is at the top of the hierarchy and has ultimate control over resourcing, spending, and all other activities that occur within a Fd Amb medical clinic. Furthermore, a Fd Amb CO has the ability to balance his or her organization as they see fit. Where a traditional CO of a clinic has only one mandate – to provide the best possible level of health care to a patient population with the resources given, a Fd Amb has numerous operational tasks that must be priorities and fulfilled. Only one of those tasks is to provide garrison healthcare and that is not on the top of his or her priority list. As such, the

reality is that a Fd Amb medical clinic exists as a part of a divisional structure, rather than a functional structure as indicated by Rx2000 policy.

Figure 2.2 – Operational Field Unit Divisional Structure



The existence of Fd Amb divisional structures is not consistent with Rx2000 policy, but does have benefits associated with it. Galbraith, in section one, suggests that divisional groupings are required when there are too many products or services, or specialized services that require specific attention and resourcing to function. A divisional structure gives the Commanding Officer considerable flexibility in how to organize and execute tasks. Decentralized decision making as well as functional coordination is maximized to enable people to work across the organization to establish solutions. Existing in unpredictable operational environment, such as

Petawawa, enables a divisionally structured Fd Amb the resources, people, and flexibility to custom tailor training and tasks to support numerous stakeholders. What is not depicted in the hierarchy in either figure 2.1 or 2.2 is to whom the CO, in both cases, reports. In figure 2.1, the Commanding Officer of a normal clinic formally reports to a Health Services Group (HSG) Commander. Key stakeholders include the Base Commander, Lodger Unit Commanding Officers, local healthcare organization leadership (Pembroke and Deep River Hospital key staff). In figure 2.2, the Clinic Manager is only authorized to report through the chain of command to the Fd Amb CO. The CO, in turn, reports to the HSG Commander; however, the HSG commander is not the primary stakeholder although they write the CO's performance appraisal. The Fd Amb CO is deeply imbedded in the Brigade as a key brigade enabler. As such, the tasks assigned to the CO of a Fd Amb by the HSG commander always prioritizes 'the support of Bde operations' as the most critical assigned task in annual Commander's Planning Guidance.⁶³ This is an ongoing reality. Furthermore, the daily working relationship of a Fd Amb CO sees them associating on a regular basis with the Brigade Commander and brigade staff. It is the Fd Amb's operational imperative to provide all forms of medical operational support to an operational brigade, regardless of location, personalities, resources, and staffing levels and a daily working relationship is required to do this regardless of structure.

PERFORMANCE MEASUREMENT, ACCREDITATION, AND STANDARDIZATION

One of the primary goals of the Rx2000s PCRI is to standardize healthcare delivery across the CAF. That task is relatively simple to accomplish if clinics have a shared organizational structure relative to the size of population that they serve. For the most part, that is the case, demonstrated by the functional departmental structure shared by most military clinics in Canada. The inconsistencies created in the Fd Amb medical clinics; however creates an

⁶³ Canadian Forces Health Services, 2 Fd Amb Business Plan 2012, retrieved December 14, 2016.

imbalance in the clinic structure system which may require a rebalance of resources in order to properly assess performance.

The performance measurement criteria and system established by Accreditation Canada is similar to the systems used by most publically funded institutions in Canada. The formal implementation of PCRI ensures that performance measurement is a top priority. Firstly, the CFHS Gp wants to ensure that the newly refined system uses a sanctioned accreditation program that provides an unbiased improvement cycle to “evaluate and improve the quality, safety, and efficiency of services while reducing risk.”⁶⁴ Secondly, the Surgeon General must ensure that the CAF healthcare system is deemed credible among the numerous systems existing within various provinces and as a national entity. A substandard system has the potential to deteriorate morale and create follow-on effects that would hinder operational readiness, mission longevity, and discredit CAF operations writ large. The Accreditation QMentum program, therefore, was chosen as the performance measurement guide to drive the collection of data and development of military healthcare system metrics that would be used to analyze performance and overall system effectiveness.

QMentum is rooted in various key healthcare principles including: quality improvement, risk management, patient safety, occurrence reporting and ratings. Principles are then organized into either clinical or management indicators. These indicators further break down into dimensions to include: system responsiveness dimensions, system competency dimensions, patient/community focus dimensions, and work-life dimensions.⁶⁵ The aforementioned indicators are organized into questions related to each dimension to enable Accreditation Canada’s QMentum surveyors the opportunity to assess clinic operations in four-year cycles.

⁶⁴ Canadian Forces Health Services, *Rx2000: The Canadian Forces Medical Clinic*. Ottawa, D-1-1.

⁶⁵ *Ibid.*, D1-1 to D-1-8.

The QMentum program is based on four sets of standards that make up the program: governance, leadership, infection prevention and control, and medication management. These standards are system wide, with a reliance on questionnaires and site visits to determine the level of standards being achieved at each medical clinic.⁶⁶ The results of the interviews, visits, and questionnaires are formalized in the form of a written report card for a Unit, and results are tabulated to illustrate what is working well and areas that require improvement. Each CAF medical clinic receives a QMentum report card and a written report outlining activities that should be implemented to increase the overall quality of healthcare being delivered. The ability to implement change is largely dependent on the structure of the organization and the people that work within it. Accreditation Canada works on the premise that all of the CAF clinics are similar in their organizational structure and operating principles as the physical experience of walking into a clinic in Petawawa should feel similar to the experience of walking into a clinic in Halifax according to an average visitor. What surveyors do not appreciate is the difference in the command structure, resource allocation, and the command nuances that exists in a clinic led by a Company Commander (Clinic Manager) working for an Fd Amb CO compared to a stand-alone clinic being command by a designated CO. Surveyors only observe a clinic working in isolation with the resources that it has been granted.

