WHAT IS THE ORGANIZATIONAL CULTURE REGARDING USE OF FAMILY NURSE PRACTITIONERS AS PERCEIVED BY SELECTED OBJECTIVE MEDICAL GROUP EXECUTIVES

1997

O'ROURKE

THE ORGANIZATIONAL CULTURE REGARDING USE OF FAMILY NURSE PRACTITIONERS AS PERCEIVED BY SELECTED OBJECTIVE MEDICAL GROUP EXECUTIVES

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ABSTRACT

Current political and social climate offer both challenges and facilitators to the Air Force (AF) implementation of Family Nurse Practitioner (FNP) services. Whether or not FNPs can successfully integrate their advanced practice role within the current Air Force health care culture not only depends upon the core competencies obtained through their formal educational program but extends into Surgeon General (SG) role expectations of the FNP role. Furthermore, there must be the identification of a need for FNP services at the local Objective Medical Group (OMG) level. The purpose of this descriptive study was to assess and describe the organizational culture as perceived by the Chief of Medical Staff (CMS), Chief Nurse Executive (CNE), Administrator (SGA) and Medical Operations Squadron Commander (MDOS/CC). Data collection was conducted through a mailed survey to selected health care executives (N=224) at 56 OMGs. A response rate of 76% indicated study relevancy. Almost three quarters of current OMG executives support the addition of FNP services. Culture change must be initiated through top management. Highest consensus among OMG executives was found in the agreement that preventive care would be increased through the addition of FNPs to provider staff. Given the current instrument limitations, executives generously qualified their survey choices over and above what was asked for by survey instructions. The military FNP role has given OMG executives additional choices in forecasting the most appropriate provider- mix for the care recipients. Economic and consumer outcomes from military FNP services are not yet known. Further study is needed to understand how organizational culture impacts FNP role expectation/fulfilment.

WHAT IS THE ORGANIZATIONAL CULTURE REGARDING USE OF FAMILY NURSE PRACTITIONERS AS PERCEIVED BY SELECTED OBJECTIVE MEDICAL GROUP EXECUTIVES

by

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DEDICATION

To my mother,

BETTY GIAQUINTO PECK

(1917 - 1991)

Whose dreams taught me that life holds no limits,

and to stretch for the stars,

that achievement is sparked through the love of learning.

You gave me this sparkle, Mom.

and,

~ To military and civilian nurses everywhere - Find and follow your dreams ~

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I must extend my appreciation to my family: Lauren-Rose and Collin-James who efficiently maintained the household during my mental absences throughout the past year. They have surprised me with gourmet dinners of pasta, jell-o, biscuits and salad; and tried their hardest to give me the study-time needed.

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For any contribution this paper possibly makes to the advancement of knowledge on FNP utilization, the aforementioned must share some of the credit. However, I take full responsibility for any errors found within.

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The significant problems we face cannot be solved at the same level

of thinking we were at when we created them

~ Albert Einstein

CHAPTER ONE: STATEMENT OF THE PROBLEM

Introduction

The purpose of this study was to survey the attitudes of key members of the executive management team at Air Force Objective Medical Groups (OMGs) regarding their degree of agreement about selected strategic planning factors and organizational receptivity factors surrounding the implementation of Family Nurse Practitioners (FNPs) at the Objective Medical Group (OMG) level. Furthermore, specific and general anticipated contributions and change expectations were elicited and are described from Air Force officers in the Chief Nurse Executive (CNE), Chief of Medical Staff (CMS), Administrator (SGA), and Medical Operations Squadron Commander (MDOS/CC) positions.

United States health care has moved away from an emphasis on inpatient, acute-care settings into a system that strives to provide comprehensive and coordinated primary care services. Military health has been included in this dynamic shift. The United States Air Force Nurse Corps (USAFNC) recently graduated its first class of FNPs from the Uniformed Services University of the Health Sciences (USUHS). These ten FNP graduates have been assigned to various stateside and overseas medical treatment facilities. An additional 15 future providers of Air Force health care are presently enrolled in the USUHS Family Nurse Practitioner program. In addition, Air Force health care leaders recently realigned most medical treatment facilities (MTFs) into Objective Medical Groups (OMGs). Realignment of local command line authority has transcended the traditional corps-specific channels of communication and authority. Military medical

medicine has never before been the subject of such strong reeingeering efforts. Changes in health care delivery combined with the growing ambulatory health care systems have made for massive priority changes. Most OMGs have been in a constant state of change within the past 24 months. Executive "teams" have formed together quickly to lead their organizations through TRICARE, the military's managed care system. Beyond TRICARE deployment, OMG executive management have been faced with increasingly complex access to care issues related to military "right-sizing." A growing inequity between capitation-based resourcing and formerly provided health care services has contributed to the growing unrest by consumers of care as out-of-pocket expenses increase in a once "free" military health care system.

The recently introduced Air Force FNP role could be rich with possibilities towards meeting existing access-to-care gaps, improving health outcomes, while increasing marketability of the local OMG through a variety of care-delivery models. However, it is first necessary to explore what the culture is towards implementing FNP services. The most influential factor within the organizational culture for ensuring success of the FNP role will be the executive management team. Success will be associated with the degree of importance that Air Force health care executives ascribe to the FNP role. Consumers of Air Force health care, the Air Force health care workers themselves and local OMG leaders are all equally involved in redefining current Air Force health care delivery. What organizational factors within the OMG culture do Air Force executive leaders believe will influence the implementation of FNP services?

Background

The military medical mission, its cost, and how best to accomplish that mission has been in the forefront of current military health care debate (Blount & Hereford, 1995; Brown, 1994; Buck, 1992; Callendar, 1994; Gonzalves & Minderler, 1995; Hall, 1995; Hudak, Brooke, & Finstuen, 1994). The Air Force military health care system is in the midst of evolutionary change that is re-creating the landscape of health care delivery to eligible beneficiaries that include specific populations (fighting force) and layered communities (military dependents, retired members, and their families and survivors). New to the Air Force health care system is a group of advanced practice nurses prepared at the graduate level and nationally certified as FNPs. These new players to the Air Force medical mission require study regarding their most appropriate use as perceived by executive management teams at the local level; the factors that enhance assimilation into the workforce by colleagues and consumers; and identification of barriers to practice. Consequently, cultural changes must occur within Air Force medical treatment facilities (MTFs) in order to allow and improve upon the changing expectations for health care delivery within the Air Force medical system.

Military Health Services System (MHSS) Factors

The MHSS has shifted away from the inpatient acute-care setting toward the less costly outpatient ambulatory care setting (Best, Lovato, Learmonth, & Williams, 1995; Kutch, 1995). Many of these changes have in actuality been mounting in intensity over the past ten years. However, it only has been in the more recent years that anecdotal

authors have noted that real paradigm shifts have occurred throughout the military and its health care systems (Ahrens, 1993; Blount & Hereford, 1995; Brown, 1994; Hall, 1995; & Jennings, 1993a).

On October 1, 1989, each of the uniformed services was given fiscal responsibility for managing their own Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) budget. Prior to this event excess costs were absorbed by the Department of Defense (DOD). Individual military services found that their scarce resources were being consumed by the CHAMPUS budget at an approximate annual rate of ten percent (Brown, 1994). The push for cost-containment became a priority in all military service departments. Thus, the DOD Coordinated Care Program (CCP) was implemented in January 1991 (Jennings, 1993b). The purpose of the CCP was to transform military health care into a uniformed services managed care system similar to the civilian health maintenance organizations (HMO).

Successful testing of military capabilities in the recent Gulf War along combined with reductions in worldwide military tensions have resulted in recalculations of military end-strength needs. Joint military operations were validated and additional joint ventures were initiated throughout all military services (Szafranski, 1993). Military health care was not excluded.

The primary political platform for the 1992 Presidential campaign became national health care reform (Wilson & Daniel, 1994). In anticipation of health care reform objectives, the Medical Health Services System (MHSS) leaders focused upon improving access to quality care while promoting cost-effective use of resources (Jennings, 1993a;

Texidor, Lamar, & Roberts, 1996; Phoon, Corder, & Barter, 1996). Under TRICARE, twelve designated Health Services Region (HSR) are managed by a lead agent commander. TRICARE mandates that the uniformed services work together under the direction of the lead agent in starting and managing regional health plans within the HSR. This lead agent may be associated with any of the three services, Air Force, Army or Navy (Texidor et al., 1996). Thus, the present version of TRICARE has steadily evolved from the Department of Defense (DOD) Coordinated Care Program (CCP) (Jennings, 1993b) and current national political health care reform factors. In addition, base realignment and closure (BRAC) activities further underscored the demands for reduced expenditures in the national defense programs (Blount & Hereford, 1994). These and other DOD initiatives supporting the national health care reform agenda have continued to strain OMG capabilities and further limit space-available appointments for non-active duty beneficiaries (Blount & Hereford, 1994; Koop, 1995). The USAF Surgeon General has agreed with others in the national health care reform arena that access-to-care is a number one priority in all military health care objectives (General Stierle, personal communication, 30 August 1996).

TRICARE implementation has demanded an understanding of civilian market-driving forces by AF health care executives (Brown, 1994). This has demanded civilian health care market initiatives be applied at the local MTF level (Texidor et al., 1996). One such initiative has been the introduction of the Family Nurse Practitioner within the AF Objective Medical Group environment.

Conceptual Framework

The conceptual framework that has guided this study is that of organizational culture change. This is appropriate because the skills required for maximizing military human and material resources are prerequisites for reducing barriers to change. Air Force health care leaders have been called upon to assess and influence world-wide system readiness to pursue entirely new ways of thinking and behaving in relation to the AFMS. Current strategies and actions have been demanded of health care leaders which radically depart from any historical patterns and procedures of military health care delivery management (Cooper, 1995; Hall, 1995; Hart & Conners, 1996; Johnson & Morrison, 1995; Lanier, 1993; McEachern, 1995; Pantell, Fries, & Vickery, 1994; Rosenthal, Riemenscheider, & Feather, 1996; Seaver, 1996; Stimes, Tuchschmidt, Mecher, & Pate, 1996). Hammer & Champy (1993) call these maneuvers reengineering the organization. Reengineering an organization means to ignore what exists and focus on starting over based on new, radical visions of what is possible. Changes driving the present Air Force health care organizations link the purpose of this study to the conceptual framework of organizational culture change.

This descriptive study is concerned with what, if any, are the OMG operationalized cultural changes associated with AFMS health care reform initiatives which resulted in the education and acquisition of FNPs. In otherwords, what is the fit between the AF medical system corporate body and the OMG executive staff regarding expectations for what FNPs will contribute to the OMG? Schneider, Guzzo, & Brief (1996) maintain that to make change a part of the culture not only depends upon what the prevailing conditions

are at the start of the change effort but to what degree of significance the management hierarchy values the change initiative.

Organizational culture for the purpose of this study is defined by Schein (1992) as:

> The pattern of basic assumptions which a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, which have worked well enough to be considered valid, and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (p. 34).

Change links the culture to a sense of history. Hughes (1990) describes a strong organizational culture as a definable group with shared history. The military promotes and rewards its members from within, thus, fostering the advancement of members who possess cultural norms and values consistent with the organization's mission. The Air Force health care system, like all health delivery organizations, is operating under conditions of high uncertainty and complexity. Organizational culture provides a mechanism for lessening this uncertainty by sanctioning job performance outcomes consistent with overall mission objectives. Thus, culture equally serves an integrative function by generating the commitment necessary to achieve the mission.

According to Louis (1980) the operational definition of organizational culture is:

> A set of answers to questions that arise in the everyday negotiation of life at work for members of the group. Who's us? Who's them? How do we treat us and

them? How do we do things around here and why? What constitutes a problem? What do we do when a problem arises? What really matters here and why? (p.229)

The private sector business world of managed care has begun to dominate military health care. The leadership skills of military health care executives must include strategies which target organizational climate and culture (Bennis, Benne, & Chin, 1985; Jick, 1995; Pearce & Osmond, 1996). Three important dimensions to change are climate, culture and learning (Argyris, 1993; Kotter, 1995). Climate and culture are dynamically interconnected (Maurer, 1996; Schneider, et al., 1996; Steckler & Fondas, 1995; Trofino, 1995). The climate of an organization is organized around the goals the organization pursues and how it goes about conducting its daily business (Bennis, Benne, & Chin, 1985; Schneider, et al., 1996). Climate reflects the tangibles that, in turn, reinforce the culture (Reichers & Schneider, 1990). For example, the inferences that members of an organization make about the culture are inferred from the existing policies, practices, procedures, and routines within the organization. The culture will support or resist changes as the climate is altered (Boyton & Rothman, 1995; Marmor & Mashaw, 1994; Schneider, et al., 1996). What behaviors are expected, get rewarded and are supported from the management hierarchy? Is there congruence between mission values and what kinds of behaviors are rewarded and supported?

Any potential mismatch between the stated goals and actual behaviors of organizational members is referred to as a disparity between culture and climate (Schneider, et al., 1996). Organizational change is most assured when both the climate -

what the organization's members experience - and the culture - what members believe are the organization's values - are in congruence (Lawler & Galbraith, 1994; Reichers & Schneider, 1990). The primary determinants of how health care executive members create an organizational culture are through:

1. practices they put into place and values they communicate;

2. articulation of the vision to all organizational members through actions and deeds if members are going to change attitudes, behaviors, and subsequently values;

3. promotion and development of educational and informational programs surrounding the change;

4. leadership skills that motivate organizational members to accept new responsibilities;

5. reward and recognition programs that align the organization's new values and vision with the policies, procedures, and practices;

6. sustaining change momentum over time until the change effort is successful;

7. measuring, monitoring and communicating progress every step of the way to all stakeholders in the organizational change process (Adams, 1984; Hammer & Champy, 1993; McGill & Slocum, 1993; Pointer & Sanchez, 1996).

There is no single best climate or culture for achieving sustained change. Different climates and cultures can be equally effective for different organizations. The culture of the organization is framed by its particular market and the nature of the work force. However, what people in an organization experience as the climate and believe is the culture is ultimately what determines whether change is accomplished and sustained.

Statement of the Problem

There are no published studies on the utilization of Family Nurse Practitioners within the AF medical system. In addition, multiple changes have occurred in Air Force command structure, leadership philosophy, and management team diversity. Air Force health care operational missions have merged with wing missions. Air Force culture has adapted by meeting new mission requirements. Furthermore, health care culture adaptation has occurred through the deployment and employment of the Air Force-wide OMG. In addition, TRICARE has become a significant player in reshaping consumer and provider expectations of military health care services.

Multiple authors have advocated for improved collaboration among the various cultures of health care consumers, providers and purchasers of health care (Brooten & Naylor, 1995; Edmunds, 1988; Glenn, & Goldman, 1976; Weil, & Jorgensen, 1995; Weiner, 1994). Health care reform objectives have forced groups to cross boundaries and share resources for closing existing health care service gaps. For example, the demand for primary care services are on the rise as the numbers of primary care and family practice physicians decrease nataionwide (Department of Health and Human Services, 1994).

Both civilian and military health care systems have addressed these access-to-care gaps by using mid-level providers (physician assistants and nurse practitioners). Like their civilian counterparts, Air Force health care consumers and providers have been exposed to nurse practitioner services in "specialized" primary care roles (Obstetrics & Gynecology and Pediatrics). However, unlike their civilian counterparts, Air Force members have not been equally or recently exposed to generalist nurse

practitioners in primary care practice settings. FNP services are entirely new for the Air Force health care system. Additionally, this role has not become familiar to most providers, patients, or health care executives in the local OMG setting. Because so few FNPs clinically practice within the USAF system, it is not yet known how their services will be received or perceived by consumers, provider colleagues or health care executives. Additionally, most people may not be acquainted or familiar with what competencies comprise the FNP role.

No published information is available as to what factors drive the acquisition of military FNP services. Despite OMG executive-level strategic planning for local delivery of health care services, incongruence may exist between the Air Force level executive vision for educating FNPs and the OMG organizational expectations regarding FNP delivery of services. Therefore, a major thrust of this study was to identify and describe what a selected group of Air Force OMG health care executives perceive the organizational culture to be for implementing and using FNP services.

Research Questions

The research questions guiding this study are as follows:

1. What is the degree of OMG executive management interest regarding the addition of FNP services at the local level?

2. What is the organizational culture regarding the use of FNPs as measured by strategic planning factors, perceived contribution factors, and specific organizational receptivity and expectations of change factors?

Definitions of Relevant Terms

For the purposes of this thesis, the following definitions will be used:

Military

The armed forces of the United States.

TRICARE

The Department of Defense health care reform program initiative which augment MTF capabilities with managed-care support contracts in accordance with regional priorities (Texidor, et al., 1996).

Family Nurse Practitioner

A nurse practitioner is an advanced practice registered nurse who has completed graduate level education and or clinical preparation resulting in national certification and a Masters degree as a FNP. This gives them the educational preparation and the legal auathority to provide direct primary care to patients, including assessment, diagnosis, and management, with a specific focus on health promotion and disease prevention.

Objective Medical Group

An operational framework for the delivery of goods and services within the MTF. Realignment is organized around service-lines (focusing services on customer needs) rather than functional groups for greater integration of operational and support functions. Each medical unit will have four levels of command: Group, Squadron, Flight and Element. The OMG will have 2-5 squadrons depending upon MTF size.

Medical Operations Squadron (MDOS)

A squadron consists of elements (smallest unit) and flights (made up of elements) which are organized to meet all mission requirements through local alignment of services (elements) to the respective flight. The mission of the squadron is to provide longitudinal care of the population.

OMG Executive Management Team

This team is the Objective Medical Group (OMG) body of senior leaders who provide the Group Commander with professional and specialized technical perspectives.

Group Commander (MG/CC)

The MG/CC is the chief executive officer accountable for accomplishment of all aspects of the medical group mission and serves as the base or wing level medical advisor to the wing/installation commander.

Chief Nurse Executive (CNE)

The CNE is a nurse who directs the delivery of nursing services throughout the medical group and is a functional advisor to the medical Group Commander (MDG/CC).

Chief, Medical Services (CMS)

The CMS is a physician who is responsible for the governance of the medical staff and is a functional advisor to the MG/CC.

Group Administrator (SGA)

The SGA is a senior Medical Service Corps officer (MSC) who defines group manpower and financial requirements for meeting operational medicine and readiness taskings.

Medical Operations Squadron Commander (MDOS/CC)

The MDOS/CC is an officer from the Nurse Corps (NC), Medical Corps (MC), Dental Corps (DC), Medical Service Corps (MSC), or Biomedical Service Corps (BSC) who is responsible for successful mission accomplishments through effective squadron management of all assigned functions and resources as enumerated in the Medical Operations Squadron description.

OMG Executive Member Perceptions

Perceptions are the mental constructs, feelings, images, and attitudes about an idea, place, person, or event which is interpreted in light of one's own life experiences. Perceptions are measured by a six point rating scale in the study's questionnaire.

Strategic Planning Factors

Factors identified by Air Force OMG executive leaders which ensure mission goals and objectives are operationalized in the near and far term.

Organizational-Environmental Receptivity Factors

Those factors which either facilitate or constrain the implementation of FNP services.

Perceived Contribution Factors

Those perceptions which the individual OMG executive leader holds about FNPs which potentially impact how the FNP will be utilized within the OMG.

Expectation of Change Factors

Those factors which potentially enhance or diminish OMG delivery of health care services.

Total Quality Management(TQM)/Quality Improvement

TQM is a program that integrates a philosophy of customer focus, empowerment, leadership, and service within the management philosophy.

Primary Care

Primary care is the provision of integrated accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients and practicing in the context of family and community (Donaldson & Vanselow, 1996).

Demand Management

A program to maximize appropriate utilization of medical services by increasing access and satisfaction through the use of telephone-based decision support (Air Force Advice Nurse program), self-care classes and publications (Air Force Health Promotions program and events), and individual education programs designed to teach patients about the management of chronic disease conditions such as hypertension, asthma and diabetes (Vickery, 1996).

Definitions requiring further explanation can be found in Appendix A.