The Rx2000 document does not distinguish the difference between the separate realities, nor does senior leadership consider this an issue. Yet, the Results-Based Management and Accountability Framework section of the policy discusses the importance of the CAF's overall "corporate goal" and goes on to explain that some of the objectives that need to be attained in

⁶⁶ Accreditation Canada, QMentum - Canada, retrieved April 16, 2017 from <https://www.accreditation.ca/accreditation-canada-programs>.

the achievement of credible health service delivery applies as well to operational setting.⁶⁷ That particular language is vague, yet the notes section of the page explains how the 2002/2003 business plan emphasized the “overlap between in-garrison care and support to operations noting that activities and functions are not easily compartmentalized as might be suggested by our model and hence there is a certain degree of artificiality in the separation.”⁶⁸ That is perhaps the largest oversight in any medical policy that was allowed to fester for over a decade. What further complicates this oversight is the CFHS Group’s development of strategic objectives to attain the vision of clinical care delivery in CAF clinics. The vision is to create an “operations capable organization that meets personal and occupational health needs.”⁶⁹ That is to be accomplished by managing the following five objectives: quality, balanced care delivery, standardization, sustainability, and risk management.⁷⁰ The inconsistent organizational structure, encouraged by the CFHS Group, allowing CAF medical clinics to exist as a divisional structure versus the existence of functional structures in all other non-field environments prevents the attainment of the listed strategic objectives. The inability to achieve these clinical operational objectives creates unnecessary risk to both patients and practitioners.

CAF CLINIC STRUCTURAL CONTRADICTION

The CFHS Gp’s decision to create CO positions within its clinics is paramount for the organization to run a credible military health system. The authority nestled in a CO position is required for the Clinic Manager who is ultimately accountable for the delivery of healthcare, practitioners within the system, and system resources. The current construct of Fd Amb medical clinics does not allow for a dedicated CO to control the clinic. A Unit is only able to have one

⁶⁷ Canadian Forces Health Services, *Rx2000: The Canadian Forces Medical Clinic*. Ottawa, D-1-10.

⁶⁸ Ibid.

⁶⁹ Canadian Forces Health Services, *Rx2000: The Canadian Forces Medical Clinic*. Ottawa, D-1-11.

⁷⁰ Ibid.

CO, hence the requirement for a divisional structure to allow the Clinic Manager to function as a Company Commander within this construct.

Running a large medical clinic with the authority vested in the position of a Company Commander is considerably different than having authority and accountability of a Commanding Officer. Additionally, the Fd Amb clinics in Petawawa, Edmonton, and Valcartier are among the largest within the CAF. The interested stakeholder groups associated with the provision of care are vast, and the operational tempo in these locations is considerably more rapid than at other large CAF bases. Based purely on structure, there are four key structural contradictions that exist in Fd Amb medical clinics: competing priorities, authority & accountability, and operational objectives.

Competing Priorities

A true divisional structure enforces specific reporting relationships to enable the flow of information and communication up, down, and laterally throughout an organizational framework. The reporting relationships are often drafted in a hierarchical form, but paint a clear picture of functional responsibilities across an organization. Unit priorities within the Health Services Group are best articulated through a Commander's Planning Guidance (CPG) as well as yearly business plans. The yearly planning guidance organizes and assigns operational tasks within the assigned structure to the 2 Fd Amb Units. A lone company, such as the medical clinic, working as a functional department within the Unit should not receive separate direction or conflicted information. That is not the case with the most recent CPGs. The Unit and the Company receive specific tasks, objectives, and priorities – many of which do not align. It is then left to the unit leadership to resolve planning contradictions and tasking disputes. Naturally, the higher ranking officer – in this case, a CO, makes the final decision on task priority. At Brigade-focused army bases, operational tasks normally take priority over support tasks. Specifically, a

CO will use his or her available resources necessary to accomplish the operational task obligations to the Brigade Commander and ongoing/future operations. In these cases, the medical clinic becomes a secondary priority to operations.

To further complicate the issue of priorities, both 2 Fd Amb and the medical clinic receive separate business plans with competing priorities. Those with departmental business plan experience understand that a business plan, in theory, is developed for one Unit. It is illogical to develop two separate business plans for the same unit – one for a medical clinic and one for the remainder of the Unit that supports Bde operations. Each business plan emphasized different tasks and objectives within the same Unit for both managing entities. Ultimately, the CO owns all of the resources (including the clinic) and will make decisions to accomplish his or her assigned tasks prior to considering the tasks that have been allocated in a separate business plan to the clinic for which he or she holds no financial accountability.

Authority and Accountability

The same business plan for the clinic empowers that clinic manager (again, an equivalent Company Commander) with considerable spending authority in order to manage and be accountable for the clinic budget. The clinic manager is given a Resource Control (RC) manager designation, ultimately responsible for approximately \$23 million in annual funding. The CO of 2 Fd amb is not the RC manager. The CO of a Fd Amb is the RC manager for minimal salary wage envelope (SWE) as well as operations and establishment (O&E) funding for the operational Unit only. Additional funding is provided from the Brigade business plan so that all Fd Ambs are minimally funded to allow for training dollars to be consumed by Brigade operations and training budgets. Simply stated, a Clinic Manager assumes the highest level of financial risk based on the size of budget to be managed (\$23 million in Petawawa, \$18 million in Edmonton, and \$27 million in Valcartier). Comparatively, a CO of a Fd Amb is responsible

for approximately \$1 million in annual funding. Yet, a Clinic Manager has minimal authority in terms of unit staffing decisions, dispute resolution, powers of punishment and discipline, and the authority to approve leave. All key decisions must be formally supported by the Fd Amb CO prior to a clinic manger taking action. This division of power and authority does not exist at the remaining clinics within the CAF, as all other Clinic managers are designated COs and possess all of the authority and accountability vested in the title of CO.