Limitations

There are several limitations to this study. One must consider the characteristics of the military health care executive who tend to volunteer for research compared to those executives who do not participate. Additionally, there was no military or civilian health care culture scale found which specifically addressed organizational receptivity to the introduction of nurse practitioner services. There is some question of reliability with self

reporting on survey scales. Additionally, the validity of standardized culture scales for current health care environments have been cited among researchers as less than ideal (Klingle, Burgoon, Afifi, & Callister, 1995). These scales were found to ignore various organizational intricacies of the health care environment. The consumer factor was not found among any of the standardized scales. Confounding this issue of reliability and validity are the unique medical readiness missions for each Objective Medical Group. Additional peacetime mission variations will also exist. For example, each OMG must plan for and allot resources (programs, providers, and prevention efforts) according to the mission and medical needs of the identified beneficiary population for each OMG. Therefore, findings cannot be statistically generalized to any given group within a military or peacetime environment.

Assumptions

Several assumptions have been made for the purpose of this study:

1. Each OMG executive management team has varying stages of collaboration and teamwork based upon a variety of factors, to include, strategic vision, education, and leadership styles within each specific OMG.

2. Rapid, large, multiple and unexpected changes are all factors that make it harder to promote change in any given culture.

3. The AFMS is undergoing increased intensity and duration of change making it difficult for AF OMG executives to assess optimal and appropriate organizational mixes of health care providers for their given population.

4. AFMS executive leaders need a different set of leadership and management skills than they did in the pre-TRICARE era.

5. The FNP role has not been adequately marketed to current OMG executive staff, health care providers or health care beneficiaries.

6. OMG executive leaders do not have a clear understanding of the differences in ideology that guide practice among physicians, physician assistants, and family nurse practitioners.

Summary and Overview

This chapter has described the purpose and importance of surveying the attitudes of current OMG executive team staff members regarding introduction of FNP services at the local level. It is valuable to assess what the current Air Force Objective Medical Group leadership interest is towards the implementation of Family Nurse Practitioner services. The remaining chapters will examine the literature relevant to this study, explain the methodological key processes and present the analyzed data. Conclusions are drawn and recommendations for further study made in the final chapter. Chapter Two will discuss the literature review as to how it provides the foundational support for this study.

CHAPTER TWO: REVIEW OF LITERATURE

Introduction

The purpose of this thesis was to survey selected OMG executive team members about their attitudes toward specific strategic planning factors, perceived contribution factors, organizational receptivity factors and perceived change factors regarding the implementation and utilization of FNP services. The Surgeon General's support of nurse practitioner services is known. However, very little is known or understood about the implementation decisions made among Objective Medical Group executive members.

Review of Relevant Literature

The purpose of this chapter was to provide some understanding about the dynamics of organizational culture that Air Force OMG executive leaders face when considering the implementation of FNP services. The literature review is organized into three sections, Air Force reorganization factors, nurse practitioner utilization factors, and change factors. Air Force reorganization factors include Air Force medical system (AFMS) realignment into the OMG and military managed care initiatives such as TRICARE. Both reorganization factors are used as indicators for how the AF military health care system has evolved. The nurse practitioner review of literature includes an overview of nurse practitioner utilization studies. The change factor review of literature explores factors and strategies that have contributed to cultural changes throughout Air Force medical system. Air Force medical reorganization will be discussed next.

Air Force Medical Reorganization

Several key changes in Air Force practice and policy are intersecting with the implementation of Air Force family nurse practitioner services. First, the Air Force has decreased from 600,000 members in 1989 to approximately 400,000 members in 1995 (HQ SGN). However, coincidental to this reduction there has not been a similar "downsizing" in the number of health care consumers within the AFMS.

In line with DOD reorganization, the Air Force will complete the realignment of its medical treatment facilities into OMGs over the next several years (Sloan, 1994). The OMG structure resembles the dually collaborated Army and Navy version of the proposed Medical Group Practice Model (MGPM) (McGee & Hudak, 1995). Both health care organizational models, the OMG and MGPM, attempted to optimize an MTF's efficiency by:

1. unifying similar inpatient and outpatient departments under a common management and administrative umbrella;

2. providing "seamless" care from patient entry to exit by reducing duplication and fragmentation of products and services;

3. ensuring improvements in health care effectiveness through documented outcome measures on access, cost efficiency, patient satisfaction, clinical care outcomes, treatment efficacy, and continuous quality improvement activities; and

4. reducing health care expenditures of the MTF (Bannick, 1996).

Within the OMG executive team there may be any mix of medical corps specialties (i.e., Medical Corps, Nurse Corps, Dental Corps, Biomedical Service Corps, and

Medical Service Corps) represented. In addition, these members could occupy non-traditional positions within the OMG management hierarchy. For example, a nurse, physician, or administrator could occupy the OMG Commander position. Likewise, the Medical Operations Squadron Commander (MDOS/CC) position is not corps specific and can be occupied by a member of any corps. Only the Chief Nurse Executive (CNE) and Chief, Medical Services (CMS) positions remain corps-specific.

Few military research studies were found that identified or addressed what mix of skills and competencies were needed by military executives to cope with ambitious or conflicting military objectives and health care priorities (Hart & Connors, 1996; Hudak, et al., 1994).

Hart & Connors (1996) discuss the need for the leadership body of local MTFs to make resource allocation decisions based upon these managed care economic principles:

1. Does it make good business sense?
2. Does it contribute to medical staff humanitarian efforts and warfighter's readiness mission components?
3. Is it the right thing for the patient?

The cornerstone of each of these three pillars is strategic planning. Managed competition (TRICARE), budget constraints, and readiness are issues now common to all AF medical treatment facilities (MTF). Commanders have not traditionally been expected to evaluate budgets in the near term for accurate forecasting of future health care planning needs. Additionally, military health care leaders have assumed an active role with the

interpretation of the various information data-collection systems. These systems are currently employed in the DOD ambulatory setting for optimal use of resources in targeting defined populations for documentation of improved clinical outcomes (Cooper, 1995). Few military studies address how health care executives can facilitate quality and patient satisfaction in a capitated managed care setting.

In one Army study a Delphi mail-out was conducted in two phases. Senior U.S. Army Hospital Commanders (physicians) and Deputy Commanders for Administration (administrators) served as respondents from 37 Army Medical Centers and Army Medical Detachments (N=40). The Delphi members were asked to identify at least five major issues and job requirement skills, knowledge, and abilities (SKA) needed to manage MTFs through the next decade. These executives formed two leadership groups and responded to two Delphi rounds. Eighteen Hospital Commanders (49% return rate) supplied 78 issues and 22 Deputy Commanders for Administration (59% return rate) supplied 109 items. Totals of 92 separate key phrases were developed by thematic analysis of content. After round one Delphi members forecasted health care issues and job management skills, knowledge and abilities, a panel of experts identified nine health care domains (HCD) consisting of: cost-finance, leadership ability, professional-staff relations, access-to-care, health-care delivery concepts, ethics, quality and risk management, and technology and marketing. The four areas of cost-finance, health care delivery, access to care, and quality accounted for 70% of all responses. Before round two each Delphi group was given feedback on round one HCDs and asked to associate specific SKAs from round one with each HCD. Inter-rater reliability was assessed between the two groups using Cronbach's

coefficient alpha. There was a high level of agreement between Commanders and Administrators on the most critically needed SKAs (Hudak, Brooke, & Finstuen, 1994).

Texidor et al. (1996) conducted a needs assessment among Navy managers (n = 475), in the grades 0-4 through 0-7, to learn what executive level competencies were needed to lead Navy MTFs in the TRICARE environment. Management competencies identified by MTF executives, and not provided by the Naval Postgraduate School (NPS) Executive Medical Management Education (EME), were identified for incorporation into the NPS curriculum. The top five competency-gaps as perceived by senior executives were: bottom line/high-impact communications; strategy formulation on health care market dynamics and stakeholder management; medical process reengineering and alternative health care delivery systems; managing quality through risk/uncertainty and cost output analysis; and health care law and policy.

Military health care management issues fail to appear as crosstalk or exchange in the civilian health care literature and are only slightly more visible within the military health care journals (Jennings, 1993a; Miser, 1992; Reinhart, Anderson, Clay, Patrician, & Maloney, 1995). The Air Force remains disturbingly silent in published research about military-specific health care management experiences. The bulk of the military management literature contains anecdotal articles. Yet, military articles suggest that the medical treatment facility executive staff will be expected to supplement local MTF health care capabilities through negotiation and implementation of private sector managed care contracts with civilian providers (Texidor, et al., 1996). Most Air Force MTFs are going to compete for the health care business among CHAMPUS-eligible beneficiaries

with the civilian sector and other DOD facilities. A strong driving factor in the push for successful marketing of local military health care facilities is the idea that beneficiaries will have consumer choice. Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) eligible beneficiaries will choose from one of three TRICARE options: a health management organization (HMO) plan, TRICARE Prime; a preferred provider organization (PPO), TRICARE Extra; or a basic indemnity option, TRICARE Standard. Further explanation is included in the definition of terms (Appendix A). It can be predicted that retirees will become the largest consumers of health care dollars in a capitated environment while active-duty beneficiaries (due to age alone) would consume the least amount of health care dollars. Presently, uniformed personnel will be enrolled automatically in TRICARE Prime. The question revolves around what TRICARE option active duty dependents will choose (Lamar, 1994).

Brigadier General Linda Stierle, Director of the United States Air Force Nurse Corps and Chief of Medical Readiness Operations agrees that common factors are driving changes in every military health services system. They are:

1. unequal access to care between active-duty and non-active duty beneficiaries;
2. uneven distribution of military health care resources;
3. duplication of services among the various DOD MTFs within the same geographic region;
4. escalating health care costs;
5. diminished DOD monies for beneficiary health care expenses;
6. downsizing of military end strength without similar downsizing in health care

consumer numbers; and

7. beneficiary dissatisfaction and confusion over changing health care options. (Personal communication, August, 30, 1996)

Air Force MTF health care executives are challenged to address, as a minimum, these issues in their respective day-to-day MTF operations. Shortell, Gillies, & Anderson (1994) identified four critical success factors for the development of effective organized delivery systems. These factors are the ability to: (a) make the system the right size (based on forecasting provider/consumer mix); (b) conduct relevant population-based health status and needs assessments (patient-driven versus provider-driven care); (c) assume capitation-based risk for the defined population; and (d) develop new management and governance models. The last indicator, these authors argue, requires increased interdisciplinary efforts not only to provide health care differently, but to collaborate in different and new ways than has occurred in the past.

Multiple authors (Alexander & Clancy, 1993; American Academy of Nursing, 1993; Donely, 1995; Edmunds, 1994; Murray, 1995; O'Connor, 1994; Reinertsen, 1995; Sawyer, 1993; Sebas, 1994; Strasen, 1994; Uhlfelder, 1996) recognize that health care management practices must change in response to the evolving health care climate. In addition, there are financial disincentives for the practice of specialized versus generalized medicine (Department of Health and Human Services [DHHS], 1994). Managed care systems are placing growing emphasis on the education, self-help, and preventive services offered to patient populations.

Characteristics of emerging health care delivery systems as described by the Pew Health Professions Commission (O'Neil, 1993) include an "emphasis on an increased integration of providers with concomitant emphasis on teams to improve efficiency and effectiveness across all settings" (p.6). The Commission stressed that interdisciplinary collaboration and sharing of resources will lead to more cost-effective and quality-enhancing health care delivery.

The next change factor discussed will be the review of nurse practitioner factors.

Nurse Practitioner Factors

The three primary indicators commonly used to measure the efficacy and efficiency of any health care delivery model in both the private and public sector are: access to care, quality of care, and cost of care (McGrath, 1990; Safriet, 1992). Since the 1970s many studies have documented the effectiveness with which nurse practitioners provide a broad range of cost-effective services while increasing access to care (Bell & Mills, 1989; Buchanan, 1996; Callan, 1992; Henshaw, 1976; Nichols, 1992; Prescott, 1994; Ramsey, McKenzie, & Fish, 1982; Salkever, Skinner, Steinwachs & Katz, 1982). Reviews of the literature on nurse practitioner practice continue to document the beneficial effects on patient outcomes (Brown & Grimes, 1993; Buchanan, 1994; Edmunds, 1978; Molde & Diers, 1985; Office of Technology Assessment, 1986; Siegloff, 1995).

In today's managed care environment increased bottom-line emphasis is given to who can provide a given service at a lower cost while still maintaining quality (Cutler, 1995; Sunshine, 1996; Weiner, Steinwachs, & Williamson, 1986; Wilson, 1994).

A meta-analysis of 38 studies on nurse practitioners including 15 studies of certified nurse midwives conducted by the American Nurses Association suggested that:

1. nurse practitioners scored higher on quality-of-care measures than did physicians where the measures examined diagnostic accuracy and completeness of care;

2. although nurse practitioners ordered more laboratory tests for patients then physicians (38% versus 30%), the total cost for nurse practitioner ordered laboratory tests were 8% less than those ordered by physicians;

3. nurse practitioners prescribed drugs at an equal rate as physicians; however, the average cost per nurse practitioner visit was 39% lower than the cost of a physician visit; and

4. nurse practitioners provided more health promotion activities, such as nutritional counseling and exercise regimes than their physician counterparts (Brown & Grimes, 1993).

Another study by Bennett and Biener (1982) showed that the most effective outcomes for patient-provider satisfaction, provider satisfaction and team productivity in the delivery of health care were those in which the nurse practitioner and physician were paired up as a provider team. Patients demonstrated a high level of acceptance of the primary care nurse practitioners' role by itself. However, they were more satisfied when they received care from both the physician and nurse practitioner, rather than from either provider alone. Additional benefits of interdisciplinary collaboration between nurse practitioners and physicians include increased patient compliance (Casto, 1991; Chard, Dunn, & Mandelbaulm, 1983; Feldman, Ventura & Crosby, 1987; Henneman, Lee, &

Cohen, 1995; Sebas, 1994); greater patient satisfaction with care (Avis, Bond & Arthur, 1995; Bowers, Swan, & Koehler, 1994; Edmunds, 1992; Gonzalves & Minderler, 1995; Koch, Pazaki, & Campbell, 1992; Louis & Sabo, 1994; Sullivan, 1994; Zastowny, Roghmann, & Hengst, 1983); improved clinical outcomes (Bell & Mills, 1989; Boyle, 1995; Brooten & Naylor, 1995; Mundinger, 1994); and decreased health care costs (Donely, 1995; Wilson, 1994).

Nurse practitioner studies have historically been driven by an existing tension between nursing and medicine (Brush & Capezuti, 1996). For example, many earlier nurse practitioner studies used medical practice as the standard for measured care outcomes (Molde & Diers, 1985; Prescott & Driscoll, 1979). Some nurses argue that this viewpoint of nurse practitioners as physician extenders inherently biases nurse practitioner research toward the medical practice model (Carrino & Garfield, 1995). This still bears weight today. One recent study looked at role utilization of advanced practice nurses (APNs) in large health care systems and multispecialty group practices. The Clinical Nurse Specialist (CNS), Nurse Anesthetist (NA), Nurse Case Manager (NCM), Nurse Midwife (CNM), and Nurse Practitioner (NP) were defined as APNs. A telephone survey was accomplished using a standardized interview guide. A management fellow conducted each interview. The most popular specialty clinics served were internal medicine and family practice. Most of the APNs were nurse practitioners. However, no actual numbers of the types of APN found in these clinical areas were given. Eleven of the surveyed systems (42%) had a tool in place specifically to measure the cost-effectiveness of care provided by APNs that showed their APNs had significant savings. However, most of the

respondents stated that their cost/benefit tools lacked sophistication and were in evolution. Seven systems (27%) reported that although they had no specific measure, the APNs had shown to be cost effective in their budgets because they were salaried less than physicians but did many functions performed by physicians. Two systems had no cost data. Over one-half of the organizations reported that satisfaction with care provided by the APN was incorporated within a general patient satisfaction survey. Only four systems (15%) had extensive data on outcome measures. Yet, nurse-run clinics were reported in nine (34%) of the health systems (Schaffner, Ludwig-Beymer, & Wiggins, 1995). Results from this study certainly suggest where NPs need to focus future research efforts.

Numerous studies have linked patient satisfaction with collaborative practice arrangements between nurse practitioners and physicians. (Madden & Ponte, 1994). One such study examined this collaborative arrangement through a new model of service project (Buchanan, 1996). This project evaluation took place over nine months. Three forms of data collection were used, patient care data, collaborative practice behavior self-reports, and clinical log data. Four internal medicine units were studied for care outcomes between the traditionally staffed units of medical residents and the alternatively staff units of nurse practitioners. Unfortunately only the nurse practitioners were required to keep clinical logs so no comparisons between groups could be further studied. The physician controlled the admission of patients to either the traditional medical service or the NP alternative service. There were no differences in total costs when comparing these two services. However, the NP service saw mostly elderly females discharged to skilled care. The traditional service saw more young males discharged home. How the medical staff

made the decision for patient selection to the two different services is not known as it was not a study variable. Further understanding is needed about the selection of the right patient for the appropriate level or model of care. The NPs showed positive changes in collaborative behaviors, while physicians did not. The NPs also spent a smaller amount of time than originally expected on the prescribing of independent therapeutic nursing interventions. Two administrative lessons were reinforced from this project evaluation. First, the organizational system (executive/management teams) needs to assume an active role to make collaborative practice models work. Second, all groups of practitioners should be held to the same data collection rigors when measuring model outcomes. Comparing both the nurse practitioner and physician collaborative role over time would have been helpful.

Nevertheless, nurse practitioners have shown a strong history of promoting preventive services (Lemley, O'Grady, Rauckhorst, Russell, & Small, 1994; Prescott & Driscoll, 1979) and have also proved their success in providing continuity of care for their clients (Henshaw, 1976). In today's managed care environment these nurse practitioner activities are highly valued (Burns, Moores, & Breslin, 1996). The success of health systems will depend upon the appropriate mix of providers (Carrinow & Garfield, 1995; Kutch, 1995; McGee & Hudak, 1995). The literature documents that managed care plans use more generalist than specialist physicians (Gamliel, Politzer, Rivo, & Mullan, 1995; Hassmiller, 1995; Hibbard, & Nutting, 1991; Rivo, 1993; Rosser, 1996). Contemporary civilian research has begun to question what the most appropriate mix of providers are for providing preventive and longitudinal care (Lanier, 1993; Madden & Ponte, 1994;

Pennachio, 1995; Weiss, 1995). However, there has been only one published model found in the military health care literature (Kutch, 1995). It is unknown what factors the executive staff considers when building the most appropriate mix of provider staff for their target population.

The Total Quality Management (TQM) / Continuous Quality Improvement (CQI) framework has been an active component of all OMG quality processes. Patient satisfaction has been and will continue to be a critical outcome measure for OMG system performance. Factors that contribute to patient satisfaction are also associated with improved quality of care (Inui, 1996; Seibert, Strohmeyer, & Carey, 1996; Wasserman & Inui, 1983). Associations have been made between the quality of patient and provider encounters, systems of care and positive outcomes in patient satisfaction. Additionally, strong linkages have been documented between patient satisfaction and the quality and degree of nurse practitioner interaction (Avis, et al., 1995; Carrino & Garfield, 1995; Donley, 1995; Enggist & Hatcher, 1983; Henshaw, 1976; Louis & Sabo, 1994). Other studies have begun to surface as a natural outgrowth of the nurse practitioner studies on patient satisfaction. In addition, these studies have begun to document further associations that link patient satisfaction with quality of provider interaction (Lamberts & Hofmans-Okkes, 1996; Lambrew, DeFriese, Carey, Ricketts, & Biddle, 1996; Mackey, 1995; McEachern, 1995; Seibert et al., 1996; Simborg, Starfield, & Horn, 1978; Sullivan, 1994). This link has become so well documented that it has changed the climate of provider-patient interactions. Patient sensitivity has long been a nursing domain. Managed care agencies, professional practice organizations, and medical specialties have

now recognized the value of this relationship between patient and care provider (Alexander & Clancy, 1994; Inui, 1996). Some authors have called this phenomena patient-centered medicine (Lainer & Davidoff, 1996).

The next change factor reviewed will be how change evolves and is sustained within organizational cultures.

Call to Change

Change comes in two very different forms: evolutionary and revolutionary (Kuhn, 1970; Prigogione & Stengler, 1984). Evolutionary change is continuous; its defining characteristic is an exaggeration of an existing pattern. Revolutionary change is discontinuous; one pattern is completely replaced by another. TRICARE deployment and MTF reorganization into the Objective Medical Group are examples of this type of change. The Air Force health care system has begun to organize itself into something entirely different then it once was.