Operational Objectives

The hierarchical construct of a divisional organizational structure formalized all decision making at the top of the structure. In the case of a Fd Ambulance, the CO holds that power. In the case of a non-Fd Amb clinic, the clinic CO holds that power. In the Fd Amb example, the CO is provided numerous assigned and implied tasks in order to direct resources and training so that mission success is achieved. A non-Fd Amb clinic is directed in the same fashion; however, the Fd Amb is structured for domestic and expeditionary operations – and must also consider all of the tasks associated with providing health care in garrison through the subordinates clinics attached. The objectives associated with conducting domestic and expeditionary medical operations are considerably different than the objectives assigned to providing non-emergent health services to a garrison population. The necessary core tasks, skill sets, and timetabling to accomplish the tasks required for both are significantly different. This puts strain on a divisional system where centralized departments exists to provide common services for departments to function. For example, the Headquarters company, headed by the Deputy Commanding Officer, is staffed purely to support Bde planning and operations. There is no mandate to be involved in clinical practice of providing healthcare. Similarly, the support and communications platoons are structured to integrate into Bde logistics and communications. There is no mandate to support clinic operations. These examples illustrate the difficulties that occur when a functional

structure (existing clinic model) is thrust into a divisional structure and expected to operate like any other department within the organizational design of a division. Daft aptly points out a fundamental weakness to divisional structures that is apparent in Fd Amb Units. Functional departments are “unable to realize economies of scale when dealing with some products and services.”⁷¹ Furthermore, standardization and integration across services is often complicated. These issues do not exist among non-Fd Amb clinics that are departmentally structured in accordance with Rx2000s.

PART TWO SUMMARY

Part two introduces and explains the PCRI military healthcare model and how it fits into the Rx2000 policy framework. This section considers how the CAF clearly defines its healthcare structure and its organization as a departmental structure to be used broadly across CAF healthcare clinics. The discrepancy in the structure described in Rx2000 versus the practical reality of the existing divisional structure used in Fd Amb clinics is made apparent. In addition, aspects of complexity are introduced to the models by dual chains of command reflected by the roles of Base Surgeons and the professional technical network that exists within clinics, regions, and the HS Gp. The differences between these structures are considered based on the part one analysis of strengths and weaknesses of departmental and divisional structures clinics relative to each other and within the context of their environment with unique missions, mandates, stakeholders, and reporting structures. Moreover, the system of performance measurement, accreditation, and standardization is explored in broad terms and how it is applied to the Rx2000 policy and PCRI model. Finally, clinical structure contradictions are explored with a view to understanding competing priorities, authority and accountability, and the assigned operational objectives required for clinics to meet is clinical and operational mandate. The section suggests

⁷¹Richard Daft, *Essentials of Organization Theory and Design*, Scarborough: Thomson Ltd., 32.

that the discrepancy in organizational structure is a root cause to numerous problems that exists at the tactical medical clinic model specifically in Fd Amb units.

SECTION THREE – PROBLEMS SETS AT FIELD AMBULANCES

The following problem sets are generated from numerous working groups among key clinic staff at 2 Fd Amb medical clinic, involving the Clinic Manager, Base Surgeon, senior managers, and relevant system stakeholders/end-users.⁷² Additionally, the listed problem sets were discussed and agreed upon by the previous Clinic Manager and Base Surgeon as well as the Clinic Managers from field units in Valcartier and Edmonton. The following problem sets are inclusive of all CAF Fd Amb medical clinics in order of perceived relevance: leadership continuity, a lack of uniformed clinicians, a lack of qualified managers, and ineffective training.

LEADERSHIP CONTINUITY

CAF medical clinics rely on a command-team based leadership triangle to ensure responsible decision-making and resource usage. The Clinic Manager, Base Surgeon, and Clinic Sergeant-Major make up the leadership triangle at all CAF medical clinics and each represents a specific dimension of clinic operations. Rx2000 policy suggests that the leadership team has “shared responsibility and accountability for the successful operation of their clinic.”⁷³ Although that view is philosophically correct in that each member’s contribution to the CAF medical clinic leadership team is required for overall success, accountability belongs to the Clinic Manager for clinic related issues and decisions. The Base Surgeon and Clinic Sergeant-Major, however, are responsible for their decisions and activities in line with their specific terms of reference (job descriptions). This view provides a level of interpretation not found in Rx2000 policy and contributes to the complexity of governance in the CAF medical clinics, and should therefore be made transparent in policy to reflect the tactical reality of clinic operations. Ideally, Rx2000

⁷² I was the clinic manager for two years at 2 Fd Amb and had considerable experience dealing with the Unit as a key stakeholder while I held the positions of Deputy Commanding Officer 1 Canadian Field Hospital (2 years) prior to posting to 2 Fd Amb clinic as the Clinic Manager. I had the advantage of a diverse perspective, having serviced at a combat arms Unit (3 RCR) and an Infantry Officer, and working in the Petawawa senior leader environment for many years prior to fulfilling my duties as a Clinic Manager in a Fd Amb Unit.

⁷³ Canadian Forces Health Services, *Rx2000: The Canadian Forces Medical Clinic*. Ottawa, A-4-2.

depicts the CAF medical clinic leadership team in an equilateral triangle, with the Clinic Manager (as a CO) at the top, indicative of his or her level of accountability to the organization. The Base Surgeon is at either side of the base of the triangle, providing medical advice and ensuring standards of clinical care within the established chain of command and their professional technical network. The Clinic Sergeant-Major is positioned at the other base of the triangle, providing mentoring, discipline, operational expertise and training inputs.

Clinic Manager

The Clinic Manager is responsible for the delivery of all health services programs and care delivery within the supported geographic base location, including possible detachment sites. A large aspect of providing health services programs is the management of program delivery through daily operations that meet the accreditation standards as established by Accreditation Canada.⁷⁴

The Clinic Manager must also ensure that fiscal responsibility within the clinic is maintained in accordance with healthcare policy and Treasury Board guidelines. Under the direct supervision of a formation commander, normally a Health Services Group (HSG) Commander, the Clinic Manager (a CO) must develop a yearly business plan for their clinic that aligns with the medical group's Commander's Planning Guidance (CPG) and strategic intent. Key aspects of this plan include the development of a consistent mission, vision, and values as well as a pragmatic approach to achieving assigned and implied tasks using the resources provided within their clinic.

Base Surgeon

The Base Surgeon's key function is to provide professional technical oversight of all clinical activities required for healthcare delivery within the clinic and its associated detachments. The Base Surgeon uses a multi-disciplinary collaborative approach to coordinate

⁷⁴ Canadian Forces Health Services, Rx2000: *The Canadian Forces Medical Clinic*. Ottawa, A4-3.

all clinical programs, specialty programs, new medical initiatives, and primary care outputs related to the delivery of healthcare. They also provide medical advice to Units, Bases, and Formations.⁷⁵ The Base Surgeon must also remain well-versed in healthcare policy, changes to the provision of care and allowances, and innovation in medical procedures and equipment that may enhance clinical operations.

Clinic Sergeant-Major

The Clinic Sergeant-Major (Clinic SM) has a dual role within the clinic to provide both leadership and clinical expertise within their environment. Clinic SMs are certified Physician Assistants, and therefore have a wealth of medical knowledge to share with junior medical technicians. They have a significant role, therefore, in the development and training in the medical technician cadre that works within the care delivery units (CDUs) of each clinic. Furthermore, the Clinic SM advises medical technicians on updated standards of practice. In addition, they manage clinic dress and department, non-commissioned member (NCM) career management, and mentoring. They also work part-time as a Physician Assistant to help CDU manage patient load during peak operating periods.

The Medical Clinic Command Team

The triangle command team concept works best when its members are present and actively engaged in daily activities at the clinic. Leadership continuity, therefore, begins to suffer when any one of the three members in the command team triangle are absent for prolonged periods of time. Furthermore, each CDU is formulated on the same construct with a physician team lead (Captain or Lieutenant-Navy), primary care nurse (Captain or Lieutenant-Navy) and an experienced non-commissioned medical technician. This triangle is important in

⁷⁵ Ibid.

establishing consistent care within each CDU and among the multiple CDUs within any CAF clinic.

Leadership continuity is adversely affected when experienced personnel are absent for prolonged periods of time. In regular clinics with no Fd Amb affiliation, the ability to plan and synchronize schedules, a key responsibility held by the Primary Care Services Manager, is consistently easier than in Fd Amb clinics for many reasons. Firstly, in a regular clinic the CO of the clinic has final approval on the resource allocation of its people in concert with the HSG commander's approval. The clinic CO has a primary mandate to provide consistent garrison care although on standby to support training and operational tasks – that means keeping the clinic staffed to provide clinical services. When tasks/operations are populated, the clinic CO has the ability to negotiate with an HSG commander based on the needs of their specific clinic and personnel negotiations take place. That is not the case in a Fd Amb medical clinic. As high tempo Units working within a Brigade atmosphere, the Clinic Manager is an officer commanding a company (OC) who must report to a CO. The CO's primary objective is to support operations. That is accomplished by using his or her resources as they see fit, which in many cases translates to a high number of taskings to the clinics embedded within their chain of command. Regardless of the objections raised by a Clinic Manager (OC in a Fd Amb) the CO has the power and authority to make the final staffing/personnel decision. More importantly, unlike the HSG commander who commands numerous clinics within a region and may decide to spread a task out among multiple clinics (across provinces) to offset the clinical impact of creating physician or medical technician absences, a Fd Amb CO does not have that authority. His or her Unit must absorb the prolonged loss of personnel resources, thereby having a greater impact on garrison clinical operations.

Typical examples of the aforementioned leadership continuity problems stem from Base Surgeon, Clinic Manager, and Team Lead absenteeism, which is quite typical in Fd Amb medical clinics. In 2016, the Clinic Manager from 2 Fd Amb was sent on an operational tasks, career training, and conducted mandatory professional development which amounted to approximately eight months of absence from positions once annual leave was calculated. In their place, a junior Captain with less than five years of military experience was appointed Clinic Manager. In addition, the Base Surgeon was selected for post-graduate studies, and the clinic was ordered to manage the position with internal resources. A senior Lieutenant-Navy (physician) was appointed to the positions for most of the reporting period, and in his absence (due to leave, professional development, taskings), the remaining junior captains from the CDUs would fulfill the role of Base Surgeon. Of note, the movement of positions causes increased disorganization in the lower levels of the chain of command. Appointing a CDU team lead then deprives the CDU of its command team and even more junior members become responsible for the provision of care and service delivery. The reality and tempo depicted by the above example is not an exception to routine operations, but appears to be the reality in Fd Amb medical clinics. Long-serving public servants and medical support staff/clinicians often bear the brunt of the leadership inconsistency which creates stress and unpredictably in the provision of daily healthcare. Stress and unpredictability are neither principles of Accreditation Canada nor the Surgeon General, and as such, a system of consistency is required and mandated to develop consistent and safe healthcare.

A Lack of Uniformed Clinicians

There is a considerable debate about the use of uniformed clinicians within clinics in a military healthcare system. There has been an appetite to convert some positions to civilian public service positions in order to create consistency within the garrison clinic environment.

The benefit to these positions is that it increases consistency and allows uniformed clinicians to deploy on operations and support training as required. There must be a balance; however, as the needs of patients are diverse and it is important that military physicians develop skill sets within a consistent clinical environment prior to applying medical skill sets in a theatre of operations. The main factor that affects the lack of uniformed clinicians in Fd Amb medical clinics is operational tempo and associated staffing priorities.

High operational tempo and its staffing has the largest adverse impact on clinic operations, and is rarely the fault of any clinician or the clinic leadership team. The Rx2000 model used to calculate the division of labour of a military physician is significantly flawed as it does not take into account all variables within its equation. Military physicians are considered a 0.5 full-time establishment (FTE) for any clinic to which they belong. The other 0.5 FTE of their time is to account for operational deployments, continued military education, maintenance of clinical skills program development (MCSP), officer professional development, and leave.⁷⁶ An analysis conducted by 2 Fd Amb staff illustrate that the FTE ratios are grossly incorrect. An assessment of all military physicians revealed that on average 0.2 FTE hours were spent in the clinic providing care, while 0.8 FTE hours were utilized conducting the other activities required of a military physician. This analysis included the Base Surgeon position.