Pointer and Sanchez (1996) use a catapillar as an example of these two types of change. Evolutionary change occurs when the catapillar grows larger, and becomes more of what it already is. However, the catapillar undergoes revolutionary change when it becomes something different, a butterfly. During evolutionary change, the environment is stable. If it changes at all, it does so in highly predictable ways and in incremental steps. However, revolutionary change is characterized by environmental turbulence and uncertainty. In other words, evolutionary change modifies the rules of the game; whereas, revolutions create a totally new game to be played (Drucker, 1980; Peters, 1987).

Air Force health care leaders, providers, and consumers of care have been presented with a completely different set of problems to solve and opportunities to seize. This typifies revolutionary change. The Air Force health care organization that once appeared predictable, controllable, understandable, and comfortable is now unpredictable, unsettling and uncomfortable for many system users (patients), builders (management), and sustainers (health care providers and management). Expectations and values within the AF culture have rapidly changed. The organizational culture that once rewarded filled hospital beds, recruited specialty physicians, played by established rules has mutated into something that has become less recognizable to its members and users.

Griffith (1996) identified the core cultural changes demanded of all successful health care delivery models:

OLD STRATEGIES	NEW CAPABILITIES
1. Acute inpatient	Continuum of care from outpatient to inpatient
2. Treating illness	Maintaining and promoting wellness
3. Caring for individual patients	Accountable for health status of defined population
4. Commodity product management	Value added service - emphasis on primary care and demand
5. Fill hospital beds	Care is given at most appropriate level
6. Manage an organization	Manage a network of services
7. Manage a department	Manage a market
8. Coordinate services	Actively lead and articulate and reinforce mission objectives

(pp. 35-36)

This chart illustrates that health care delivery systems must redistribute health care dollars away from hospital and specialty care and invest it in primary care capabilities.

Health care models have moved toward capitated systems that assume this accountability for the health needs of a given population.

Multiple authors have endorsed a variety of change models throughout the past several decades (Beer, 1976; Brooten, Hayman, & Naylor, 1978; Johnson & Morrison, 1995; Lewin, 1951; Pearce & Osmond, 1996; Peters, 1987; Porras & Silvers, 1991; Riehl & Roy, 1980). Pierce & Pierce (1996) point out that any implemented change only reflects changes in attitudes and does not ensure changes in behavior. Consideration of four crucial elements is required for planning or responding to change. These are: individual attitudes, behavioral changes, information and education related to the change, and the rate and volume of change (Adams, 1984; Pierce & Pierce, 1996). Lack of awareness toward any of these elements diminishes the desired outcome toward influencing a deeper change in values and assumptions. Maximizing "fit" or congruence between any new policy and practice within the organization will require some strategy for influencing organizational behavior.

The literature has just begun to suggest how health care executives set priorities for use of change strategies within different organizational cultures. Nutt (1996) attempted to quantify whether civilian health care executives' implementation strategies corresponded to prescriptions found anecdotally in the literature. A simulation was created in which four implementation strategies - accommodation, incentives, bargaining, and persuasion - were carried out in settings with a participative and control oriented culture. These four strategies are briefly defined as follows:

1. Accommodation calls for examination of pivotal interests of how stakeholders

will react to the proposed change. Antagonistic players are identified before any change event so that implementors can explore positions to find mutually beneficial situations for each antagonist. This process is mostly reflective and does not include high people contact.

2. Bargaining calls for implementors to use negotiating tactics and building bridges between antagonistic parties. Creation of compromise becomes the prime objective.

3. Persuasion presents the tangible evidence of the proposed change. Stakeholders will go along with the change if there is little to lose. Persuaders often have to use their power to secure compliance if people begin to balk about the change.

4. Incentive approach calls for tangible rewards to coax desirable behavior from stakeholders. A reward is carefully selected which is valued by the members and will link the desired behavior to the incentive.

To determine beliefs about the outcome of these four implementation plans, each respondent (N=353) was asked to assume the role of the Chief Executive Officer (CEO). The responses were then analyzed to link the success and resistance indicators to implementation approach and climate and culture (participative vs. control). The simulation described a hypothetical multi-hospital system (MHS) comprising eight hospitals at different sites that operated independently before take-over by the parent organization. Each respondent CEO was asked to indicate whether the proposed change plan submitted by each hospital was apt to be successful or provoke resistance. A two-by-four experimental design was used. The executive level leaders were least optimistic

about prospects of successful change strategies than people with managerial and departmental level experience. Results showed that among higher level executives ($p < .0001$) accommodation had the best chance of success with the least production of resistance. Persuasion was seen as the least effective approach. However, these results were also culture-specific. Bargaining, which eases discussion among people with something to lose, was the preferred strategy to use in a control culture. On the other hand, accommodation, where managers reflect to find and dilute sources of opposition was the preferred strategy in a participatory culture. However, several study limitations must be taken into consideration. First, there is a question of validity as to whether manager preferences were linked to their respective practice. Second, there was an assumption that respondents had been exposed in practice to the various implementation scenarios. Despite these limitations, the importance of culture on executive staff decision-making towards change strategies was confirmed.

Organizational culture has become increasingly recognized and documented throughout the health care and business literature. It has been shown to be an important determinant of organizational performance (Caroselli, 1992; Kralewski, Wingert, & Barbouche, 1996; Pierce & Pierce, 1996; Porras & Silvers 1991; Sherer, 1994; Trofino, 1995). How organizations cope with change depends upon the individual members of that organization as well as the consumers and purchasers of those organizational products and services (Beer & Walton, 1987; Chapman, 1996; Pierce & Pierce, 1996; Porras, 1987; Porras & Silvers, 1991).

Purchasers and consumers of health care have recently become recognized as having an intricate relationship with the organizational culture (Klingle, Burgoon, Afifi, & Callister, 1995). Purchasers of health care have demanded increased accountability and cost-control through evidence-based criteria. Rendered health care services are now judged for effectiveness and value by these practice standards. Both capitated and fee-for-service systems are now required to collect and summarize data that demonstrates accountability. Most health care organizations quantify data that support that appropriate services are delivered, at-risk population subgroups are identified, outcomes are within acceptable parameters, and selected "benchmarks" are near to or above national standards (Taylor & Lessin, 1996). Improved technology has provided the mechanism for capturing and analyzing this complex data.

Technology has exploded in its various health care capabilities and applications. Health care providers have become exposed to information systems that clearly enhance both practice and care delivery. Advances in electronic data interchange, medical on-line information, and on-line clinical practice guidelines and protocols, have made relevant and appropriate care available to many health care providers. Such technology has exposed providers and patients to evidence-based research and clinical practice standards. It has also given executive leaders data that supports clinical practice methods through measured outcomes.

Managed care concepts emphasize that it is the success of the health care providers as a team, rather than the success of any one type of provider. This has become a marker for successful organizations. Consumers of health care have learned to expect certain

behaviors from contemporary health care systems. These are: timely access to care, education on disease management and prevention, continuity of care, and positive patient-provider health care encounters (Nauert, 1996).

D'Aunno, Alexander, and Laughlin (1996) cite compelling evidence that consistently shows how collaboration among physicians, nurses, and other care providers, enhance the quality of care and improve patient satisfaction. The managed care literature documents a growing interdependence among health care providers that has become the norm rather than the exception. Most contemporary organizational culture and change articles draw similar conclusions. Executives who understanding the work culture of the organization will help to ease organizational change and foster organizational learning (Taylor & Lessin, 1996). Health administrative experts have further emphasized that organizational learning cannot occur unless ideas with impact (value-added) are expressed and displayed across all internal, external, vertical, and horizontal boundaries. Individual learning of these ideas may or may not result in organizational change (Ulrich, Glinow, & Jick, 1993). In contrast, when organizational learning does occur, then the change will sustain over time and become institutionalized. Thus, organizational learning requires the work group to incorporate values applied to the change efforts (Argyris, 1993). Ulrich et al. (1993) theorize that organizational learning is dependent upon the capability of the leaders to generate and generalize ideas with impact that span real and symbolic boundaries. McGill & Slocum (1993) call this phenomenon relearning or unlearning the organization. Ulrich et al. (1993) identified four learning types, or ways that organizations generate ideas:

1. continuous quality improvement (improve it);
2. competence acquisition (buy it);
3. experimentation (try it); and
4. boundary spanning (adapt it).

The Air Force health care system has actively applied at least two of the four learning styles throughout its own organizational evolvement. Continuous quality improvement activities have become an active component of shared value through benchmarking "best practices" across Air Force health care organizations (Buck, 1992; Cooper, 1995; Gonzalves & Minderler, 1995). In addition, reliance on boundary spanning has become more pronounced during the past seven years as borrowed practices from the private sector have become institutionalized within current military settings (Blount & Hereford, 1995; Brown, 1994; Davis, Collins, Schoen & Morris, 1995). A prime example of this event is the managed care movement within military medicine.

The circular influence of change on both organizational climate and culture is widely documented. However, few culture or climate empirical investigations were found within the literature. Appropriate evaluation of the work culture and effective communication of key changes were the most consistent link common to successful change strategies in any work culture.

Summary and Overview

This chapter has summarized Air Force reorganization factors that have promoted multiple and simultaneous change factors within the AF medical system. One such change has been the realignment of Air Force medical treatment facilities into the OMG. Shifting

priorities and realities, sharing of resources, introduction of managed care ideas, and changing expectations of health care purchasers and consumers are only a few of the issues that confront OMG leaders. Present day interdisciplinary efforts cross traditional clinical boundary lines. The introduction of the Family Nurse Practitioner role to the AF medical system adds another variable of change for the OMG culture. Executives, providers, and patients may be more familiar with the physician and physician's assistant (PA) role than they are with the certified nurse midwife, pediatric or women's health nurse practitioner role. Furthermore, little if any experience exists with the Family Nurse Practitioner, as both a nurse and medical care provider, within the Air Force managed care environment.

The next chapter will describe the research methodology and key processes. More specifically, it will discuss the instrumentation, protection of human subjects, and the data-collection procedures.

CHAPTER THREE: METHODOLOGY

Introduction

The purpose of this thesis was to assess and describe the organizational culture as perceived by the Chief, Medical Staff (CMS), Chief, Nurse Executive(CNE), Administrator (SGA), and Medical Operations Squadron Commander (MDOS/CC) of all U.S. Objective Medical Groups (OMGs) regarding the implementation of FNP services. Air Force health care executives are the most influential component of the OMG culture. Their attitudes toward FNP utilization are unknown. Whether or not FNPs can successfully integrate their advanced practice role within the current AF health care culture, depends upon local identification of need and support for services. This chapter will discuss the research design and research methods used throughout the study. It will also provide information on instrumentation, data collection, protection of human subjects, and research methodology in a stepwise approach.

Research Design

The descriptive design was appropriate for this purpose because descriptive research seeks to "provide an accurate portrayal or account of characteristics of a particular individual, event, or group in real life situations for describing what exists, determining the frequency with which something occurs, and categorizing information" (Burns & Grove, 1993, p. 766). A descriptive survey (Appendix B) was used to capture selected Air Force OMG executive team members' perceptions on specific strategic planning factors, organizational receptivity factors, contribution factors and expectation of

change factors when considering FNP services. Use of the survey method was appropriate for this design because it enabled the investigator to "identify a phenomenon of interest, identify variables within the phenomenon, and describe variables" (Burns & Grove, 1993, p.766). However, the time required to answer the survey and variations in self-reporting may be limitations to the survey method.

Sample

The population under study was AF OMG executive team members whose responsibilities included resource allocation and strategic planning for outpatient health care delivery. The population consists of four groups with 224 members: all currently assigned OMG officers occupying the Chief, Medical Service, Chief Nurse Executive, Administrator, and Medical Operations Squadron Commander position within the United States. These specific OMG executive team members were specifically selected for their involvement in the planning for and evaluation of the delivery of ambulatory care services. Objective Medical Group addresses were obtained from the AF Surgeon General's Office (SGO), Washington, DC.

Instrumentation

The data collection instrument (Appendix B) used in this study was developed from the Uniformed Services University of the Health Sciences (USUHS) Graduate School of Nursing (GSN) thesis of Patrick Bertz (1996). In this thesis Bertz described a selected sample of Air Force physicians' attitudes toward the utilization of FNPs. Initially, the instrument was to be used in a replication study. However, evolving events within the

AF health care system prompted a further review of the literature to identify how organizations handle massive amounts of change. What factors allow these organizations to emerge successful? Consequently, the instrument items were grouped under specific headings that repeatedly surfaced in the health services administration literature common indicators related to large-scale change efforts. Organizational culture became central to the accomplishment of the change effort. No review or research articles could be found specific to the USAF medical service environment. Thus, the data collection instrument was reformatted with some of Bertz's original statements grouped with specifically developed organizational culture and climate factors. These factors emerged through the literature review in health services administration.

In Bertz's study, each survey statement was rated separately for relevancy to the instruments' objective. In addition two clinical experts, recommended by USUHS faculty for their expertise on physician - nurse practitioner relationships and nurse practitioner utilization, independently rated each question and its relationship to the stated objectives of the study. Bertz previously reported a Content Validity Index (CVI) of 0.89. A reliability coefficient of 86 percent was reported in a pilot study conducted at the Family Practice Clinic, Andrews Air Force Base.

The framework that guided this study had a different focus from Bertz's work. Content experts in the fields of ambulatory health care management were identified by USUHS faculty. Four experts from the AF Surgeon General's Office, Malcolm Grow Medical Center, and Bolling Air Force Base judged the relevancy and validity of the added

survey items in relation to the sample unit chosen and the research questions posed. Additionally, the survey was given to fourteen military health care professionals to provide further evaluation on simplicity of instruction, organizational layout, time involved in survey responses, and general ease of understanding. At this point, no further changes in layout or organization were made.

The instrument consisted of five parts. The first part included a demographic page to indicate duty title, length of time in present position, and officer corps affiliation. The second section, strategic planning factors, was intended to assess the interest among OMG executives for gaining and using FNP services. This section consisted of nine items. The first statement identified whether or not the respondent thought it within the Air Force's best interest for their particular OMG to gain an FNP position. The next statement measured agreement or disagreement respondents had for converting authorizations from three choices of health professionals. Based upon Bertz's recommendation for further research several statements were modified or removed from the questionnaire. The question "to replace physician assistants" was dropped from the questionnaire. The review of literature did not support substitution of one category of physician extenders (e.g., NP or PA) by another category. However, Bertz reported that this statement generated the most discussion among respondents. Therefore, the question was modified so that the respondents could equally choose among the three corps (i.e., Medical Corps, Nurse Corps, Biomedical Service Corps) for FNP authorizations.

This ensured a broad range of responses to provide useful information regarding the OMG culture-specific climate.

Next, four clinical choices are given for FNP assignment. One choice included the Flight's Surgeons Office (FSO) that was added to the instrument to display thinking that crossed traditional boundary lines. Flight Surgeons historically have taken care of the aviation community and their families. Health care providers and ancillary support staff from areas outside the FSO have, to date, not been traditionally included in any Flight Medicine health care activities. Innovative thinking is required of executive leaders when dealing with substantial amounts of change (Marmor & Mashaw, 1994; McLagan & Nell, 1996; Meyer, 1996; Nutt, 1996; Pointer & Sanchez, 1996; Reinerstein, 1996; Steckler & Fondas, 1995).

The third section, perceived contribution factors, consisted of most of the original statements developed by Bertz (1996). These allude to the OMG executive vision for implementation of FNP services. "To be used for global humanitarian relief efforts" was removed from the instrument. All AF officers are expected to participate in the medical readiness mission in war or humanitarian relief efforts during peacetime. Otherwise, this section consists of six items. The respondents were asked to rate their level of agreement or disagreement that the addition of an FNP would improve specific health care delivery services. This section was designed to capture similarities and differences in the OMG executive vision regarding the potential contributions gained or not gained from starting FNP services. Porras and Silvers (1991) defined this executive vision as the guiding

beliefs, purpose and mission of the organization. It is at this level that organizational transformation begins.

The fourth section, organizational-environmental receptivity factors, was designed to elicit agreement or disagreement about OMG issues that must be addressed prior to the implementation of FNP services. Seven statements were developed for this section related to administrative, organizational, and practice issues. The administrative items were "Resource management cannot obtain or convert slots for gaining an FNP" and "Productivity would not warrant an FNP position." Organizational factors that were found to promote or detract from efficient delivery of services were reflected in the statements, "Space issues are a concern" and "Ancillary support is a concern." Organizational attitudes were captured by the statement, "Current provider culture would not welcome the addition of an FNP." Practice related statements were "Standard of care may go down" and "FNPS offer no "on-call" contributions." It was recognized that these statements have a component of the administrative, organizational and practice domains. The statements were chosen from anecdotal reports by MTF senior leaders, management staff, organizational culture review articles, and current health industry standards.

The fifth section, expectations of change factors, was designed to elicit agreement or disagreement by OMG executive leaders regarding the expectations of clinical and administrative changes that would occur from the implementation of FNP services. This section speaks to the perceived outcomes anticipated from the introduction of FNP services at the OMG level.

Finally, Bertz's instrument used a 4-point Likert type scale with 1 as "very important," 2 as "important," 3 as "slightly important" and 4 as "not important." It was decided to enlarge the scale into a 6-point scale by including both "neutral" and "not applicable" options.

Protection of Human Subjects

Consent for this study was obtained from the Uniformed Services University of the Health Sciences (USUHS) thesis committee and the Institutional Review Board (IRB) for the Protection of Human Subjects at the University (Appendix C). Before survey distribution, a survey control number was obtained from Headquarters, Manpower Personnel Center at Randolph Air Force Base following IRB approval (Appendix D).

Participation in this study was completely voluntary and anonymous. Participants were assured of their anonymity in the participant cover letter (Appendix E). Confidentiality was maintained by using anonymous surveys with only the executive position of the OMG respondent self reported in the data collection. All questions or concerns regarding this study were to be directed to Dr. Marilyn Edwards, Professor and Chairperson of the FNP Department. The investigator's name was put in both the sender and receiver areas of the return envelope containing the completed questionnaire. Each returned survey was opened by an impartial party and randomly placed in the survey pile. This procedure ensured that the completed questionnaire could not be matched to geographical location.

Data Collection

Two hundred and twenty-four surveys were mailed through the U.S. postal service to 56 OMGs within the United States. Advantages of mailed questionnaires were relative speed, low cost, and the possibility of response anonymity (Burns & Grove, 1993; Wilson, 1985). Limitations to a mailed survey are non-response and ability to obtain only limited information (Polit & Hungler, 1983). Therefore, specific actions were taken to personalize the survey. A courtesy letter (Appendix F) was sent to each Group Commanders of a U.S.A.F. OMG to notify them of the prospective research, its purpose, and the name of the principal investigator for follow up contact. This package consisted of a letter of introduction, the survey tool, and a participant cover letter. Each officer in the sample was then mailed a cover letter, survey tool, and stamped self-addressed envelope. The cover letter discussed the specific purpose of the study with a request to return the completed questionnaire within five days.

Data Analysis

The study data were collected by a tool that elicited responses to items concerning the FNP role in relation to various organizational factors (Appendix B). Respondents indicated agreement or disagreement about the role as expressed in each of the items, using a six point Likert-type scale which ranged from strongly agree to strongly disagree with a central neutral category. A not-applicable (N/A) category was also provided and responses were kept separately from non-response items. Respondents also provided information on their title, time in present position, and USAF corps. Since this scale elicits

ordinal level data the responses were analyzed non-parametrically by aggregating responses and converting them to percentage distributions using the Statistical Package for the Social Sciences (SPSS) software.

Summary and Overview

This chapter discussed the methodology used in this study to describe the organizational culture as perceived by members of four different but complementary OMG executive positions. Estimates of reliability and validity of the study instrument were obtained by content experts in the field of ambulatory health care management. The instrument was piloted for understanding and convenience in administration by a diverse group of health care professionals who have had a wide range of clinical and managerial competencies. Chapter four will present the data obtained from 162 OMG executives who responded to the instrument.

CHAPTER FOUR: DATA ANALYSIS

Introduction

The purpose of this study was to describe and assess the organizational culture as perceived by the Chief, Medical Staff (CMS), Chief, Nurse Executive (CNE), Administrator (SGA), and Medical Operations Squadron Commander (MDOS/CC) of all U.S. Objective Medical Groups (OMG) regarding the implementation of FNP services. Air Force OMG executives are the most integral component of the OMG culture. The methodology consisted of a survey mailed out to these personnel. Whether or not FNPs can successfully integrate their advanced practice role within the current AF health care culture depends upon many factors. Most important is the local identification of need and executive support for Family Nurse Practitioner (FNP) services which this study addresses. This chapter will present data gathered in the study about identified factors that impact organizational culture and change. The data will be discussed in relation to the two posed research questions.

Data were collected from Air Force OMG executive members through a mailed questionnaire and explanatory cover letter sent to 224 executives in group level Air Force medical treatment facilities within the United States. One week after the initial mail out 105(47%) of the questionnaires had been returned. By day 19, 162 questionnaires were returned. Since 27 OMG executives were found to occupy more than one OMG position the response rate was recalculated. A "dual-hatted" executive was defined as one person who formally occupied any two of the following OMG positions: CMS, CNE, SGA, or MDOS/CC. The number of "possible" returned surveys was then reduced by

twelve (half of 24) because two OMG executive positions were held by only one person. The response rate was then recalculated to be 76%. Forty-four questionnaires were not returned. Seven surveys arrived after data analysis began and were not used. Postmarks on the return envelopes showed geographical representation from the northwestern, northeastern, central, southwestern, and southeastern United States.

Respondents

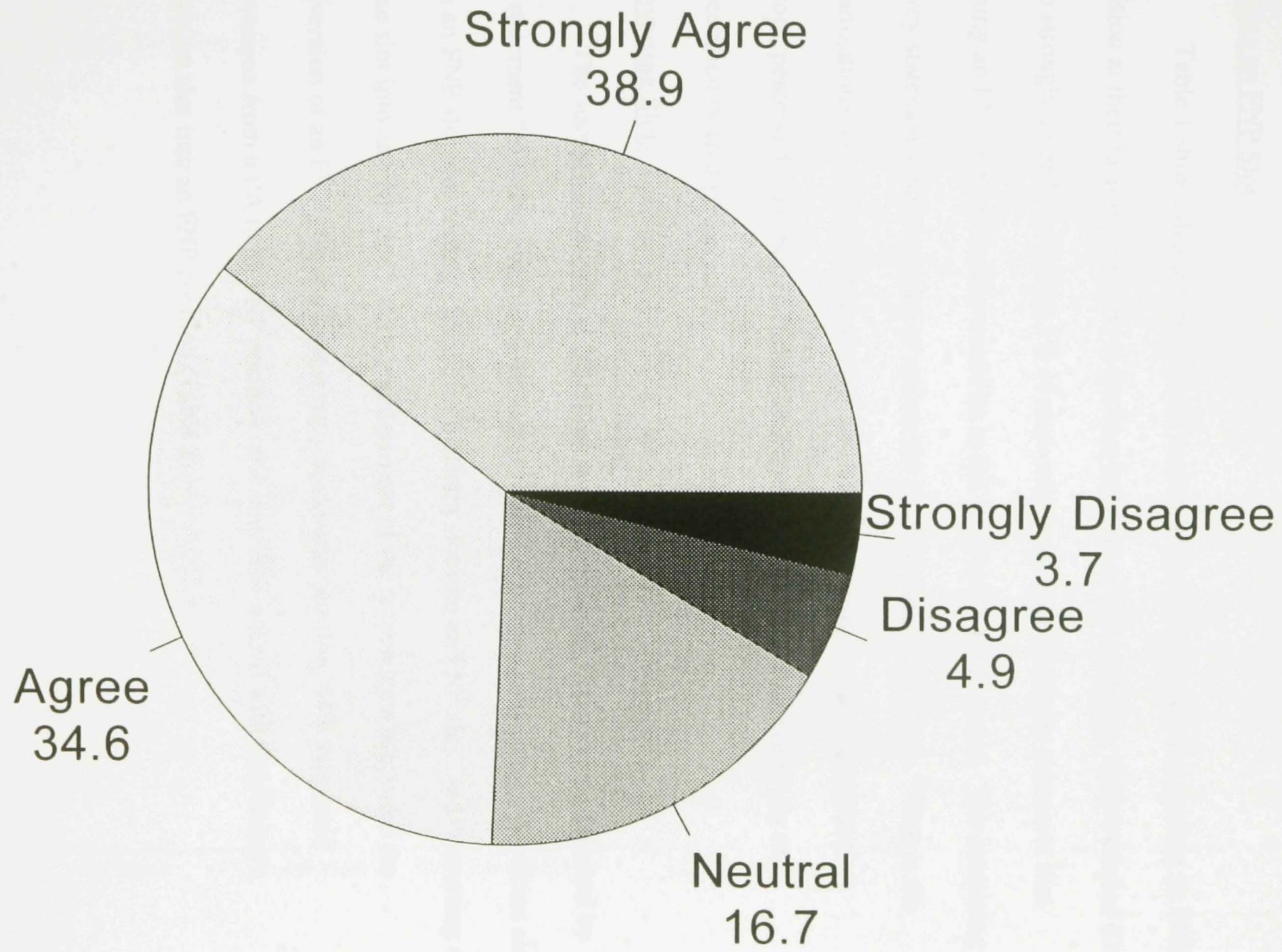
Respondents consisted of all Air Force (AF) OMG executives who responded to the questionnaire. The respondents represent a large share of the total population of AF OMG respondents within United States organizations. The study includes 63 Medical Corps officers, 53 Nurse Corps officers, 4 Biomedical Service Corps officers and 4 Dental Corps officers. The largest group of responders were from the Medical Corps who held Chief Medical Staff titles (38), followed by Medical Service Corps officers in Administrator positions (34), and Nurse Corps officers with Chief Nurse Executive titles (32). A total of 24 of respondents held "dual-hatted" positions. Most respondents (117) had 24 months or less experience in the present executive position while 49 of those respondents had 12 months or less.

Strategic Planning Factor Findings

The first research question, "What is the degree of OMG executive management interest regarding the addition of FNP services at the Objective Medical Group level," was answered by the statement "I believe it is within the interest of the Air Force that this Objective Medical Group gains an FNP slot"(Figure 1). The responses ranged from 74% agreement to only 9% who disagreed, while 17% remained neutral.

Figure 1. Percentage Agreement Concerning Gain of FNP Slot

Based on responses from 162 executives



Gaining an FNP Slot

Table 1 shows that the majority of respondents (73%) agreed that gaining an FNP position at their facility would be in the best interests of the Air Force. This included 63% who strongly agreed. Less than 5% of respondents disagreed with the statement that gaining an FNP at their facility would be in the Air Force's best interest. The remaining survey statements gathered data to answer the second research question, "What is the organizational culture regarding the use of FNPs as measured by strategic planning factors, perceived contribution factors, and specific organizational receptivity and expectation of change factors?"

Converting Slots

The second component of identified strategic planning factors was addressed by the statement "In order to add an FNP to this facility I support: converting a physician slot into an FNP slot; converting a physician assistant slot into an FNP slot; and converting a nurse slot into an FNP slot." Forty-eight percent of the respondents supported the conversion of an FNP position from a registered nurse position, 44% supported conversion from a PA to an FNP position, and only 20% agreed with converting a physician slot into an FNP position (Table 2).

Table 1.

Strategic Planning Factor for OMG Gaining An FNP

Gaining FNP	Number								Percent							
	SA	A	N	D	SD	NA	UNK	Total	SA	A	N	D	SD	NA	UNK	Total
FNP position	63	56	27	8	6	2	0	162	38.9	34.6	16.7	4.9	3.7	1.2	0	100

SA - strongly agree A - agree D - disagree NA - not applicable UNK - unknown

Table 2.

Strategic Planning Factor for Converting Existing Provider Slots to FNP Positions

Conversion	Number								Percent							
	SA	A	N	D	SD	NA	UNK	Total	SA	A	N	D	SD	NAU	UNK	Total
MD to FNP:	12	20	12	50	50	5	13	162	7.4	12.3	7.4	30.9	30.9	3.1	8.0	100
PA to FNP:	29	42	30	28	16	4	13	162	17.9	25.9	18.5	17.3	9.9	2.5	8.0	100
RN to FNP:	26	51	17	26	27	3	12	162	16.0	31.5	10.5	16.0	16.7	1.9	7.4	100

SA - strongly agree A - agree D - disagree NA - not applicable UNK - unknown

IRC/USUHS

Assignment Preferences

The third strategic planning component was addressed in the statement, "I would like to see an FNP work primarily in: Primary Care Clinic, Emergency Room, Family Practice Clinic, and Flight Medicine Clinic." Figure 2 shows the percent of respondents who selected one of these assignment choices. Table 3 shows, 81% of respondents agreed with a Family Practice Clinic assignment followed by 66% agreement with assignment to the Primary Care Clinic. The least favorable agreement rates for FNPS were Flight Medicine Clinic (29%) and the Emergency Room (18%).

Additional clinical areas for assignment were solicited by the statement, "Are there other areas that you would like to see an FNP assigned?" Ten respondents (6%) would like to see an FNP assigned to the Health and Wellness Clinic, seven (4%) cited Pediatric Clinic, and five (3%) cited the Prevention into Practice Program. Smaller numbers indicated rotation through all clinics as need arise and manning Nurse-Run Clinics.

Figure 2. Preferences for FNP Assignments

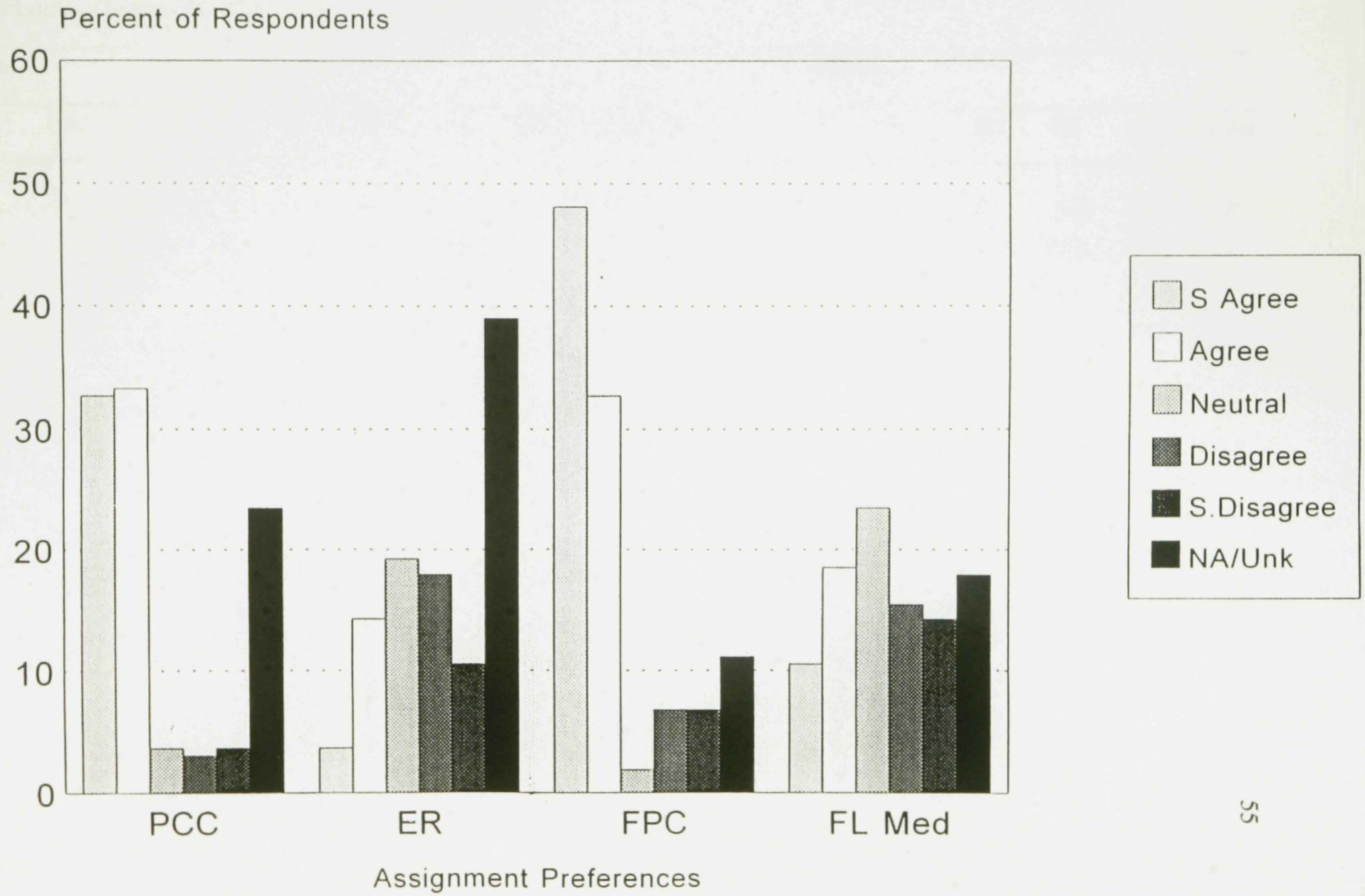


Table 3.

Strategic Planning Factor for FNP Assignment Preferences

Assignment	Number								Percent							
	SA	A	N	D	SD	NA	UNK	Total	SA	A	N	D	SD	NA	UNK	Total
PCC:	53	54	6	5	6	27	11	162	32.7	33.3	3.7	3.1	3.7	16.7	6.8	100
ER:	6	23	32	29	17	34	21	162	3.7	14.2	19.2	17.9	10.5	21.0	13.0	100
FPC:	78	53	7	3	3	11	7	162	48.1	32.7	1.9	1.9	6.8	6.8	4.3	100
FLMed:	17	30	38	25	23	9	20	162	10.5	18.5	23.5	15.4	14.2	5.6	12.3	100

SA - strongly agree A - agree D - disagree NA - not applicable UNK - unknown

UNCW/USURS

Perceived FNP Contribution Factors

Table 4 shows that at least 70% of the respondents agreed that the addition of an FNP would make positive contributions to the organization. The highest level of agreement was found in the statement that FNPs would "increase preventive services for the patient population" (86%), followed by "increase access for clinic medical services" (76%), and "increase patient satisfaction with medical care" (76%). More than 70% of respondents agreed that FNPs would increase "continuity in health care delivery of services" (73%), increase "clinic productivity" (73%), and increase "comprehensive health care services" (72%).

Perceived Organizational/Environmental Receptivity Factors

Responses were almost equally divided as to agreement or disagreement with the following statements: "Resource Management Office cannot obtain or convert slots for gaining an FNP"; "Ancillary support is a concern"; and "FNPs offer no "on-call" contributions" (Table 5). Least agreement was toward the items, "Productivity would not warrant an FNP slot" (12%), "Provider culture would not welcome the addition of an FNP position" (6%), and "Standards of care may go down" (4%).

Perceived Expectations of Change Factors

Table 6 shows that the highest overall percentage of agreement was with the statement that the addition of an FNP position would increase " Preventive and wellness services" (81%). Two-thirds of the respondents agreed with the statements that the addition of FNP services would result in: "Improved continuity of care," "Improved collaboration across disciplines," and "Improved provider relations."

Table 4.

Perceived Contributions of FNPs

Contribution	Number								Percent							
	SA	A	N	D	SD	NA	UNK	Total	SA	A	N	D	SD	NA	UNK	Total
Access:	49	76	19	16	2	0	0	162	30.2	46.9	11.7	9.9	1.2	0	0	100
Continuity:	47	72	31	8	2	1	1	162	29.0	44.4	19.1	4.9	1.2	0.6	0.6	100
Prevention:	62	77	14	6	2	1	0	162	38.3	47.5	8.6	3.7	1.2	0.6	0	100
Productivity:	51	68	23	15	3	1	1	162	31.5	42.5	14.2	9.3	1.9	0.6	0.6	100
Satisfaction:	51	72	30	7	1	1	0	162	31.5	44.4	18.5	4.3	0.6	0	0.6	100
Comprehensive:	41	75	32	9	4	0	1	162	25.3	46.3	19.8	5.6	2.5	0	0.6	100

SA - strongly agree A - agree D - disagree NA - not applicable UNK - unknown

Table 5.

Organizational/Environmental Receptivity Factors

Receptivity Concerns	Number								Percent							
	SA	A	N	D	SD	NA	UNK	Total	SA	A	N	D	SD	NA	UNK	Total
Obtain slots:	23	39	26	52	15	5	2	162	14.2	24.1	16.0	32.1	9.3	3.1	1.2	100
Productivity:	5	14	30	81	27	4	1	162	03.1	8.6	18.5	50.0	16.7	2.5	0.6	100
Space:	34	63	20	30	11	3	1	162	21.0	38.9	12.3	18.5	6.8	1.9	0.6	100
Ancillary:	26	38	28	54	13	2	1	162	16.0	23.5	17.3	33.3	8.3	1.2	0.6	100
Care Standards:	1	3	16	69	71	1	1	162	0.6	1.9	9.9	42.6	43.8	0.6	0.6	100
Provider Culture:	3	6	20	75	54	3	1	162	1.9	3.7	12.3	46.3	33.3	1.9	0.6	100
Take Call:	15	42	39	48	14	4	0	162	9.3	25.9	24.1	29.6	8.6	2.5	0.0	100

SA - strongly agree A - agree D - disagree NA - not applicable UNK - unknown

UNCLASSIFIED

Table 6.

Change Factor Expectations

Perceived Change Factors	Number								Percent							
	SA	A	N	D	SD	NA	UNK	Total	SA	A	N	D	SD	NA	UNK	Total
Outcomes:	40	49	59	10	1	0	3	162	24.7	30.2	36.4	6.2	0.6	0.0	1.9	100
Continuity:	41	67	42	8	1	3	0	162	25.3	41.4	25.9	4.9	0.6	0.0	1.9	100
Collaboration:	39	65	48	6	1	1	2	162	24.1	40.1	29.6	3.7	0.6	0.6	1.2	100
Relationships:	33	72	46	7	1	0	3	162	20.4	44.4	28.4	4.3	0.6	0.0	1.9	100
Wellness:	51	80	24	3	1	0	3	162	31.5	49.4	14.8	1.9	0.6	0.0	1.9	100
JCAHO:	23	47	75	12	1	1	3	162	14.2	29.0	46.3	7.4	0.6	0.6	1.9	100

SA - strongly agree A - agree D - disagree NA - not applicable UNK - unknown

LRC/USUHS

Additional Comments Regarding Expectation of Change Factors

A total of 61(38%) questionnaires contained comments ranging from a single sentence to several pages. Most comments addressed culture factors not included in the questionnaire. The two most frequently mentioned factors were items related to strategic planning and perceived expectations of change. However, every section within the questionnaire was supplemented by respondent comments.

To utilize all data, short-answer responses were coded. Longer responses containing a variety of comments and suggestions were transcribed on comment cards that contained the executive position, corps, and length of position of respondents. Specific issues emerged that was organized into practice-related, role-related, mobility-related, and administrative supplemental information expressed by executive team members (Appendix G).

One question, eliciting 44 comments, was, "Are there additional change expectations you have regarding the implementation of FNP services?" Most comments reinforced findings in the managed care literature. Complex decisions regarding who the most appropriate mix of health care providers are for providing the most appropriate health care services is a multifactorial question that both civilian and military health care agencies are attempting to answer. The literature supports the idea that strategic decisions of human resource allocation are multifactorial. First, what services are going to be delivered? If prevention is highly valued, then organizations are more likely to choose a practitioner for preventive-type care over one who is trained in acute care

delivery (Nichols, 1992; Stimes, Tuchsmidt, Mecher, & Pate, 1996). However, what criteria military health care executives use to make these resource decisions is unknown.

Criteria for establishing optimum provider mix currently are multifactorial. Few resource allocation methodologies were found in the literature. The few methodologies found contributed little to management decision-making in the forecasting of health care providers. The multifactorial nature of provider staffing was demonstrated by the number of executives who developed their own "if...then" scenarios for choosing one type of health care provider over another. Furthermore, it became apparent through both the data and the volunteered comments that few executives were willing to lose their physician authorizations. The data support that given a choice of various selections, FNPs are primarily valued by health care executives for their role in "preventive" services. However, a number of respondents commented on their not knowing how FNPs differed from other health care providers regarding patient care management. This is not surprising. FNPs have not become fully operational within the military system nor have they been universally defined by system users as to how they may best be utilized to enhance optimal patient outcomes within the Air Force practice setting.