Spikes in operational tempo in Fd Amb medical clinics translate into deployed military physicians. The culture of a Fd Amb unit is such that those posted to these units know that they are posted there in order to deploy and support expeditionary or domestic operations. It is not culturally accepted to post into such units and have an expectation to remain behind within the clinic to provide medical continuity. It becomes the Clinic Manager's job to find human resource tactics to backfill positions to allow deployable military physicians the opportunity to

⁷⁶ Canadian Forces Health Services, *Rx2000: The Canadian Forces Medical Clinic*. Ottawa, C-6-0 – C-6-10

deploy and gain operational experience. Backfilling occurs for physician positions in the form of public service, reserve force, or Calian contracted physicians to facilitate operational tempo.

The divisional structure that exists within a Fd Amb unit does not allow a Clinic Manager the requisite authority to balance its physician or clinical staff positions and therefore meet the provision of care mandate as set out by Accreditation Canada. It is the Fd Amb CO authority that is final. In most cases, the CO is forced to deploy his or her clinic physicians in order to support his or her line of operations – at the detriment of continuity of care, garrison medical care, and Accreditation standards. The divisional structure, therefore, and its associated chain of command in the context of a Fd Amb Unit is one of the root causes of a lack of uniformed clinicians working within Fd Amb medical clinics. This is a systems problem that must be addressed as it is irreconcilable at the tactical level within the current construct of garrison healthcare.

A Lack of Qualified Managers

The lack of qualified managers in Fd Amb medical clinics is largely the result of a shortage of appropriately trained personnel to occupy necessary positions. Important management positions in a Fd Amb medical clinic include Primary Care Services Manager, Support Services Manager, and Operations and Training officers, to name a few. These positions are part of a typical clinical departmental structure and closely resemble those positions and authority levels found at comparable civilian healthcare facilities. The ability to perform at a high level in these positions is indicative of a combination of education, experience, management skills, and communication abilities that allow one to acquire the necessary understanding of a military clinic system within a military healthcare environment. Understanding of federal health policy, finance, government policy, military healthcare doctrine, and the business planning process are also key attributes to being able to function in this environment. Additionally, having an appreciation for military culture, posting cycles, knowledge management, and change

management (due to regular posting turnover) assists with job mastery in any one of the above-mentioned positions.

The military is known for posting personnel possessing high potential with limited experience into key positions so that they acquire necessary career skill sets while conducting daily business. Many technical management positions, however, have an expected element of technical mastery in order to function at a competent level of output. The Support Services Manager position, for example, is an experienced middle manager in the civilian healthcare industry who thoroughly understands systems, resources, stakeholder, and how to get things done to support all departments within the clinic environment. It takes years of job training and experience before a civilian organization will consider hiring a support services manager due to the complexity of their job, and the number of departments and stakeholders that they must support on a daily basis, and a thorough understanding of the human resources system used within their organization. It takes a well-trained, educated, and mature individual to perform competently in this employment.

A Fd Amb CO will typically conduct yearly posting rotations in order to professionally develop his or her officers to expand job skill sets and in doing so emplace junior officers to some of these important management roles. This routinely occurs because the most experienced junior officers are strictly managed to occupy the positions of Unit Operations Officer, Adjutant, and acting Company Commander at the Fd Amb HQ. These employment shuffles ensure that experienced personnel are placed in the jobs that the system recognizes as complex, and generates the required personnel evaluation reports to assist with promotion and general career advancement. This is not the case in a Fd Amb medical clinic, where the most junior of officers are placed to develop administrative skills sets since the most senior officers are selected to work

within the Fd Amb HQ. Within the divisional structure of a Fd Amb, the positions that are deemed senior and essential either directly support the CO of the Fd Amb or the headquarters. The clinic, embedded as just another division, does neither.

In situations where there is an abundance of trained personnel resulting from a healthy posting cycle, it is rare that the Fd Amb clinic will receive additional support. This reality is largely to do with the unpredictable tempo of operations and the rigorous training schedule imposed by a Brigade. The ability to develop necessary initiatives that require dedicated staff support, such as the development and utilization of a Quality Improvement (QI) manager is limited. Even though the standards established by Accreditation Canada strongly recommend the use of a QI manager to focus on healthcare data and the tracking of trends, the military healthcare system appears to be unable to standardize a system of data collecting, tracking, and trend analysis. A Fd Amb clinic is therefore unable to establish and measure benchmarks and comparable metrics among other CAF clinics. The high operational tempo set by Bde, combined with the existing divisional structure imposed by any Fd Amb HQ makes it extremely difficult to allocate a dedicated FTE to track data when there are periods of time when physician FTE numbers fall below mandated levels to appropriately staff CDUs. Although there have been efforts for clinics to independently staff QI manager positions, the staff vacuums created by a lack of clinicians usually means re-allocating positions to be used to find additional clinical support for CDU staffing.

Non-Fd Amb medical clinics have better outcomes when it comes to staffing key positions. COs of these units have a greater voice when it comes to yearly posting cycles and have less positions within their Units to fill within their functional department structure. The divisional structure at a Fd Amb competes with itself in that it gets a allocated number of

positions posted to the Unit, but must de-conflict where to post its members between the field and clinic side of the organization. In the case of a Fd Amb medical clinic, the Clinic Manager has little influence in this process and receives what he or she is given by the CO of the Fd Amb.

Ineffective Training

Clinical skills training and military training are two primary forms of training for health services personnel within the CAF that enable them to thrive as leaders within the institution. The tempo for military training in field units is greater and more thorough relative to non-Fd Amb medical clinics within the CAF. As such, more time must be scheduled to accommodate the various forms of training and suitably qualified personnel must be selected to conduct training – especially if it is advanced medical training involving life-saving procedures. Too many outside factors influence the necessary clinical skills training that must be conducted in clinics as part of routine professional development. These include: excessive training tempo and a lack of personnel continuity.