Current strengths in recent primary care studies are their comprehensive look at outcomes and strategies. Health care executives now challenge former clinical traditions, boundaries and practices by holding an expectation of accountability for any "value added" service (Hibbard & Nutting, 1993). The literature supports that civilian health care executive cultures that express increased openness to interdisciplinary ideas while valuing teamwork over individualism in the primary care setting are more likely to survive

the next decade (Stange, 1996; Taylor & Lessin, 1996). However, this evolving paradigm invites a degree of skepticism. Professional boundary lines within the OMG are still an underlying cultural factor according to one executive whose comments can be found in Appendix H.

Nurse practitioners have experienced multiple territorial barriers to practice and role acceptance by other professional disciplines (Brush & Capezuti, 1996; Nichols, 1992). A lack of nursing consensus has equally contributed to practice barriers (O'Malley, Cummings, & King, 1996). Though this study showed consensus toward perceived contributions of FNPs, sanctioning of this role has not become a shared value among all Air Force health care executives.

Instrument construction for perceived FNP contribution factors revealed several interpretation variances by study participants. Comments supported that some participants felt that they had been asked to measure perceived FNP contribution factors in comparison to their current provider staff. Some respondents commented that this section was felt to be biased towards FNP services. One Nurse Corps (NC) officer selected "disagree" that FNP services would "increase" access, continuity, preventive services, clinic productivity, psychosocial support, or comprehensive health services for the OMG patient population. However, this NC officer defended the current provider staff by commenting , "the present provider team excels" in contributions made to the organization. Several Medical Corps (MC) officers and Administrators (SGA) stated that they chose the "neutral" position because there was no comparison standard to measure the contribution factors against. Furthermore, they did not feel that FNP services would

"increase" any of these factors as their current provider team was outstanding. Additional contradictions were found in other associated comments of executives who selected "neutral" responses.

In conclusion, these current Air Force health care executives seem to have a strong grasp on health services restructuring processes. Some respondents obviously did not feel that the questionnaire reliably captured the complex factors that influence the organizations' business decisions. On the other hand, by no means was this study intended to be a global business case analysis on FNP utilization. Generous, passionate and critical comments were generated in response to this study. However, perception regarding organizational culture by Objective Medical Group executives toward the use of FNPs is still not fully known. The high response rates, rapid return of responses, correspondingly high number of well-thought out comments, and invitations for further discussion show anything but a neutral position on this subject. A pocket of executives seemed tentative in disclosing their opinion choices on survey statements.

Summary and Overview

The purpose of this thesis was to describe and assess the organizational culture regarding FNP services as perceived by OMG executive members. Characteristics of the study respondents have been described as to OMG executive position, length of experience, and USAF corps affiliation. Responses were reported as aggregate data under the cultural factors of strategic planning, perceived contributions, organizational/environmental, and expectations of change factors. The final chapter will provide discussion, summarize conclusions and present relevant recommendations.

CHAPTER FIVE: FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to describe and assess the Objective Medical Group (OMG) organizational culture as perceived by the Chief, Medical Staff (CMS), Chief Nurse Executive (CNE), Administrator (SGA), and Medical Operations Squadron Commander (MDOS/CC) regarding the implementation of FNP services. Air Force OMG executives are the most integral component of the OMG culture. Whether or not FNPs can successfully integrate their advanced practice role within the current Air Force health care culture depends upon local identification of need and congruence between demand for and supply of rendered services.

The methodology consisted of a mailed survey to four sample units comprised of the Chief of the Medical Service (CMS), Chief Nurse Executive (CNE), Group Administrator (SGA), and Medical Operations Squadron Commander (MDOS/CC) in U.S.A.F. Objective Medical Groups (OMGs). Summary statistics were reported in Chapter Four for each cultural factor.

This final chapter will present and interpret the findings for each research question. No study variables exist in a vacuum. Variables chosen to assess organizational culture in this study have been no exception. Discussion will include the significance of findings, recommendations, and cautions for the use of this information with suggestions for future studies.

Discussion and Conclusions Regarding Research Question Number One

What is the degree of agreement of Objective Medical Group executive management interest regarding the addition of FNP services at the local level?

As stated in the conceptual framework "organizational change is most assured when both the climate - what the organization's members experience - and the culture - what members believe are the organization's values - are in congruence." The first research question is supported primarily by the statement " I believe it is within the interest of the Air Force that this Objective Medical Group gains an FNP slot."

Gaining an FNP slot

"I believe it is within the interest of the Air Force that this Objective Medical Group gains an FNP slot."

Almost three quarters of the current OMG executive body of leaders supported the addition of FNP services. However, several caveats belie this issue. For example, one medical Group Commander shared his concerns about this questionnaire statement: "My answer would be 'strongly disagree'...health care is best provided by optimizing the mix of staff based on the needs of the population being served. Optimizing the right combination means balancing skills, priorities, and cost to provide for the best possible outcome. Thus, your questions....(regarding slot conversions) are taken out of context and any answer would be most likely to reflect the emotions of the respondent than one based on consideration of all the factors required to optimize the delivery of health care." This comment gave a glimpse as to the complexity of issues faced by Air Force health executives.

Discussion and Conclusions Regarding Research Question Number Two

The second research question, "What is the organizational culture regarding the use of FNPs as measured by strategic planning factors, perceived contribution factors, and specific organizational receptivity, and expectations of change factors" is answered by the remaining survey elements.

Attention must be given to the strategic factors which allow accomplishment of the mission with the available resources at hand. Therefore, consensus is not easily achieved, especially if stakeholders feel they have professional territory to protect (Chapman, 1996).

Slot Conversion

"In order to add an FNP to this facility I support."

Strategic planning involves deciding what needs to be done first when introducing massive change, and recognizing that the first action chosen may not be the most correct (Hart & Conners, 1996; Meyers, 1996). No fail-safe methods exist for reaching a consensus about the appropriate mix of providers for a given population. Three questions found in the literature regarding new military business proposals are: (a) Does it make good business sense? (b) Does it contribute to readiness? and (c) Is it the right thing for the patient? Outcome measures over time will best predict services needed (Alexander & Clancy, 1994; Nauert, 1996). Overall, the Air Force health care executive culture showed consensus in protecting physician positions over PA and nurse positions. Knowing the size of the respondents' medical facility and current provider-mix would have been helpful for discussion.

Assignment Preferences

The clinical practice setting has been the most influential factor in determining nurse practitioner quality outcomes (Burns, Moores, & Breslin, 1996). The appropriate match between the right services and appropriate level of care have been linked to nurse practitioner autonomy. Most of the executives preferred to see FNPs working in the more traditional primary care settings of Family Practice Clinic or Primary Care Clinics. Less popular choices for FNP assignments were the Emergency Room (ER) and Flight Medicine Clinic (FSO). Almost one quarter of the respondents were neutral about FNP assignment to the Flight Medicine Clinic. Culturally, both the ER and FSO work centers might be considered "sacred cows." For example, external symbols (flight suits and scrub attire) differentiate these workers from those found in the Primary Care Clinic setting. Missions associated with the ER and FSO differ from other outpatient clinic missions. Strategies for successful crossing of these boundary lines will bear further investigation.

An unexpected finding was revealed in the small number of executives willing to put FNPs in alternative positions (PPIP, Health and Wellness Clinics, Telephone Advice, etc.). The executives may have considered these assignment preferences to be additional duties. Does this imply overall desire for expansion of nursing roles or a lack of understanding as to the provider dimension of the FNP role? Instrument design lacked the sensitivity to explain this finding. Future studies could examine the association between OMG executive interest in the FNP role and their degree of satisfaction with FNP role-fulfilment.

Perceived Contributions

"I believe that the inclusion of an FNP at this facility will increase"

The prevention factor drew the highest level of consensus among OMG executives. The remaining factors were clustered between 72% and 77%. Diverse comments were generated by the contribution factor "comprehensiveness." This factor also showed the highest frequencies of "neutral" responses. Furthermore, comments indicated that the word "increase" was perceived to be biased towards FNP contributions. This was an unanticipated event in instrument construction. The literature supports that health care executives will increase their focus on specific outcome measures to correlate care outcomes with level of health care provider (Kassirer, 1994).

Organizational/Environmental Receptivity

"I believe that the following statements must be addressed with the implementation of FNP services" clearly identified potholes in the road ahead. Discussion will summarize these concepts under the relevant factor headings. Several respondents pointed out that these organizational/environmental issues needed to be considered "before the addition of any provider, not just an FNP." This particular interpretation by respondents was not anticipated.

Resource Management Cannot Obtain Or Convert Slots

Respondents were divided approximately in half between agreement and disagreement on this statement. This may reflect existing gaps in knowledge about the availability of and executive interest in obtaining the FNP position for the OMG. Other issues may surround this division of responses. AF military health care leaders may not

understand how physicians, nurse practitioners, and physician assistants differ from, yet complement one another in clinical practice. Informed choices will be easier made when outcome data are made available as to what kind of health services can be delivered by what level of health care provider within a defined population. Current reality dictates that health care dollars must be spent on the most appropriate use of health care services. This most likely was the cause for the majority of comments regarding this strategic planning factor. The executives wanted to ensure that the researcher understood the multifactorial nature behind these complex decisions. Further research into provider-mix analysis will simplify these decisions for AF health care leaders (Hart & Connors, 1996; McGee & Hudak, 1995).

Productivity Would Not Warrant An FNP Slot

Most of the OMG executives disagreed with this statement. One SGA rightly pointed out to the researcher that "productivity is no longer an issue ... the real driver of resourcing authorizations is based on the target population." Thus, the statement may have been interpreted in two or more ways. First, that the converse of the statement regarding productivity is true; the facility does not need additional providers because the facility is not busy or is overmanned. Second, the interpretation could have been based upon double-negative reasoning. For example, it would go something like this, "the statement is correct; productivity does not warrant the addition of an FNP slot; population does; therefore, I disagree with the statement." Either conclusion would account for the high number of "disagree"responses. Therefore, no conclusion related to this issue can be made. However, it peaks interest that only one executive drew attention to this misprint.

Space Issues In The Clinic Are A Concern

The high level of agreement related to concern about clinic space was not a surprise. The literature supports that administrative requirements have been on the rise over and above the expansion of clinical services in many practice settings (Taylor & Lessin, 1996). However, logistical space remains a real-world time-management obstacle to efficient patient care. To maximize efficiency, civilian health maintenance organization (HMO) design experts recommend two or more patient exam rooms for every provider office (Seibert, Strohmeyer, & Carey, 1996). Some respondents remarked that provider offices are currently being shared between providers.

Culture literature speaks to the importance of real and symbolic system supports that contribute to successful change strategies (Porras & Silvers, 1991). Space has been extensively symbolized in the research literature as political power, role identity, and representative of organizational value (Martin & Hutchinson, 1997). Lack of space conveys messages counterproductive to assimilation efforts by the executive team. These messages extend to both patients and provider staff. Most executives agreed that this issue must be addressed prior to expanding clinic services.

Ancillary Support Is A Concern

Executive staff was again roughly divided in half between agreement and disagreement choices on this issue. Interpretation may depend upon several issues. Level of knowledge among executive staff related to perceived role importance of ancillary staff is unknown. Ancillary staff are involved in all aspects of clinic functions and are critical to clinic efficiency. For example, medical technicians are involved in patient check-in,

treatment and procedures, chaperoning, record-keeping, defusing potential negative patient complaints, cleaning-stocking-organizing, ordering appropriate supplies, education, and coordinating patient flow through the system. These activities optimize clinic outcomes. The executive body, due to their various backgrounds, may not share an equal understanding of the importance of this role to ideal clinic functioning. However, the more likely interpretation is that the organization has an outstanding ancillary support and executives do not perceive "concern" issues related to patient care support activities. Additionally, what executives perceive as patient care support may not be what providers use or value as patient care support activities (Steckler & Fondas, 1995).

Standards Of Care May Go Down

Overall disagreement with this statement reflected one of the highest levels of consensus reached by OMG executives. Nurse practitioner studies on patient satisfaction and quality of care have identified that the standard of care is equivalent or higher. However, this depends on what factors are used to define standard of care. Only four executives throughout the USAF OMG executive body agreed that the standard of care may go down with the addition of an FNP. It would have facilitated a consistent understanding for these executives if a definition of "standard of care" had been offered. There is insufficient information to make any conclusion. Sixteen executives reserved judgement by choosing the "neutral" position. Again, this was not born out by the raw data when questionnaires were item-checked against those who commented about the addition of FNPs.

Current Provider Culture Would Not Welcome The Addition Of An FNP

Eighty percent of the respondents disagreed with this statement. Health care executives most likely have a realistic idea of their provider culture as supported by military management literature (McGee & Hudak, 1995). Accurate provider assessments may be less likely to occur in civilian practice settings due to more formalized separations between the provider and executive staff (Nutt, 1996). It is not known how the executive body assessed provider culture toward FNPs.

FNPs Offer No On-Call Contributions

Respondents were clearly divided as to this issue. Basically one-third agreed, one-third disagreed and a smaller percentage were "neutral." Several commenters anticipated FNPs taking primary care medicine call. However, offering conclusions without a consensus as to what "call" means makes interpretation difficult. Issues related to "call" could only be found in the acute-care nurse practitioner or medical-model literature (Knaus, Felton, Burton, Fobes, & Davis, 1997; Ruth-Sanchez, Bosque, & Lee, 1996). It can be said safely that these issues factor into provider mix executive decision-making but how these issue are managed as an executive governing body remain to be seen.

Expectations Of Change

"I predict that the addition of FNP services will promote."

This section proved to be where the highest overall frequencies of "neutrals" were found. Three executives commented that they felt this section to be biased toward FNPs. The expectation of change factors seemed to imply for respondents that this section was searching for some degree of improvement over the current provider staff. It cannot be

safely said how many executives may have similarly interpreted this statement. Responses were divided between agreement and neutral support for most statements.

The top three change factor expectations were:

1. Increase in preventive and wellness services
2. Improved continuity of care
3. Improved patient-provider relationships

The bottom three change factor expectations were:

4. Improved collaboration across disciplines
5. Improved outcomes of health care
6. Improved JCAHO outcomes

The majority of providers agreed that some degree of improved health care process was expected. Least agreement was over the JCAHO statement. This is most likely due to changing health system standards. The statement would have more applicability if written as "improved HEDIS outcomes." This may have accounted for the high percentage of "neutral" choices selected for this statement.

Expectations of Change Comments

A wealth of information was found within the generous and passionate comments volunteered by executives throughout USAF OMGs. Perhaps the most relevant piece to this study has been the insights gained from those respondents who qualified their survey responses. The researcher had a glimpse into the executive culture as they grapple with these complex decisions. Few comments related to professional boundaries. They do show, however, willingness to do what is best for the populations and missions served.

Recommendations and Implications for Research

First, this research would have been better conducted out of the Surgeon General's Office. Dedicated staff and field "experts" would have more appropriately matched the right level of sophistication with the study's purpose and design. With the massive changes occurring within the military health care field it became impossible to find or use a common language that had equivalent meaning to all respondents. Additionally, being removed from the medical policy- setting environment, a true sense of current executive group issues proved historically invalid.

"What is the degree of OMG executive management interest regarding the addition of FNP services at the local level?" was sufficiently answered by the level of data gathered. The second research question, "what is the organizational culture regarding the use of FNPs as measured by strategic planning factors, perceived contribution factors, and specific organizational receptivity and expectations of change factors?" was found to be too general for a practical understanding of the OMG culture. However, this study did serve to stimulate discussion and raise executive consciousness towards management issues surrounding the introduction of military FNPs within the primary care setting.

Any future study undertaken must narrow the focus on what type and how many cultural characteristics are going to be assessed. The group practice culture scale developed by Kralewski, Wingert, & Barbouche (1996) should be considered. The cultural dimensions it is designed to measure are: innovativeness/risk-taking, group solidarity, cost-effectiveness orientation, organizational formality, and methods of cost-control. A major limitation to this study was the current instrument's lack of reliability

and validity. The study design could be easily altered to include a cross-comparison between executive and provider perceptions regarding organizational culture.

Recommendations and Implications for Clinical Practice

Executive leaders must be able to articulate what outcomes they seek from the implementation of Family Nurse Practitioner services. The "old" Air Force health care system lacks a well-developed research culture. The OMG could be the start of such a new culture. Credibility and collaboration demand that an honest appraisal be given towards recognition of what each health care team member (type of provider) can reasonably offer or contribute to population outcomes.

FNPs can participate in research that provide outcome data to facilitate corporate level resource decisions. Outcome criteria developed by FNPs could further define nurse practitioner domains. Civilian and military cultures would benefit from outcome data that supports decision-making for the right level of medical care (physician versus mid-level provider) within a given population. This information could be summarized and shared within military nursing and medical forums. Data collection should begin at once to document the evolution of barriers to and facilitators of military FNP practice.

Furthermore, this criteria could help clarify models of practice unique and shared among nursing and medicine. FNPs must be able to contribute to both the nursing and medical disciplines. Communication and collaboration are readily available tools. Involvement in multidisciplinary patient care conferences offers an opportunity for the FNP to provide other health team members insight as to how nursing contributes to patient care. FNPs must be able to articulate their value to other health care team members in order to support FNP professional growth and longevity.

Recommendations and Implications For Leadership Competencies

Senior executive management has responsibility for the entire health care facility. Deep understanding is required about the various culture components - environment, customer needs, practice issues, and mission - from a future forward perspective. This means being accountable for the organization while cultivating the corporate culture. It also includes a moderate assumption of risk. AF leadership culture must promote the development of thick enough skin for front-line executives to tolerate short-term losses for long-term gains. Executives must be able to decide on what strategies to use and which to eliminate to maximize a given set of resources. This means knowing where to focus attention for the greatest good of all and the biggest bang for the buck. No one individual can do all of this. The challenge, then, comes from collectively developing a working definition of teamwork. Executives need to know how to work with teams with diverse priorities to maximize resources.

A progress report by each OMG forwarded to an objective "consultant" division of the Surgeon General's Office would document the inception of this new practice role into a set of useful lessons learned. Historical information as to how executives manage change could be accessed and shared. Items that could be trended across a variety of OMG cultures are: What practices do executives put into place that support new practitioners? Are the orientation periods adequate? Responsive to needs? What do other providers and staff anticipate from the new practitioner? What is the "fit" between organization expectation - fulfilment of needs? How was the FNP role marketed? What resistance factors were identified and overcome? Is the practice model supported by administrative policies and aligned with patient outcomes?

Successful change strategies should be shared and understood in relation to specific cultural characteristics of the organization. With increased decentralization, learning can be easily shared across all boundaries and communicated in all directions. Information technology should make this boundary spanning much easier than it has been in the past. Health care providers will benefit from knowing what factors executives consider when prioritizing both human and material resource allocations. The relatively homogenous responses show that more similarities than differences exist among our AF health care executives. Equally important military health care executives will benefit from an understanding of how their contemporaries are stage-managing complex strategies for building healthy communities.

Recommendations and Implications for Marketing

The best has been saved for last. Herein lies the crux of this project. The adage, timing is everything, bears particular truth in this case. It was forward thinking that created the opportunity for FNP education. Fulfilment expectations began at the point when funds were committed for FNP training and education. The local level redesign of job processes and development of decision-tools have ideally already taken place. However, no one lives in a perfect world; we all must do the best we can with the current information that lies at hand. Air Fore issues for the remainder of decade will be: building healthy communities, medical group practice models, broadening executive competencies , increased assumptions of risk and diversity, and need for creative non-traditional leadership competencies (Reinertsein, 1995; Steckle & Fondas, 1995; Uhlfelder, 1996).

The requirement for finding the right communication strategy to promote the least resistance to change has and will become a science (Marmor & Mashaw, 1994; Maurer,

1996; Richardson & Denton, 1996). For example, the last survey that was received stated, "Prior to sending out this survey, better marketing should have been accomplished." Greater reliance has been placed on the role of marketing as both an awareness and education tool (Boyton & Rothman, 1995; D'Aunno, 1996; Jick, 1995; Murray, 1995). Optimal outcomes will become more likely when the culture is administratively and professionally prepared to implement FNPs. Increased attention needs to be given to what impact the implementation of the military FNP role may have on health care resources already in place.