In a Fd Amb medical clinic, training tempo is not established by the clinic operations and training officer as it is in all non-Fd Amb medical clinics. Rather, it is conceptualized by the HQ's training officer and the Unit's Deputy Commanding Officer (DCO). The training tempo for a clinic, therefore, is largely dictated by the Bde training schedule where the clinic (a company within the Unit) must adapt to the larger scenario in order to support the Bde and Unit training mandate. That leaves limited time for any Fd Amb medical clinic to establish a clinical skills training program within a garrison healthcare environment. Specifically, the type of training that must be conducted by physicians and medical technicians is significantly different within the garrison clinic and the field at an operational base. Typical field military clinical training involves complex trauma, gunshot wounds, and concussion scenarios involving war-type injuries. Clinical skills training in a clinic environment involves family practice medical skill

sets, organizational skills, basic and advanced triage and prioritizing, and medical report and patient follow-up skill development in a relatively minimally stressed environment. Those most suitable to conduct garrison clinical training are those that have the most experience working in the garrison clinic or civilian practice/hospital environment. That is why physicians are only scheduled to be employed within the clinic for half-time (0.5 FTE), as part of the remaining time is allocated to develop medical skill sets in civilian institutions as part of the Maintenance of Clinical Skills Program (MCRP).

The reality that has emerged is that training becomes non-existent and therefore ineffective because those required to conduct the training are normally required to conduct operational medical training to support the Fd Amb. It is often the most junior or injured personnel who are left behind in the clinic when a Fd Amb conducts its pre-training cycles, training, and deployments, thereby creating a considerable knowledge gap that cannot be filled until such time as the qualified members return to the clinic from their training or task with the Fd Amb. During a rigorous and prolonged training cycle, it is not abnormal for a non-Fd Amb clinic to be reduced to only one or zero military physicians. It is the remaining public servants and Calian contract staff that ensure a basic continuity of care exists for the garrison population of patients.

Training tempo issues in a Fd Amb medical clinic environment is further exacerbated by a lack of personnel continuity due to postings and assignments. All Units within the CAF must deal with the turmoil created by routine postings; however, a Fd Amb has the added complexity of balancing clinical staff between a clinic and a field Unit. Where a normal Unit within the CAF might see a personnel turnaround cycle of two to three years, and in some cases four (if an extension is granted), it is rare for a Fd Amb medical clinic to keep key people in positions for

more than one year. If their posting time to a Fd Amb is two to three years only, that time will arbitrarily be split between supporting the Fd Amb proper, working at the medical clinic, or deploying on operations. A non-Fd Amb clinic posting plot is far more stable and most postings last their entire duration to ensure that individuals posted into the Unit learn and master their job, and apply these new skill sets prior to changing jobs. The inability to master a job in a Fd Amb clinic due to lack of continuity hinders the ability to develop and deliver training. Training delivery is problematic when the people responsible to deliver the training are not yet experienced in their new clinic roles. Furthermore, a change in personnel means a change of personalities and technical abilities. These routine changes hamper the development of a consistent and progressive clinical training program that can be implemented and supervised by senior personnel. The ineffective training reality that exists at an Fd Amb medical clinic, therefore, has everything to do with the structure of the organization that is deemed critical to remaining intact at the expense of skill development. Some view this as a governance issue, although it speaks more to a total system structure misalignment.

GOVERNANCE

The ability to design, implement, and supervise an organizational structure to enable production in any sector requires governance. Healthcare governance has emerged as a significant topic of study over the past two decades due to the evolution of output oriented health systems that are designed to reduce costs while increasing the quality of care afforded to patients.⁷⁷ In a macro sense, this is a work in progress and some healthcare costs decrease, others increase, yet in many cases the quality of patient care is not increasing. This is a concern of many healthcare systems hence the need for good governance.

⁷⁷Alberta Health, *Working Together to Build a High Performance Health System: Report of the Health Governance Review Task Force*, Alberta Government, 3-5.

The Surgeon General, as the ambassador of military healthcare leading one of the most complicated healthcare systems due to its national coverage, is empowered to ensure that a suitable structure exists within a framework that is able to demonstrate proper governance. His framework is developed from key responsibilities that must be considered in the development of an efficient system. The responsibilities of the Surgeon General include: health research; health education; quality and patient safety; coordination with territorial and provincial health systems; liaison with various health authorities; public, occupational, and environmental health; advice to all levels in the chain of command; regulation of the military healthcare profession; and surveillance and analysis of CAF health.⁷⁸ In accomplishing all of the above responsibilities within the CAF healthcare system, the Surgeon General is also responsible to ensure that the CAF follows provincial and federal legislation affecting its many clinics across Canada. To enable this system, healthcare policy must be developed at the strategic HQ level to create a consistent system for safe, high quality healthcare to military end-users.

As discussed in chapter two, Rx2000 developed a clear and functional departmental healthcare system to be governed by both a military chain of command and professional technical oversight. This in itself proposes considerable challenges, recently analyzed in the post-graduate work of Colonel (retired) Scott McLeod of the strategic medical HQ. He wrote extensively on the requirement of a modernized governance framework to enable professional technical oversight to a healthcare system that should be patient-focused and centered on health outcomes. While he makes many strong points for the need to rationalize the relationship between a military chain of command and a professional technical oversight, he fails to consider that the system that requires governance is not consistent across the CAF at the tactical level.

⁷⁸ Director Defence Governance, "Draft Reference B: Draft ARA Framework for Special Advisors" The Department of National Defence, Ottawa. 4.

Those who have not served in Fd Amb medical clinics have issues grasping the organization conflict that exists between clinic operations and field operations – especially when all Fd Amb Units must prioritize field operations as critical outputs. Within this allowed sub-structure, which is not identified in Rx2000, the military chain of command is ultimately responsible for governance and maintenance of the healthcare system. That is a major concern, as it puts a CO of any field unit in a conflict of interest position to divide resources for the provision of the healthcare for a garrison population while providing the same pool of resources to support operations. Colonel (retired) McLeod states the following:

If one was to take the definition of governance used...to be the decision-making framework of an organization that clearly identifies the appropriate authorities, responsibilities and accountabilities of those who have been entrusted with making decisions related to ensuring the core objectives are met at various levels within institutions or organizations then clinical governance is simply putting safe, high-quality healthcare as the core objective to be met.⁷⁹

A credible healthcare system, therefore, must place high quality healthcare as the core objective to be met. That is the main priority. A Fd Amb medical clinic is unable to do that in its current organizational construct as a division within a parent unit, as the core objective will always be to provide support to operations in the parent unit. In order for Colonel (retired) McLeod's vision to be realized, there must be one consistent clinic model, reflected by a uniform structure based on system benchmarks that allow for comparison and improvement of health outcomes. That is currently not the case due to the Fd Amb clinic anomaly that exists within the CAF's medical system.

⁷⁹ Scott McLeod, *Healthcare Governance In the Canadian Armed Forces*, Canadian Forces College, 18 May 2015, 63.

PROPOSED STRUCTURE

The complexity of the CAF healthcare system and its national scope demand a simplified approach to an organizational structure that will allow the nuances of a chain of command military organization to exist within a system requiring the professional technical network to maintain the highest possible levels of healthcare governance. The current system, whereby some of the nation's largest military clinics are imbedded into Fd Amb units cannot be maintained if good governance is to be achieved. Additionally, the added complexity of a healthcare divisional structure within a system that is designed to support a departmental structure will not enable national standardization and proper performance measurement.

A traditional matrix structure, upon first review, would appear to resolve some of the issues that exist with the chain of command versus the professional technical network issues within the current clinic model. A matrix structure, as outlined in section one, is effective when service or product innovation as well as technical experience is important for meeting organizational goals. Often matrix structures are used when functional, divisional, and geographic structures (when combined with horizontal linkage mechanisms) are ineffective.⁸⁰ The matrix structure makes use of strong horizontal linkages and formalizes the communication and coordination that must occur across these linkages to reduce organizational conflict. Matrix structures function best when both service managers and functional managers have equal authority and clearly established lines of communication within the organization. Employees report to both sets of managers on the horizontal and vertical communication and authority lines. A dual hierarchy exists to ensure that the best service is delivered to the end user.

Theoretically, the three conditions that must be present for a successful matrix structure to thrive cannot be met in context of military healthcare. The absence of scarce resources

⁸⁰ Henry Mintzberg, *The Structure of Organizations*, New Jersey: Prentice-Hall, 168-169.

(condition two) and general environmental volatility (condition three) would prevent the use of a matrix structure as other structures would be better utilized in this situation to exploit their strengths and weaknesses. Furthermore, the matrix structure is the most complicated of all structures and although the structure itself allows for the depiction and explanation of dual lines of communication, it is heavily dependent on personalities and as such, proven to work better in small to medium sized organizations with specialized product output. Moreover, military culture is such that the military chain of command is traditionally dominant over any other formal or informal line of communication. In the case of medical management, the use of a professional technical network is often paramount to patient care and would have to be prioritized over the traditional chain of command.

The integration of a professional technical network with a traditional chain of command would also provide problematic with Galbraith's Star model. Although the tenets of the model (strategy, structure, process, people, and rewards) depict an equal balance of functions, the model is heavily reliant on key individuals that provide consistency to key positions to then enable the complex network of relationship to form. The continuous movement of personnel within the military will not allow for the necessary communication network to emerge and create consistency in the model. The Star model provides the most flexible framework to develop a new system of communication, authority and control to merge the traditional chain of command with the professional technical network, but lacks positional consistency and overall stability.

A classic departmental structure, therefore, should be maintained in all CAF clinics without exception, with a view to refining governance within the system. Specifically, Fd Amb medical clinics need to be severed from Fd Amb structures so that they may exist as a departmental system within the already accredited and established military healthcare system.

This model already works for all non-Fd Amb clinics across the CAF. The majority of the system was designed to function departmentally, based on an Rx2000 policy that reflects modern healthcare establishments – many of which are successfully managed and resourced.

Accreditation Canada has proved that this is attainable, as all CAF clinics were deemed fully accredited in 2014.

STRENGTHS AND WEAKNESSES

There are numerous strengths associated with using a departmental structure to sever Fd Amb medical clinics from parent Units so that they function consistently with the remaining CAF clinics. They are: ability to establish clear priorities and objectives, autonomy of resources, easier alignment of the chain of command and professional technical network.

S1 -Clear Objectives and Priorities

Fd Amb medical clinics that are severed will have an independent business plan and receive specific annual direction from the yearly Commander's Planning Guidance documents. The strategic direction given to Fd Amb medical clinics should look relatively similar, with objectives related primarily to the provision of healthcare. Competing objectives between supporting Fd Amb operations and providing care will cease and the focus on clinics is to use resources internally to support clinic operations. Only spare capacity/resources would be considered for additional tasks or support to operations. Additionally, structural uniformity across will allow for consistency and the necessary changes required for proper governance. The establishment and evolution of performance measurement and national benchmarking will be extremely difficult if clinics differ drastically in structure due to inconsistent goals, objectives, and priorities.

S2 - Autonomy of Resources

The current system already provides a business plan and funding allocation specific to Fd Amb medical clinics even though the Fd Amb proper receives its own business plan. A single business plan will align financial resources with activities, supported by the appropriate level of human resources to rationalize the business plan. The key resource in a medical clinic is trained and experienced clinicians and managers. The ability of a medical command team to allocate its resources across CDUs and balance CDU operations based on patient flow is paramount to success and must be left in the hands of clinics, not parent Units. A Clinic Manager cannot be an OC working for a CO with no autonomy to manage resources – nor should they be put in a routine situation of conflicting priorities where they are unable to attain their assigned objectives because they ultimately do not control their own resources.

S3 - Alignment of Professional Technical Network and Chain of Command

The maintenance of a departmental structure by severing Fd Amb medical clinics will help to align the professional technical network and the chain of command. In this case, the medical command team, comprised of the Clinic Manger, Base Surgeon, and Clinic Sergeant-Major, will exist with proper authority, responsibility, and accountability to make both medical and administrative decisions that are best for patients and the institution as a whole. The power triangle works when it is practiced and maintains its autonomy with operational support from command (the HSG Commander) and the prof tech (Regional Surgeon support). It does not work when it is subjected to an artificial layer of command (in the case of a CO of a Fd Amb) that is driven mostly by command principles and a different set of operational objectives.