Marketing begins with an understanding of the FNP role and intended purpose combined with a comprehensive analysis of the organizational culture. Culture diagnostic questions have not yet been answered. This study provided an indication of the varying levels of cultural values that are still in operation. Consider the very different premises operating among the two concepts of "productivity" and "building healthy populations." Changing or replacing the core value of productivity into a system that values prevention and wellness requires multi-level changes throughout the care continuum. It is not enough to implement programs without equal attention given to the culture. Organizational values must change to reflect support of these programs. A great example of this point can be made when only one executive out of 161 other executives chose to comment on the inappropriate use of the term "productivity" relative to strategic planning. Does this indicate that productivity mindsets are still operating withing the health care culture? Additional assessments need to be made. What rewards are in place for keeping these populations healthy? What benefits, as stakeholders in the organization, do providers gain from promoting wellness? What socialization processes occur for FNPs who successfully

bridge the gap between self and organization expectation? What discrepancies exist in fulfillment of the FNP role? What is the root cause of these discrepancies? What are the fixes? These thinking strategies must begin with the executive hierarchy.

What is most needed in the Air Force work culture are organizational leaders who have a macro perspective of how to support and improve the system so their people can accomplish the mission. The OMG executive body must culturally assess their organizations and determine how best to assess, measure, evaluate, and build change into key processes. Marketing goals must be easily established and communicated across all health care professional boundaries. Anticipation of potential administrative, organizational, and practice problems should be encouraged. In addition, everyone who "owns" a piece of the ambulatory health care environment should address potential barriers to practice.

Serendipitous Findings

Two serendipitous findings occurred that validated leadership commitment. First, few power and gender comments surfaced about physicians, nurse practitioners, and physician assistants in relation to collegiality within the practice setting. However, this does not mean that these relationships does not exist. It may only mean that executives are unaware of these relationships as barriers to collaboration. Full implementation of a mature and effective OMG executive body may further diminish these potential boundary divisions so that these kinds issues are less likely to surface. OMG executives have begun to mirror an evolved way of territory spanning. Noncompetitive sharing and enlarging of professional roles and boundaries were communicated. The second finding was reflected in the quanity and quality of comments. Air Force executive health care leaders are

committed to finding the best way to lead their organizations. It must have been challenging beyond measure to find the right questions to ask in this present culture of rapid change. It is heartening to think that despite struggles with these change processes AF health care leaders are emerging with a shared sense of cultural identity.

On the other hand, some executives made comments that seemed defensive when asked to select choices for "opinion" statements. Was this a sign of low risk tolerance? Does the difficulty experienced by some executives towards choosing a response indicate an unwillingness to share an opinion? The courtesy letter did say that the findings would be reported to the Surgeon General's Office. This may have biased some respondents about providing technically correct answers. The concern they expressed over the accurate reporting of findings was appreciated but unfounded. Another unintended finding was the (implied) disparity in communication (information) among executive members in the Administrator positions. For example, several Administrators were not aware that FNP implementation was a current possibility. While other Administrators offered constructive suggestions: "Educate us, we need to make informed decisions and recommendations!" One Administrator confessed that the "Rhino signs (the Surgeon General's Nurse Corps Newsletter) gives us lots of information that we may not normally have through channels that be" and went on to suggest that articles be published related to the FNP role.

Final Conclusions

Study findings suggest that the Family Nurse Practitioner role is viewed as an investment in care delivery and not as a benefit to one group of health care providers over another. A final word of caution needs to be reemphasized. Only a handful of military

FNPs practice within the Air Force health care system. Most, if not all of these FNPs are new graduates with less than one year experience. Therefore data and conclusions must be interpreted with the understanding that the sample does not have a universal consensus as to what is the military FNP role.

Each base reflects different cultures and climates. They exist and evolve in response to local environmental factors (e.g., nature of the base mission, frequency of deployments, condition of base facilities, cost of housing). Internal culture and climate determinants of the OMG are influenced by the strength of the executive team as well as, the individuals who comprise the team. Thus, each OMG may express different cultures though all OMGs are within the AF military organization. Organizational culture theory advances the import of group synergies on interpersonal dynamics, therefore, reliability in findings may be dependent upon the established or forming cultural norms.

Change theory supports that assessment factors used in times of rapid change are less stable. Therefore, the question must be asked, is this data meaningful, if so, in what context? In addition, it is important to interpret the findings in relation to the conceptual foundation of organizational culture change.

This study was not intended to generate new knowledge. However, there was hope that this study would improve understanding about military FNPs and raise executive awareness on the role work culture has in successful integration of FNP services. It is hoped that this study will be taken farther then it was originally intended. Understanding will be needed as to how FNPs have anchored themselves into the evolving AF culture.

References

Adams, J. (Ed.). (1984). Transforming work: A collection of organizational transformation readings. Alexandria: Miles River Press.

Ahrens, W. (1993). Nursing organizational restructure: Choosing to change. Military Medicine, 158(4), 208-212.

Alexander, G., & Clancy, C. (1994). Practice-based research: Laboratories for health care reform. The Journal of Family Practice, 38(4), 428-430.

American Academy of Nursing (1993). Managed care and national health care reform: Nurses can make it work. Washington, D.C.: American Academy of Nursing.

Avis, M., Bond, M., & Arthur, A. (1995). Satisfying solutions? A review of some unresolved issues in the measurement of patient satisfaction. Journal of Advanced Nursing, 22 (2), 316-322.

Argyris, C. (Winter, 1993). Educating for leading-learning. Organizational Dynamics,22, (3), 5-17.

Bannick, R. (Ed.). (May 23, 1996). OMG implementation guide draft. (Available from Richard Bannick through the Pentagon SGMM division at DSN phone 297-5550 ICOM 282 as omg-ig3.doc)

Beer, M. (1976). The technology of organization development. In M. Dunnette (Ed.), Handbook of industrial and organizational psychology, Chicago: Rand McNally College Publishing.

Beer, M., & Walton, A. (1987). Organization change and development. Annual Review of Psychology,(38), (ISSBN: 0-8243-0238-9), 339-367.

Bell, K., & Mills, J. (1989). Certified nurse-midwife effectiveness in the health maintenance organization obstetric team. Obstetrics & Gynecology, 74(1), 112-116.

Bennett, S.D., & Biener, L. (1982). Effectiveness in physician-nurse practitioner team: Final report. (Grant No. HS 04104; NTIS No. PB83-205252). Rockville: Agency for Health Care Policy and Research

Bennis, W., Benne, K., & Chin, R. (Eds.). (1985). The planning of change. New York: Holt, Rinehart & Winston.

Best, A.J., Lovato, C., Learmonth, C., & Williams, R. (September, 1995). The future of wellness care. Journal of Health Care Resource Management, 7-14.

Bertz, P.E. (1996). Perceptions of the utilization of Family Nurse Practitioners by current Air Force outpatient physicians. Unpublished master's thesis, Uniformed Services University of the Health Sciences at Bethesda, Maryland.

Blount, W., & Hereford, W. (1995). Military hospital closure and local retirees. Military Medicine, 160(4), 184-188.

Bowers, M.R., Swan, J.E., & Koehler, W. (1994). What attributes determine quality and satisfaction with health care delivery? Health Care Management Review, 19(4), 49-55.

Boyle, D.M. (1995). Documentation and outcomes of advanced practice nursing. Oncology Nursing Forum, 22(8 Suppl), 11-17.

Boyton, D., & Rothman, L. (1995). Stage managing change: Supporting new patient-care models. Nursing Economics, 13(3), 166-173.

Brooten, D., Hayman, L., & Naylor, M. (1978). Leadership for change: A guide for the frustrated nurse. New York: J.B. Lippincott Company.

Brooten, D., & Naylor, M. (1995). Nurses' effect on changing patient outcomes. IMAGE: Journal of Nursing Scholarship, 27(2), 95-99.

Brown, F. (1994). Paddling permanent white water: Managing within the paradigm shifts in military medicine. Military Medicine, 159(9), 622-626.

Brown, S., & Grimes, D. (1993). Nurse practitioners and certified nurse-midwives: A meta-analysis of studies on nurses in primary care roles. (ISBN 1-55810-088-1). Washington, D.C.:American Nurses Publishing.

Brush, B., & Capezuti, E. (1996). Revisiting a nurse for all settings: The nurse practitioner movement, 1965-1995. Journal of the Academy of Nurse Practitioners, 8(1), 5-11.

Buchanan, L. (1994). Therapeutic nursing intervention knowledge development and outcome measures for advanced practice. Nursing and Health Care, 15(4), 190-195.

Buchanan, L. (1996). The acute care nurse practitioner in collaborative practice. Journal of the American Academy of Nurse Practitioners, 8(1), 13-19.

Buck, A. (1992). Defining quality in health care. Military Medicine, 157(5), 260-262.

Burns, N., & Grove, S. (1993). The practice of nursing research: Conduct, critique, and utilization (2nd ed.). Philadelphia: W.B. Saunders Company.

Burns, M., Moores, P., & Breslin, E. (1996). Outcomes research: Contemporary issues and historical significance for nurse practitioners. Journal of the American Academy of Nurse Practitioners,7(3), 107-112.

Callan, M. (1992). Nurse practitioner management of hospital-affiliated primary care centers. The Nurse Practitioner: The American Journal of Primary Health Care, 17(8), 71-74.

Callendar, B.D, (1994, August).The TRICARE era in military medicine. Air Force Magazine, p 38-42.

Caroselli, C. (1992). Assessment of organizational culture: A tool for professional success. Orthopaedic Nursing, 11(3), 57-63.

Casto, R. (1991). The turmoil of turf: Interprofessional collaboration in the war zone. In J.R. Snyder (Ed.), Interdisciplinary health care teams: Proceedings of the thirteenth annual conference (pp.198-204). Indianapolis: Indiana University Medical Center.

Carrino, G.E. & Garfield, R. (1995). The substitutability of nurse practitioners for physicians: A literature review. Nursing Leadership Forum, 1(3), 76-83.

Chard, M.A., Dunn, B., & Mandelbaulm, J.L. (Eds.). (1983). Nurse practitioners: A review of the literature 1965-1982. Kansas City: American Nurses Association and National Association of Pediatric Nurse Associates and Practitioners.

Chapman, T. (1996). Challenges of leadership in an era of health care reform. Frontiers in Health Services Management, 10(2), 3-26.

Cooper, J. (1995). Accountability for clinical preventive services. Military Medicine, 160(6), 297-299.

Cutler, D. (1995). Cutting costs and improving health: Making reform work. Health Affairs, 14(1), 161-171.

Davis, K., Collins, K., Schoen, C., & Morris, C. (1995). Choice matters: Enrollees' views of their health plans. Health Affairs, 14(2), 100-112.

Department of Health and Human Services (1994). A study of graduate medical education costs (DHHS Publication No. A-09-93-00096). Washington, DC: Office of

Inspector General.

Donaldson, M., & Vanselow, N. (1996). The nature of primary care. The Journal of Family Practice, 42(2), 113-117.

Donley, R. (March/April, 1995). Advanced practice nursing after health care reform. Nursing Economics, 13(2), 84-88.

Drucker, P. (1980). Managing in turbulent times. New York: Harper & Row.

D'Aunno, T., Alexander, M., & Laughlin, B. (1996). Business as usual? Changes in health care's workforce and organization of work. Hospital and Health Services Administration, 41(1), 3-18.

Edmunds, M.W. (1978). Evaluation of nurse practitioner effectiveness: An overview of the literature. Evaluation and the Health Professions, 1(1), 69-82.

Edmunds, M. (1988). Promoting visibility for the nurse practitioner role. Nurse Practitioner,13,(3), 53-55.

Edmunds, M. (1992). Council's pursuit of national standardization for advanced practice nursing meets with resistance. The Nurse Practitioner: The American Journal of Primary Health Care, 17(10), 81-83, 50.

Edmunds, M. (1994). Time of risk, time of opportunity. The Nurse Practitioner: The American Journal of Primary Health Care, 19(8), 7,8,11.

Enggist, R., & Hatcher, M. (1983). Factors influencing consumer receptivity to the nurse practitioner. Journal of Medical Systems, 7(6), 495-512.

Feldman, M., Ventura, M., & Crosby, F. (1987). Studies of nurse practitioner effectiveness. Nursing Research, 36(5), 303-308.

Fulgrum, R. (1988). All I really need to know I learned in kindergarten. New York: Random House.

Gamliel, S., Politzer, R., Rivo, M., & Mullan, F. (Summer, 1995). Managed care on the march: Will physicians meet the challenge? Health Affairs,14(2), 131-142.

Glenn, J., & Goldman, J (1976). Strategies for productivity with physician extenders. Western Journal of Medicine, 124(3), 249-257.

Gonzalves, P., & Minderler, J. (1995). A patient satisfaction survey: A basis for changing delivery of services. Military Medicine, 160(10), 486-488.

Griffith, J. (1996). Managing the transition to integrated health care organizations. Frontiers of Health Services Management, 12(4), 20-45.

Hall, M. (1995). Uncertainty and diversity: Business as usual. Military Medicine, 160(4), 156-160.

Hammer, M., & Champy, J. (1993). Reeingeering the corporation: A manifesto for business revolution. New York: HarperCollins.

Hart, S., & Connors, R. (1996). Resourcing decision model for military hospitals. Military Medicine, 161(9), 552-556.

Hassmiller, S. (Spring, 1995). The primary care policy fellowship: An innovative model for interdisciplinary collaboration. The Journal of Health Administration Education, 13(2), 277-284.

Henneman, E., Lee, J., & Cohen, J. (1995). Collaboration: A concept analysis. Journal of Advanced Nursing, 21(1), 103-109.

Henshaw, S. (1976). Three studies of the acceptance and impact of family nurse practitioners: A final report. (Grant No. HS 01366). Springfield: U.S. Department of Commerce, National Technical Information Service.

Hibbard, H., & Nutting, P. (1991). Research in Primary Care: A national priority. In M.L. Grady (Ed.), Primary Care research: Theory and methods, (pp. 1-4). (AHCPR Publication No. 91-0011) Rockville : Department of Health and Human Services.

HQ USAF SGN. (1995, September). From the director's chair. Rhino Signs, p. 1.

Hudak, R., Brooke, P & Finstuen K. (1994). Forecast 2000: A prediction of skills, knowledge, and abilities required by senior medical treatment facility leaders into the 21st century. Military Medicine, 159(7), 494-500.

Hughes, L. (1990). Assessing organizational culture: Strategies for the external consultant. Nursing Forum, 25(1), 15-19.

Inui, T. (1996). What are the sciences of relationship-centered primary care? The Journal of Family Practice, 42(2), 171-180.

Jennings, B. (1993a). Patient care outcomes: Implications for the military health services system. Military Medicine, 158(5), 289-293.

Jennings, B. (1993b). Nursing implications of the Department of Defense Coordinated Care Program. Military Medicine, 158(12), 823-827.

Jick, T. (Summer, 1995). Accelerating change for competitive advantage. Organizational Dynamics, 24(1), 77-82.

Johnson, M., & Morrison, M. (1995). Looking ahead: A matter of survival. Journal of Health Care Resource Management, (12), 28-31.

Kassirer, J. (January, 20, 1994). What role for nurse practitioners in primary care? New England Journal of Medicine,330, 204-205.

Klingle, R., Burgoon, M., Afifi, W., & Callister, M. (1995). Rethinking how to measure organizational culture in the hospital setting. Evaluation and the Health Professions, 18(2), 166-186.

Knaus, V., Felten, S., Burton, S., Fobes, P., & Davis, K. (1997). The use of nurse practitioners in the acute care setting. Journal of Nursing Administration,27(2), 20-27.

Koch, L.W., Pazaki, S.H., & Campbell, J.D. (1992). The first 20 years of nurse practitioner research: An evolution of joint practice issues. The Nurse Practitioner: The American Journal of Primary Health Care, 17(2), 62-69.

Koop, E. (1995). Health care reform: Who is responsible? Military Medicine, 160(4), 147-150.

Kotter, J. (March-April, 1995). Leading change: Why transformation efforts fail. Harvard Business Review, 59-67.

Kralewski, J., Wingert, T., & Barbouche, M. (1996). Assessing the culture of medical group practices. Medical Care, 34(5), 377-388.

Kuhn, T. (1970). The structure of scientific revolutions (2nd ed.). Chicago: University of Chicago Press.

Kutch, J. (1995). Medical staff resources model and methodology: Ambulatory/outpatient services. Military Medicine, 160(2), 77-81.

Lamar, S. (July/August, 1994). TRICARE: DOD health care reform. Navy Medicine, 8-13.

Lamberts, H., & Hofmans-Okkes, I. (1996). Episode of care: A core concept in family practice. The Journal of Family Practice, 42(2), 161-167.

Lambrew, J., DeFriese, G., Carey, T., Ricketts, T., & Biddle, A (1996). The effects of having a regular doctor on access to primary care. Medical Care, 34(2), 138-151.

Lanier, J. (1993). Restructuring military health care: The winds of change blow stronger. Hospital and Health Services Administration, 38(1), 121-132.

Lainer, C., & Davidoff, M. (1996). Patient-centered medicine: A professional evolution. Journal of American Medical Association, 275(2), 152-156.

Lawler, E., & Galbraith, J. (Autumn, 1994). Avoiding the corporate dinosaur. Organizational Dynamics, 23(2), 5-17.

Lemley, K., O'Grady, E., Rauckhorst, L., Russell, D., & Small, N. (1994). Baseline data on the delivery of clinical preventive services provided by nurse practitioners. The Nurse Practitioner: The American Journal of Primary Health Care, 19(5), 57-63.

Lewin, K. (1951). Field theory in social science: Selected theoretical papers. New York: Harper & Row.

Louis, M. (1980). Surprise and sensemaking: What newcomers experience in entering unfamiliar organizational settings. Administrative Science Quarterly, 25(2), 226-250.

Louis, M., & Sabo, C. (1994). Nurse practitioners: Need for and willingness to hire as viewed by nurse administrators, nurse practitioners, and physicians. Journal of the American Academy of Nurse Practitioners, 6(3), 113-119.

Mackey, T. (1995). Good care is good business at UT Health Services. NP News, 3(6), 1,6,11.

Madden, M., & Ponte, P. (1994). Advanced practice roles in the managed care environment. Journal of Nursing Administration, 24(1), 56-62.

Marmor, R., & Mashaw, J. (1994). Strategy for survival: Change and stability in the management of health-care institutions. Health Management Quarterly, 16(4), 5-8.

Martin, P., & Hutchinson, S. (1997). Negotiating symbolic space: Strategies to increase nurse practitioner status and value. The Nurse Practitioner: The American Journal of Primary Health Care, 22(1), 89-91, 101-102.

Maurer, R. (June, 1996). Using resistance to build support for change. Journal for Quality and Participation, 19(3), 56-63.

McEachern, S. (1995). Demand management will be a necessity, a baked-in utility. Health Care Strategic Management: The Newsletter for Hospital Strategists, 13(10), 1, 20-23.

McGee, W., & Hudak, R. (1995). Reengineering medical treatment facilities for TRICARE: The medical group practice model. Military Medicine, 160(5), 235-239.

McGill, M., & Slocum, J. (Autumn, 1993). Unlearning the organization. Organizational Dynamics, 22(2), 67-79.

McGrath, S. (1990). The cost effectiveness of nurse practitioners. The Nurse Practitioner: The American Journal of Primary Health Care, 15(7), 40-42.

McLagan, P., & Nell, C. (June, 1996). A new leadership style for genuine total quality. Journal for Quality and Participation, 19(3), 14-17.

Meyer, P. (1996). Leadership in a time of strife and change. Frontiers in Health Services Management, 10(2), 33-35.

Miser, W. (1992). The content of outpatient family practice care in an Army community: One physician's three-year experience. Military Medicine, 157(11), 593-597.

Molde, S., & Diers, D. (1985). Nurse practitioner research: Selected literature review and research agenda. Nursing Research, 34(6), 362-367.

Mundinger, M.O. (1994). Advanced-practice nursing-good medicine for physicians? New England Journal of Medicine, 330,(3), 211-214.

Murray, D. (March, 13,1995). The four market stages, and where you fit in. Medical Economics, 72(5), 44-46, 49-52, 54, 57.

Nauert, R. (1996). The quest for value in health care. The Journal of Health Care Financing: Strategies for the Managed Care Era, 22(3), 52-61.

Nichols, L. (1992). Estimating costs of under using advanced practice nurses. Nursing Economics, 10(5), 343-351.

Nutt, P. (1996). Views of implementation approaches by top managers in health service organizations. Hospital and Health Services Administration, 41(2), 176-196.

O'Connor, K.S. (1994). APN Advanced practice nurses in an environment of health care reform. Maternal Child Nursing, 19,(2), 65-68.

O'Malley, J., Cummings, S., King, C. (1996). The politics of advanced practice. Nursing Administration Quarterly, 20(3), 62-72.