There are two key weaknesses associated with the maintenance of the current divisional structure and the severing of Fd Amb medical clinics as follows: increased resource allocation and development of a competitive sub-culture.

W1 – Increased Resource Allocation

Removing a Fd Amb medical clinic from its current structure would increase the already scarce resource allocation to ensure clinic functionality. There are some key administrative functions that are centralized in a typical Fd Amb Unit that a Fd Amb medical clinic is able to exploit, such as orderly room services, travel services, pay, and advanced administration. Although typical clinics have dedicated staff to ensure that these functions occur, Fd Amb units centralize these services as part of the HQ and provide them as required to all end-users. A restructure, therefore, would have to occur at both the clinic and the Fd Amb. The Fd Amb medical clinic would require additional positions and the associated salary wage envelop (SWE) to ensure that it could conduct all necessary administrative functions to support operations. Similarly, the Fd Amb would find itself short on physicians and medical technician positions, as these personnel are routinely borrowed from the clinic at the expense of clinic operations. Position growth would have to occur at the Fd Amb Unit to offset this loss of resource control and this is unlikely in a time of financial constraints.

W2 – Development of a Competitive Sub-culture

The balance and re-allocation of resources discussed above potentially creates a competitive and unhealthy medical Unit sub-culture. Some of this culture currently exists at operational bases such as Petawawa where three different medical Units are located. Among each Unit, rivalry exists and each Unit reports to a separate operational chain of command. The ability to consistently borrow resources or personnel between units is technically chain of command driven, but lateral negotiations occur at the tactical level in order to satisfy operational demands. Balancing Unit demands across tactical Units is successful when relationships between key leaders are positive. Conversely, when personality drives poor relationship among the same group of stakeholders, potentially unhealthy Unit rivalry may emerge and egos vice

production may become central to managing operations. Regardless, the creation of an independent clinic within an environment of other medical units will also drive competition towards professional development opportunities, training, and career progression course. Too high a concentration of medical members in one geographic area may bring to light frictions that may have otherwise been resolved at the lone unit level. Again, operational command may have to become more involved to ensure that an equal opportunity culture exists for all operators wearing a medical cap badge.

CONCLUSION

Healthcare is a complicated business and a priority among the majority of the Canadian population. Military healthcare is increasingly complex because of its exclusive federal mandate for military members having to be provided similar levels of service in each province where different civilian systems exist. Further complicating an already complex system will not resolve the issues in any system and military healthcare is no different. One way to simplify a healthcare system is to adapt a consistent organizational structure across Canada that will enable some level of stability when many of the other system inputs are variables. For example, high operational tempo and position turnover due to postings would create organizational chaos in the best of systems. A disjoint, hybrid, or inconsistent system, adds further complexity to an aspect of the organization that, in theory, should be standardized. This added complexity is what currently exists at all Fd Amb units whereby a divisional organizational structure is being forced upon medical clinics that have the resources and patient throughput to be lone entities like all other clinics within the CAF.

The purpose of this paper, outlined in its thesis, is to demonstrate that an inconsistent organizational structure used to provide healthcare at Fd Amb units inhibits organizational and

system standardization and the ability to provide the appropriate level of patient care in these complex environments. Section one outlines organized system complexity and considers bureaucracies in their theoretical form. Specific classical organizational structures are then discussed, exploring composition, application, strengths and weaknesses of these systems.

Section two focuses on the military healthcare system and how PCRI is structured as a result of the Rx2000 healthcare policy. The typical CAF healthcare structure is explained as well as the variation that exists at Fd Amb units across Canada. System strengths and weaknesses are considered, evaluating performance measurement, accreditation, and overall standardization that expose structural contradictions. A focus on the organizational structural contradictions that exists between Fd Amb medical clinics and all other CAF clinics reveals root cause problems that exist in all Fd Amb units.

Section three analyses the specific problems that exists at Fd Amb clinics as a result of inconsistent organizational structure, contrary to the Rx2000 policy framework. The key issues examined are: leadership continuity, a lack of uniformed clinicians, a lack of qualified managers, and ineffective training. These problem sets take into account the uniqueness of military service (e.g. postings, operational tempo) but consider the nature of the problems from an organizational design theory perspective in that an established structure alone can be the root cause for key issues within an organization. This is the case with Fd Amb clinics.

Governance, as a critical concept in healthcare, is then examined due to its importance in ensuring regulation of a medical system from a legislative, professional, and experiential perspective. Military healthcare governance must exist in an organizational system that ensures a feasible blending of the military chain of command for military leadership and the professional technical network for clinicians. Both systems must exist within one organizational structure

with a view to maintaining a credible military healthcare system that rationalizes the medical needs of the patient in conjunction with the operational needs of the military.

The proposed structure to resolve the organizational design structure disparity within Fd Ambs is a classical departmental structure, currently outlined in Rx2000. The implementation of a uniform structure throughout the CAF would mean a severing of Fd Amb medical clinics from Fd Amb units. Strengths and weaknesses of these actions are considered and with a governance review ongoing at strategic medical HQ, the strengths in the long-term outweigh the weaknesses of maintaining the status quo. In addition, accreditation standards, now implemented across the CAF medical system, are designed to evaluate and measure a departmentally structured healthcare system as per the majority of systems used in provinces across the country. Allowing hybrid clinics to function, yet imposing the same standards upon them is inconsistent with Rx2000 methodology and detrimental to the provision of care and the standards measured by Accreditation Canada.

In an effort to enable a system-wide governance structure, CAF medical clinics need to be consistently structured in accordance with Rx2000 departmental structure. The clear lines of communications, assigned responsibilities, associated accountability, and resourcing associated with this organizational model will enable the application of a governance model that will work in conjunction with Accreditation Canada guidelines and help to establish a credible healthcare system that can be measured against similar provincial public healthcare systems. The CAF military healthcare system must not only prove to work in the interest of its members, but also prove to be credible among other established systems if it is to evolve.

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