O'Neil, E.H. (1993). Health professions education for the future: Schools in service to the nation. San Francisco: Pew Health Professions Commission.

Office of Technology Assessment, Congress of the United States (1986). Nurse practitioners, physician assistants, and certified nurse midwives: A policy analysis. (Health Technology Case Study, 37) Washington, D.C.: U.S. Government Printing Office.

Pantell, R.H., Fries, J.F., & Vickery, M.D. (1994). Taking care of your child: A parent's guide to complete medical care (4th ed.). Reading, Massachusetts: Adison-Wesley .

Pearce, C., & Osmond, C. (Winter, 1996). Metaphors for change: ALPs model of change management. Organizational Dynamics, 24(3), 23-35.

Pennachio, D.L. (1995). The midlevel provider: Colleague or competitor? Patient Care, 29(1), 20-24.

Peters, P. (1987). Thriving on chaos: A handbook on management revolution. New York: Random House.

Phoon, J., Corder, K., & Barter, M. (1996). Managed care and total quality management: A necessary integration. Journal of Nursing Care Quarterly, 10(2), 25-32.

Pierce, A., & Pierce, N. (1996). Change, complexity, and chaos. In J. Creasia and B. Parker (Ed.), Conceptual foundations of professional nursing practice, (pp. 421-441). Philadelphia: Mosby.

Polit, D., & Hungler, B. (1983). Nursing research: Principles and practice (2nd ed.). Philadelphia: J.B. Lippincott.

Pointer, D., & Sanchez, J. (1996). Leading in the midst of revolution. Frontiers in Health Services Management, 10(2), 36-39.

Porras, J. (1987). Stream analysis: A powerful new way to diagnose and manage change. Reading: Addison Wesley.

Porras, J., & Silvers, R. (1991). Organizational development and transformation. Annual Review of Psychology, 42 (ISSBN: 08243-0242-7) 51-78.

Prescott, P., & Driscoll, L. (1979). Nurse practitioner effectiveness, a review of physician-nurse comparison studies. Evaluation and the Health Professions, 2(4), 387-411.

Prescott, P. (1994). Cost-effective primary care providers. International Journal of Technology Assessment in Health Care, 10(2), 249-257.

Prigogine, I., & Stengers, I. (1984). Order out of chaos: Man's dialogue with nature. New York: Bantam Books.

Ramsey, J., McKenzie, J. & Fish, D. (1982). Physicians and nurse practitioners: Do they provide equivalent health care? American Journal of Public Health, 72(1), 55-57.

Reichers, A., & Schneider, B. (1990). Organizational climate and culture: Evolution of constructs. In B. Schneider (Ed.), Organizational climate and culture, (pp. 237-252). San Francisco: Jossey-Bass.

Reinertsein, J.L. (Winter, 1995). Transformation: The new knowledge needed for health care administrators. Journal of Health Administration Education, 13(1), 39-51.

Reinhart, S., Anderson, F., Clay, P., Patrician, P., & Maloney, P. (1995). Managed care at Eisenhower Army Medical Center: An initial experience. Military Medicine, 160(8), 384-388.

Richardson, P., & Denton, K. (1996). Communicating change. Human Resource Management, 35(2), 203-216.

Riehl, J. & Roy, C. (1980). Conceptual models for nursing practice (2nd ed.). Norwalk: Appleton-Century Crafts.

Rivo, M. (1993). Internal medicine and the journey to medical generalist. Annals of Internal Medicine, 119(2), 146-152.

Rosenthal, T., Riemenschneider, T., & Feather, J. (1996). Preserving the patient referral process in the managed care environment. The American Journal of Medicine, 100(3), 338-343.

Rosser, W. (1996). Approach to diagnosis by primary care clinicians and specialists: Is there a difference? The Journal of Family Practice, 42(2), 39-44.

Ruth-Sanchez, V., Bosque, E., & Lee, K. (1996). Facilitators of and constraints to neonatal nurse practitioner practice: Comparing nursing and medical models. Journal of the American Academy of Nurse Practitioners, 8(4), 175-180.

Safreit, B.J. (1992). Health care dollars and regulatory senses: The role of advanced practice of nursing. Yale Journal of Regulations, 9(2), 417-488.

Salkever D.S., Skinner, E.A., Steinwachs, D.M., & Katz, H. (1982). Episode-based efficiency comparisons for physicians and nurse practitioners. Medical Care, 20(2), 143-153.

Sawyer, J. (1993). Defining your role in ambulatory care: Clinical nurse specialist or nurse practitioner? Clinical Nurse Specialist, 7(1), 4-7.

Schaffner, J., Ludwig-Beymer, P., & Wiggins, J. (1995). Utilization of advanced practice nurses in healthcare systems and multispecialty group practice. Journal of Nursing Administration, 25,(2) 37-43.

Schein, E. (1992). Organizational cultures and leaders (2nd ed.). San Francisco: Jossey-Bass.

Schneider, B., Brief, A., & Guzzo, R. (Spring, 1996). Creating a climate and culture for sustainable organizational change. Organizational Dynamics, 24(4), 7-19.

Seaver, C. (March, 1996). Good health care is family business. The Retired Officer Magazine,102(3), 28, 30-33.

Sebas, M. (1994). Developing a collaborative practice agreement for the primary care setting. The Nurse Practitioner: The American Journal of Primary Health Care, 19(3), 49-51.

Seibert, J., Strohmeyer, J., & Carey, R. (1996). Evaluating the physician office visit: In pursuit of a valid and reliable measure of quality improvement measures. Journal of Ambulatory Care Management, 19(1), 17-37.

Sherer, J. (May, 5, 1994). Corporate cultures. Hospitals and Health Networks, 20-27.

Shortell, S., Gillies, R., & Anderson, D. (Winter, 1994). The new world of managed care: Creating organized delivery systems. Health Affairs, 48(64), 46-64.

Siegloff, L.H. (1995). The nurse practitioner project, Wilcannia: Moving from anecdotes to evidence. Australian Journal of Rural Health, 3(3), 114-121.

Simborg, D., Starfield, B., & Horn, S. (1978). Physicians and non-physicians health practitioners: The characteristics of their practices and their relationships. American Journal of Public Health, 68(1), 41-48.

Sloan, A. (1994). Objective medical group implementation guidance letter. Office, Air Force Surgeon General.

Stange, K., (1996). Primary care research: Barriers and opportunities. The Journal of Family Practice, 42(2), 192-198.

Steckler, N., & Fondas, N. (Winter, 1995). Building team leader effectiveness: A diagnostic tool. Organizational Change, 24(2), 20-35.

Stimes, D., Tuchschmidt, M., Mecher, C., & Pate, A. (July, 1996). Managing change for managed care. Federal Practitioner, 79-84.

Strasen, L. (1994). Reeingeering hospitals using the "function follows form" model. Journal of Nursing Administration, 24(12), 59-63.

Sullivan, M. (March, 1994). Patients' perspectives: Subjective responses in a primary care setting. Military Medicine, 159(3), 230-232.

Sunshine, J. (July, 1996). The new DOD quality management program: Part I. Federal Practitioner, 74, 77.

Szafranski, R. (1993). Annulling marriages: Reframing the roles, missions, and functions debate. Airpower Journal, 7(4), 55-67.

Taylor, R., & Lessin, L. (1996). Restructuring the health care delivery system in the United States. Journal of Health Care Financing: Strategies for the Managed Care Era, 22(4), 33-60.

Texidor, M., Lamar, S., & Roberts, B. (1996). TRICARE: Implications for military executive management education - A review of current data . Military Medicine, 161(4), 217-220.

Trofino, J. (1995). Transformational leadership in health care. Nursing Management, 26(8), 42-47.

Uhlfelder, H. (June, 1996). It's a new world out there. Journal for Quality and Participation, 19 (3), 27-35.

Ulrich, D., Glinow, M., & Jick, T. (Autumn, 1993). High-impact learning: Building and diffusing learning capability. Organizational Dynamics, 23(2), 52-66.

Vickery, D. (1996). Toward appropriate use of medical care. Health Care Forum Journal, 39(1), 15-19.

Wasserman, R., & Inui. T. (1983). Systematic analysis of clinician-patient interactions: A critique of recent approaches with suggestions for future research. Medical Care, 21(3), 279-293.

Weil, T., & Jorgensen, J. (December, 1995). Health manpower trends: In a market-driven environment. Journal of Health Care Resource Management , (12), 15-21.

Weiner, J.P. (1994). Forecasting the effects of health reform on U.S. physician requirement. Journal of the American Medical Association, 272(3), 222-230.

Weiner, J., Steinwachs, D., & Williamson, J. (1986). Nurse practitioner and physician assistant practices in three HMOs: Implications for US health manpower needs. American Journal of Public Health, 76,(5), 507-511.

Weiss, B. (March 13, 1995). Managed care: There's no stopping it now. Medical Economics, 72(5), 26-28,31-34,36,38,43.

Wilson, D. (1994). Barriers to nurse practitioner practice. The Nurse Practitioner: American Journal of Primary Health Care, 19(11), 16-18.

Wilson, H. (1985). Research in nursing. Menlo Park: Addison-Wesley Publishing Company.

Wilson, C., & Daniel, D. (1994). Health care reform of 1993 and terminology. Military Medicine, 159(4), 365-368.

Zastowny, T., Roghmann, K., & Hengst, A. (1983). Satisfaction with medical care: Replications and theoretic reevaluation. Medical Care, 21(3), 294-294-322.

Bibliography

American Nurses Association (1995). Standards of practice for the primary health care nurse practitioner (4 ed.). Washington, D.C.: American Nurses Publishing.

Beiseckecker, A., Murden, R., Moore, W., Graham, D., & Nelmig, L. (1996). Attitudes of medical students and primary care physicians regarding input of older and younger patients in medical decisions. Medical Care, 34(2), 126-137.

Betts, V. (1996). Nursing's agenda for health care reform: policy, politics, and powerr through professional leadership. Nursing Administration Quarterly, 20(3), 1-8.

Bibb, B. (1982). Comparing nurse practitioners and physicians: A simulation study on the process of care. Evaluation and Health Professions, 5(1), 29-42.

Bigbee, J. (1992). Frontier areas: Opportunities for NPS' primary care services. The Nurse Practitioner: The American Journal of Primary Health Care, 17(9), 47-48,50,53-54,57.

Cowley, S. (1995). Health promotion in the general practice setting. Health Visit, 68(5), 199-201.

COR Health care Resources (1996, May). Physician extenders. Health Care Leadership Review, p. 12.

Cronenwett, L. (1995). Molding the future of advanced practice nursing. Nursing Outlook,43(3), 112-118.

Czarnecki, M.T. (1996). Benchmarking: A data-oriented look at improving health care performance. Journal of Nursing Care Quality, 10(3), 1-6.

DeAngelis, C. (1994). Nurse practitioner redux. Journal of the American Medical Association, 271(11), 868-871.

Diers, D. & Molde, S. (1979). Some conceptual and methodological issues in nurse practitioner research. Research in Nursing and Health, (2), 73-84.

Donjte, K., Sparks, B., & Given, B. (1996). Establishing a collaborative practice in a comprehensive breast clinic. Clinical Nurse Specialist: The Journal for Advanced Nursing Practice, 10(2), 95-105.

Evans, R. (1995). Healthy populations or healthy institutions: The dilemma of health care management. The Journal of Health Administration Education, 13(3), 453-473.

Fitzgerald, M., Jones, E., Lazar, B., McHugh, M., & Wang, C. (January, 15, 1995). The midlevel provider: Colleague or competitor? Patient Care, 20-37.

Flower, J. (1993). Reinventing our institutions. Health Care Forum Journal, 36(4), 44-50.

Fowkes, V. (1993). Meeting the needs of the underserved: The roles of the physician assistants and nurse practitioners. In D. Claws on, & M. Osterweis (Eds.), The roles of physician assistants and nurse practitioners in primary care, (pp. 69-84). Washington, D.C.: Association of Academic Health Centers.

Golembiewski, R., Billingsley, K., & Yeager, S. (1976). Measuring change and persistence in human affairs. Journal of Applied Behavioral Science,23(5), 295-313.

Goode, C., & Bulchek, G. (1992). Research utilization: An organization process that enhances quality of care. Journal of Nursing Care Quality: Clinical Implications for Quality, (Special Report), 27-35.

Goodman, H., & Perrin, E. (1978). Evening telephone management by nurse practitioners and physicians. Nursing Research, 27(8), 233-237.

Griffith, G. (1995). Family practice management in an overseas theater. Military Medicine, 160(11), 564-570.

Hassell, J. (1996). Improved management of depression through nursing model application and critical thinking. Journal of the American Academy of Nurse Practitioners, 8(4), 161-166.

Hooker, R. (1991). The military physician assistant. Military Medicine, 156,(3), 657-659.

Jenkins, M., & Torrisi, D. (1995). Marketing and Managment: Nurse practitioners, community nursing centers and contracting for managed care. Journal of the American Academy of Nurse Practitioners, 7(9), 119-124.

Kellie, S., & Griffith, H. (1995). Emerging trends in assessing performance and managing in health care: Expectations for implementing preventive services. American Journal of Preventive Medicine, 11(6), 388-392.

Keepnews, D., & Marullo, G. (1996). Policy imperatives for nursing in an era of health care restructuring. Nursing Administration Quarterly, 20(3), 19-31.

Kerekes, J. (1996). Nurse-managed primary care. Nursing Management, 27(2), 44-47.

Koelbel, P., Fuller, S, & Misener, T. (1991). Job satisfaction of nurse practitioners: An analysis using Herzberg's theory. The Nurse Practitioner: The American Journal for Primary Health Care, 16(4), 43, 46-56.

Kravitz, R., Thomas, N., Sloss, E., & Hosek, S. (1993). Satisfaction and dissatisfaction in institutional practice: Results from a survey of U.S. military physicians. Military Medicine, 158(1), 41-50.

Levine, E. (1994). Needs assessment for advanced practice nurses for the uniformed services. Military Medicine, 159(10), 650-654.

Lipman, N.M. (1995). Office visit. The doctor extender will see you now. Consumer Report Health, 7(9), 107.

Locos, C. (1995). Advanced practice nurses: These days, their welcome is becoming ever-warmer. Nursing Homes, 44(2), 20, 23-24.

Mass, H., & McKay, R. (1995). Nurse practitioners: Expanding the role of nursing. Nursing - British Columbia, 27(4), 7-9.

Melillo, K. (Fall, 1992). Nurse practitioners in long-term care: Perceptions of DONs. The Journal of Long-term Care Administration, 13-17.

Morgan, W. & Trolinger, J. (1994). The clinical education of primary care nurse practitioner students. The Nurse Practitioner: The American Journal of Primary Health Care, 19(4), 62-66.

Nightingale, F. (1946). Notes on nursing: What it is, and what it is not (2nd ed.). Philadelphia: Edward Stern & Company.

Robbins, H. (1990). Turf wars: Moving from competition to collaboration. Glenview: Scott Foresman & Company.

Schneider, D., & Foley, W. (1977). A systems analysis of the impact of physician extenders on medical and manpower requirements. Medical Care,15(4), 277-297.

Sellards, S., & Mills, M. (1995). Administrative issues for nurse practitioners. Journal of Nursing Administration, 25(5), 64-70.

Tice, D. (1992). Self-concept and self-presentation: The looking glass self is also a magnifying glass. Journal of Personality and Social Psychology, 63(3), 435-451.

U.S. Department of Health and Human Services (1994). Putting research into practice: Report of the task force on building capacity for research in primary care. (AHCPR Publication No. 0062). Rockville, MD: Author.

Van der Horst, M. (1992). Canada's health care system provides lessons for NPs'. The Nurse Practitioner: The American Journal of Primary Health Care, 17(8), 44, 50, 52-53, 57, 60.

Ventura, M., Crosby, F., & Feldman, M. (1991). An information synthesis to evaluate nurse practitioner effectiveness. Military Medicine, 156(6), 286-291.

Vickery, D.M., & Fries, J.F. (1994). Take care of yourself: The complete guide to medical self-care (5th ed.). Reading, Massachusetts: Addison-Wesley.

Vickery, D.M., & Lynch, W.D. (1995). Demand management: Enabling patients to use medical care appropriately. Journal of Occupational and Environmental Medicine, 37(5), 551-557.

Willis, E. (1993). Nurses and independent fee-for-service practice: A critical review. Contemporary Nurse: A Journal for the Australian Nursing Profession, 2(3), 135-142.

Wolford, G.R., & Goldsmith J.C. (1992). The reshaping of health care. The Health-Care Forum Journal, 35(3), 19-27.

Zammuto, R., Turner, I., Miller, S., Shannon, I., & Christian, J. (1979). Effect of clinical settings on the utilization of nurse practitioners. Nursing Research, 26(3), 98-102.

Zimble, J. (1996). Military medicine: An operational definition. Military Medicine, 161(4), 183-188.

APPENDICES

Appendix A: Clarification of Relevant Terms

Appendix B: FNP Data Collection Tool

Appendix C: USUHS IRB Consent

Appendix D: Survey Control Number Request

Appendix E: Study Participant Cover Letter

Appendix F: OMG Commander Cover Letter

Appendix G: Respondent Comments

Appendix H: Medical Corps Officer Comments Related To Military Mid-level Providers

APPENDIX A
CLARIFICATION OF RELEVANT TERMS

Family Nurse Practitioners

Have legal authority to perform acts traditionally reserved for physicians (i.e. diagnose, treat, and prescribe). FNPs emphasize wellness, health promotion and manage acute minor and stable chronic illnesses of men, women, children, young adults, and the elderly. (ANA, 1995; Sawyer, 1993).

Objective Medical Group

Small medical groups (less than 300 people) will usually have two squadrons (Medical Operations and Medical Support). Medical groups with more than 300 personnel assigned will have four squadrons (Medical Operations, Medical Support, Aerospace Medicine, and Dental). Medical groups with more than 600 personnel assigned have an option to have five squadrons by dividing the Medical Operation Squadron into Medical Operations and Surgical Operations (Bannick, 1996).

Executive Management Team

Participate in executive decision-making, design of services, resource allocation, and development of organizational policies. The Administrator, Chief Nurse Executive, and Chief of Medical Staff are all functional advisors to the Group Commander as well as hold, as a minimum, positions equivalent to Deputy Squadron Commander (Bannick, 1996).

Chief Nurse Executive (CNE)

Has the authority and responsibility for developing organization-wide patient care programs, policies, and procedures that describe how patients' nursing care needs are assessed; develops and implements the organization's plans for providing nursing care, and implements processes to measure, assess, and improve patient outcomes. The CNE plans, coordinates, and establishes practice and performance standards for all nursing personnel to ensure compliance with Department of Defense (DOD), USAF, professional, and

accreditation requirements. The CNE participates collaboratively in the planning processes and decision-making for utilization and assignment of nursing personnel within the medical group (Bannick, 1996).

Chief, Medical Services

Responsible for credentialing and privileging processes in accordance with (IAW) DOD directives, Air Force Instructions, and accreditation standards. Deploys organization-wide medical care programs, policies, and procedures that describe how patients' medical needs are assessed and evaluated. Facilitates clinical practice parameters consistent with DOD, USAF, professional, and accreditation requirements. Guides medical staff in clinical performance assessment improvement activities and evaluates these activities with outcome-based metrics (Bannick, 1996).

Medical Operations Squadron (MDOS)

The purpose of the MDOS is to provide for the full scope of preventive and clinical health care services for the defined population. (Bannick, 1996).

Medical Operations Squadron Commander (MDOS/CC)

Has met a central squadron commander board where they were nominated by Medical Group Commanders and Wing Group Commanders. Training requirements for Squadron Commanders should include, but are not limited to, (a) Service-line courses, (b) Air Force Squadron Commander's Course, (c) Wing orientation, (d) Medical Group orientation, and (e) Advanced Quality Air Force (QAF)/Total Quality Management (TQM)/Continuous Quality Improvement (CQI) training (Bannick, 1996).

Total Quality Management(TQM)/ Quality Improvement

Strong principles of management commitment and innovative thinking are crucial to TQM/QI programs. Based on Demming's 14 point method, QI elaborates the concepts for changing one's philosophy and empowering others to reach higher levels of achievement (Phoon, Corder & Barter, 1996).

APPENDIX B
FNP DATA COLLECTION TOOL

EXECUTIVE STAFF SURVEY ON FAMILY NURSE PRACTITIONER UTILIZATION

A. EXECUTIVE TEAM DEMOGRAPHIC INFORMATION:

A1. WHAT IS (ARE) YOUR CURRENT TITLE(S): **(Circle the correct response)**

Chief, Medical Staff (CMS)

Chief, Nurse Executive (CNE)

Medical Operations Squadron Commander (MDOS/CC)

A2. HOW LONG HAVE YOU BEEN IN YOUR PRESENT POSITION? **(Fill in the correct time)**

Years_____ Months_____

A3. WHAT IS YOUR SPECIFIC AIR FORCE DESIGNATED CORPS? **(Circle the correct response)**

Medical Corps (MC)

Dental Corps (DC)

Medical Service Corps (MSC)

Biomedical Service Corps (BSC)

Nurse Corps (NC)

For the remainder of this survey please circle your degree of agreement or disagreement with the following organizational factors

B. STRATEGIC PLANNING FACTORS:

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	N/A
B1. I believe it is within the interest of the Air Force that this Objective Medical Group gains an FNP slot	1	2	3	4	5	6
In order to add an FNP to this facility I support:						
B2. Converting a physician slot into an FNP slot	1	2	3	4	5	6
B3. Converting a Physician Assistant (PA) slot into an FNP slot	1	2	3	4	5	6
B4. Converting a nurse slot into an FNP slot	1	2	3	4	5	6

EXECUTIVE STAFF SURVEY ON FAMILY NURSE PRACTITIONER UTILIZATION

I would like to see a FNP assigned to work primarily:

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	N/A
B5. In the Primary Care Clinic	1	2	3	4	5	6
B6. In the Emergency Room	1	2	3	4	5	6
B7. In the Family Practice Clinic	1	2	3	4	5	6
B8. In the Flight Medicine Clinic	1	2	3	4	5	6

B9. Are there additional clinical areas that you would like to see an FNP assigned ? **(please list or comment)**

_____

_____

C. PERCEIVED CONTRIBUTION FACTORS:

I believe that the inclusion of an FNP at this facility will increase:

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	N/A
C1. Access to clinic medical services	1	2	3	4	5	6
C2. Continuity in health care delivery of services	1	2	3	4	5	6
C3. Preventive services for the patient population	1	2	3	4	5	6
C4. Clinic productivity	1	2	3	4	5	6
C5. Patient satisfaction with medical care	1	2	3	4	5	6
C6. Comprehensive health care services	1	2	3	4	5	6

D. ORGANIZATIONAL / ENVIRONMENTAL RECEPTIVITY FACTORS:

I believe that the following statements are issues which must be addressed with the implementation of FNP services:

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	N/A
D1. Resource Management Office cannot obtain or convert slots for gaining an FNP	1	2	3	4	5	6
D2. Productivity would not warrant a FNP slot	1	2	3	4	5	6
D3. Space issues in the clinics are a concern	1	2	3	4	5	6
D4. Ancillary support is a concern	1	2	3	4	5	6
D5. Standards of care may go down	1	2	3	4	5	6
D6. Current provider culture would not welcome the addition of a FNP	1	2	3	4	5	6
D7. FNPs offer no "on-call" contributions	1	2	3	4	5	6

EXECUTIVE STAFF SURVEY ON FAMILY NURSE PRACTITIONER UTILIZATION

E. EXPECTATIONS OF CHANGE FACTORS:

I predict that the addition of FNP services will promote:

	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	N/A
E1. Improved outcomes of health care	1	2	3	4	5	6
E2. Improved continuity of care	1	2	3	4	5	6
E3. Improved collaboration across disciplines	1	2	3	4	5	6
E4. Improved patient-provider relations	1	2	3	4	5	6
E5. Increase in preventive and wellness services	1	2	3	4	5	6
E6. Improved JCAHO outcomes	1	2	3	4	5	6

E7. Are there additional change expectations you have regarding the implementation of FNP services? **(please list or comment)**

_____

_____

_____

~You are welcomed to make additional comments on any issue of concern~

In the event my address or envelope has been misplaced:

Katherine O'Rourke
39 Redding Ridge Drive
Gaithersburg, MD 20878

THANK-YOU FOR YOUR TIME AND ATTENTION IN COMPLETING THIS SURVEY

APPENDIX C

USUHS IRB CONSENT

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES
4301 JONES BRIDGE ROAD
BETHESDA, MARYLAND 20814-4799

February 3, 1997

MEMORANDUM FOR KATHERINE M. O'ROURKE, MAJOR, USAF, NC, GRADUATE SCHOOL OF NURSING

SUBJECT: Human Subject Use Exemption for Protocol N06125-01

The nursing student protocol entitled *"What is the Organizational Culture Regarding Use of Family Nurse Practitioners as Perceived by Selected Objective Medical Group Executives"* is exempt from human subject use review under the provisions of 32 CFR 219.101 (b)(4). The USUHS Institutional Review Board understands that there will be no identifiers linking the responses of the target group.

Please notify this office of any amendments you wish to propose and of any untoward incidents which may occur in the conduct of this project. If you have any questions regarding human volunteers, please call me at 301-295-3303.

Michael J. McCreery, Ph.D.
LTC, MS, USA
Director, Research Programs and
Executive Secretary, IRB

Cc:
USUHS Graduate School of Nursing
File

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APPENDIX D
SURVEY CONTROL NUMBER REQUEST

30 November 1996

MEMORANDUM FOR HQ AFPC/DPSAS

FROM: Katherine O'Rourke, Major, USAF, NC
Graduate Student, USUHS
39 Redding Ridge Drive
Gaithersburg, MD 20878

SUBJECT: Survey Control Number

1. I am writing to request a survey control number which is required for continuing with my current research project. This research is being conducted to fulfill the thesis requirement for the Graduate School of Nursing - Family Nurse Practitioner Program at the Uniformed Services University of the Health Sciences. The purpose of this research is to describe the barriers to and facilitators of implementing family nurse practitioner (FNP) services in medical treatment facilities (MTF) as perceived by Objective Medical Group executive team members. The findings of this survey may be used to modify or develop current Air Force (AF) marketing programs for utilization of advanced practice nurses. Additionally, the uncovered information can be used by the Surgeon General's (SG) office to support MTFs in overcoming commonly encountered roadblocks in the operationalizing of AF health care reform initiatives. Importantly, recommendations can be given to military training programs of advanced practice nurses regarding existing barriers and facilitators to practice. The goal is to identify and strengthen change efforts which promote system-wide adaptation of health versus illness care.

2. The population to be studied are OMG executives who currently fulfill the role of Chief, Medical Services, Chief Nurse Executive, and Medical Operations Squadron Commander in the CONUS arena. The purposive sample of approximately 200 health care executives used in this study will also be the population. A mass mailing will be conducted to individual participants with stamped self addressed envelopes and my mailing address used for both return and mail to address for the completed surveys. Color coded paper will be used to identify the role of each respondent. Participants will not be identified by name at any time throughout this study.

3. Major Susan Hall has reviewed the proposed survey and methodology and has agreed to sponsor this survey. She can be contacted at DSN 297-0090.

4. Enclosed is the abstract describing this study, the cover letter, and the survey. The point of contact is Major Katherine O'Rourke. I can be reached at (301) 309-6722.

KATHERINE M. O'ROURKE, Major, USAF, NC
Graduate Student, USUHS

APPENDIX E

PARTICIPANT COVER LETTER

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES
4301 JONES BRIDGE ROAD
BETHESDA, MARYLAND 20814-4799

Katherine M. O'Rourke
39 Redding Ridge Drive
Gaithersburg, MD 20878
(301) 309-6722

24 January 1997

Dear Participant,

A penny for your thoughts! Your straight-talk is exactly what the Air Force needs in order to effectively push forward in this setting of multiple health reform initiatives. You have been selected for this study because of your leadership in both the administrative and clinical arena. ***Please share your thoughts on the enclosed survey within the next 5 days,*** otherwise, this survey may become buried in your paperwork with less chance for return.

I am an active duty nurse currently enrolled in full-time study in the Family Nurse Practitioner (FNP) program at the Uniformed Services University of the Health Sciences (USUHS). This study has been undertaken as a partial requirement for my Master of Science degree. I am very much interested in learning what your unique perceptions are regarding the strategic planning factors and organizational receptivity factors for implementing family nurse practitioner (FNP) services in your particular healthcare organization under the objective medical group (OMG) structure.

The survey will take approximately 10-15 minutes to complete. A response from all study participants will allow me to better describe obstacles and driving forces in the implementation of FNP services. Additionally, a large response will ensure that issues common to CONUS OMG leaders will be adequately described. Participation, however, in this survey is completely voluntary and all data will be kept strictly confidential. ***Data will be reported as group aggregate data and no individual responses can be identified.*** Informed consent is indicated by your returned, completed questionnaires. Please do not indicate your name on the survey. Please return the completed surveys in the pre-paid envelope as soon as possible - ***preferably within the next 5 days.***

The results will be published in the Nurse Corps update and reported to the Surgeon General's office. This thesis is under the direction of Dr. Marilyn Edmunds, Professor and Chair of the USUHS FNP Program. Any questions regarding this study may be directed to her at 301-295-1992.

Your thoughts are worth a MILLION to me. Thank you for making this questionnaire a priority in your very busy schedule. Your time and attention is greatly appreciated. I hope this study will contribute towards a better understanding of the real and potential organizational changes introduced within current Air Force health care culture by the implementation of FNP services.

Very Best Regards,

Katherine O'Rourke

KATHERINE O'ROURKE, Major, USAF, NC
Family Nurse Practitioner Student
Uniformed Services University of the Health Sciences
4301 Jones Bridge Road
Bethesda, Maryland 20814-4799

(SCN: 97-08; exp. 1 June 97)

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APPENDIX F
OMG COMMANDER COVER LETTER

Katherine M. O'Rourke
39 Redding Ridge Drive
Gaithersburg, MD 20878

28 December 1996

Dear Group Commander,

This is a courtesy letter to introduce myself and the purpose of a research study I am sending to selected members of your executive management team. I am an active duty nurse currently enrolled in full-time study in the Family Nurse Practitioner Program (FNP) at the Uniformed Services University of the Health Sciences. I am interested in learning more about specific barriers to and facilitators of implementing FNP services in the OMG. The participants chosen for this study are the Chief, Medical Services, Chief Nurse Executive, and the Medical Operations Squadron Commander. These individuals were selected because of their leadership in both the administrative and clinical arenas.

The survey will require approximately 10 - 15 minutes to complete. The responses will be completely anonymous. I will not ask for nor have any way of knowing what responses have come from which objective medical group (OMG). Identification of specific OMGs will not be possible because all returned, completed questionnaires will have only my address on the pre-paid envelope.

I have requested a **5 day return rate**, otherwise, I fear the survey may become buried among additional MTF priorities. A large response will ensure that issues common to OMG leaders (as identified in this study) will be accurately and adequately described. Please express my gratitude to those members on your management team who have agreed to participate in this study. I know everyone is very busy and appreciate the time taken to complete the questionnaire.

The results will be published in the Nurse Corps update and reported to the Surgeon General's office. I hope this survey will contribute to system-wide organizational improvements. This thesis is under the direction of Dr. Marilyn Edmunds, Professor and Chairperson of the FNP Department. Any questions regarding this research may be directed to her at 301-309-1992. Enclosed is a copy of the questionnaire and cover letter that is to be sent to the selected executive management team members.

Very Best Regards,
Katherine M. O'Rourke, Major, USAF, NC

APPENDIX G
RESPONDENT COMMENTS

Comments Related to FNP Practice Issues

Corps/Position	Time in Position	Comments
Medical Corps/CMS	18 months	FNPs are cost-effective means for providing over 90% of needed medical services to beneficiaries.
Medical Corps/MDOS/CC	2 months	We may be depending more and more on FNPs in the future!
Medical Corps/MDOS/CC	14 months	A physician extender.
Medical Corps/MDOS/CC	12 months	Inability to take call and function as medical officer of the day (MOD) are major drawbacks.
Medical Service Corps/ Administrator	12 months	Would prefer to see nurses doing prevention...we should have Health Care Advice Lines manned by nurses...(26 page packet of health promotion and prevention abstracts enclosed with phone number and request to call).
Medical Service Corps/ Administrator	10 months	Put in Health and Wellness Clinic or Advice Nurse Line management
Nurse Corps/CNE	17 months	I don't think it is widely known how FNP can contribute to the mission...most physicians don't understand or know the FNP role.
Nurse Corps/CNE	21 months	Think they will fill a void from the decrease in Family Practice physicians.
Nurse Corps	1 month	FNP would be great asset in manning a "call-in system" for patients who just need advice and not an appointment...versatility of role appealing.

(Practice Issue Comments Continued Next Page)

Comments Related to FNP Practice Issues

Corps/Position	Time in Position	Comments
Nurse Corps/ CNE/MDOS/CC	16 months	No forecasted change in productivity from FNP unless add a slot versus converting a slot
Nurse Corps/CNE/ MDOS/CC	11 months	Most women prefer GYN health care by a nurse provider; better teaching experience for Family Practice residents; improved case management by the FNP....FNPs can cover Primary Care Medicine call with MD back-up (business card and invitation for interview included).
Nurse Corps/MDOS/CC	29 months	FNPs are useful for "on-call" patient management teams where providers rotate call and triage patient for an appointment or refer to ER.

Comments Related to FNP Role Issues

Corps/Position	Time in Position	Comments on FNP Role Issues
Medical Corps/CMS	39 months	FNPs and PAs are hot commodities these days, workhorses and backbone of our clinic!
Medical Corps/CMS	36 months	As always it depends on the person in FNP slot. Need to ensure that these FNPs are willing to be part of a "team" and not out solely to promote the Nurse Corps at the expense of everyone else.
Medical Corps/CMS	48 months	Feel that PAs and FNPs are still engaged in war and need to get over it! No difference between PA and FNP.
Medical Corps/CMS	59 months	Great addition as a gatekeeper!
Medical Corps/CMS	19 months	Have recently converted slot and acquired FNP who is working out very well, it is a sound concept - would prefer to add a FNP slot as opposed to converting one from an existing position.
MedicalCorps/ MDOS/CC	6 months	Must assign FNP additional duty (Quality, Infection-Control) for promotion which neutralizes any gain in access-they will see fewer patients per day due to additional duties and doing more physicals.
Medical Service Corps/Administrator	10 months	Female FNPs are particularly suited for expansion of GYN services as our AD population do not want their PAPs from male providers.
Medical Service Corps/Administrator	32 months	FNP would enhance our Triage/Advice Nurse System...which saves us one full-time employee (16 visits/day). FNP would be the supervisor of our 3 Advice Nurses and conduct both visits and screening to population

(Role CommentsContinued in Next Table)

Continued Comments Related to FNP Role Issues

Corps/Position	Time in Position	Comments
Medical Service Corps/Administrator	17 months	Unfortunately I see FNPs as the same as PAs. I don't see any difference in their practice..non-nurses read the Rhino Signs, why not explain some of the practice differences and help the MSCs understand what these differences are to make educated decisions - (name and phone number included)
Nurse Corps/CNE	29 months	FNPs would give increased nursing voice on professional issues - a tremendous asset to CNE -especially if CNE not in designated position...as SGH/SGQ/SGN positions become designated to senior ranking officer I would welcome FNP for CNE advisor (respondent moving into Group Commander position)

Comment Related to Mobility Issues

Corps/Position	Time in Present Position	Comments
Medical Corps/ MDOS/CC	6 months	Great initiative! Create new roles for advanced practice nurses-FNPs & APNs could fill mobility classification codes for contingency operations other than war

Comments Related to Administrative Issues for FNP Utilization

Corps/Position	Time in Position	Comments
Medical Corps/ MDOS/CC	24 months	Have already converted 46N3 into FNP (46N3H) - did not know converting any other positions was an option. What about directed caps on MC and NC?
Medical Corps/ MDOS/CC	6 months	I won't rush to convert physician or PA slots into NP position but gladly welcome them to add balance to the team...some commonalities among physician assistants and nurse practitioners..can be used interchangeably, have very little need for administrative action (versus physicians), both have lower incidences of patient complaints due to down-to-earth communication style
Biomedical Service Corps/ MDOS/CC	18 months	Only have 6 extender slots. Recently acquired one FNP. Converted one PA into a Dietician slot (strongly disagreed with FNP being in best interest of AF)
Nurse Corps	27 months	FNP position is being added to UTC for ATH however I do not support converting nurse slot to FNP...workload on inpatient units increased and cannot afford to put a 46N3 in clinics authorized a nurse
Nurse Corps/CNE	19 months	Greatest gain would be in Put Prevention into Practice and Health and Wellness Clinic for patient education (non-appointment position)
Nurse Corps/CNE	22 months	The NC sold out the Primary Care NP years ago. Now with the preventive health care focus we need them as part of the team...getting slots converted
Nurse Corps/CNE/ MDOS/CC	24 months	Taking FNP positions out of MC or BSC will be difficult; converting from clinical nursing will be the fix but will further undercut current inadequate support nursing staff
Nurse Corps/CNE	30 months	Having enough physicians to pull telephone call for PCM is a big issue for ensuring best mix of providers.

Comments on FNP Administrative Issues Related to Role

Corps/Position	Time in Position	Comments
Nurse Corps/MDOS/CC	7 months	We are trying to convert a 46N3 slot, Come work for us!
Nurse Corps/CNE/ MDOS/CC	11 months	We converted three NC slots to make room for FNPs....NPs are an extremely strong component of our patient care team. Support staff is a problem....but less so with FNP
Nurse Corps/CNE	12 months	.....FNP role very versatile but the role of provider versus clinical nurse cannot be interchanged....outpatient nurses are spread too thin...we must keep an appropriate balance between provider and support staff
Nurse Corps/CNE	16 months	View of FNP is short-term...to pay back active duty service commitment (ADSC) and leave service....or be committed to career beyond ADSC
Nurse Corps/CNE	12 months	Converted nurse slot to FNP....need to increase FNP slots and decrease GMO slots

Miscellaneous Comments

Corps/Position	Time in Position	Comments
Medical Corps/MDOS/CC	5 months	Poorly designed survey to get at benefits of FNP
Medical Corps/ MDOS/CC	5 months	... should have been based on economics/business case analysis
Medical Corps/ MDOS/CC	36 months	I already have an FNP, I need more physicians now
Medical Corps/ CMS	1 month	Good and best of luck! (Drew smiley face)

(Miscellaneous Comments Continued in Next Table)

Miscellaneous Comments

Corps/Position	Time in Position	Comments
Medical Service Corps/ Administrator	4 months	I answered "neutral" to all questionnaire choices because any decision would be based upon a sit-specific business case analysis
Medical Service Corps/ Administrator	16 months	This is an interesting option (referring to FNP role) - could be of great benefit!
Medical Service Corps/ Administrator	264 months	I would rather have a board certified Family Practice Physician than any physician extender
Medical Service Corps/ Administrator	12 months	I wish it were easy to convert or obtain FNP position...it is a difficult process..(questions directed to researcher) Have you immersed yourself in the provider forecast board?? Is AFPC ready to make these changes?

APPENDIX H

MEDICAL CORP OFFICER COMMENTS RELATED TO MILITARY MID-LEVEL PROVIDERS OF HEALTH CARE

Physician Assistants	Nurse Practitioners
Prior enlisted-speaks the common language; understands the mission where "the rubber meets the road"	Polished, good networker, but less effective in the trenches
Thinks on feet; presses on without guidance	Relies on "plans", similar to nursing plan; inhibits spontaneous action
More effective in down and dirty situations, can adapt to short- notice deployments, takes direct orders in field	Highly effective with reports, OIs, and patient education; most likely will question direct orders
Manages higher level of critical patients-requires less supervision, better for remote locations, away from MD access	More effective in touchy-feely situations; makes more referrals and at lower criticality of care
Emphasizes most practical approach/takes high impact CME	Relies more on academics, recent lecture, MSN degree
Female PAs are great/high intuition/skill	Male NPs may overstep their boundaries; shoot from the hip; acting like mini-doctors
Edge on independence in action/thought	Better "team players"
Harder to get BSC promoted	Better leverage in NC

Though this officer chose to mark "neutral" on the majority of the survey statements, these passionate but biased comments suggest that this officer holds very definite ideas about nurse practitioners and physician assistants.

When you go out into the world, watch out for traffic, hold hands, and stick together

~R. Fulgrum (1988)