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Healthcare Strategic Management: The Impact of State and Federal Funding Levels on the  
Implementation of Strategic Plans at Tennessee Hospitals

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A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

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By Randy Lee Byington

December 2003

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Keywords: TennCare, Balanced Budget Act, Business Strategy, Strategic Planning, Strategic  
Management, Hospitals, Healthcare, Healthcare Finance

## ABSTRACT

### Healthcare Strategic Management: The Impact of State and Federal Funding Levels on the Implementation of Strategic Plans at Tennessee Hospitals

By

Randy Lee Byington

The purpose of this study was to determine hospital executive management's perceptions of how turbulence in the politico-legal sector of the macroenvironment impacted the strategic management systems of Tennessee hospitals. In particular, how did Federal and State funding restrictions (Medicare and TennCare) impact the strategic planning and implementation process of their hospitals? The study was also designed to gain insight regarding specific changes to strategic management systems that may have resulted from these funding restrictions.

The research was conducted during April and May of 2003. Data were gathered by surveying the Chief Executive Officers (CEOs) of acute care hospitals in Tennessee using a survey instrument covering the areas of strategy formulation, implementation, and evaluation.

Fifty-five percent of CEOs of Tennessee's acute care hospitals responded to the study. Using the number of hospital beds as an indicator of hospital size, the results of a Chi Square test demonstrated that the sample of CEOs responding approximated the population (Chi Square=.986,  $df=6$ ,  $p=.986$ ). Proportions of CEOs representing for-profit hospitals and rural hospitals also approximated population proportions.

The results of the data analysis gave insight into how reductions in TennCare and Medicare funding levels impacted the strategies employed by Tennessee hospitals and potential impact on patient care. For example, by a two to one margin CEOs indicated their hospitals had elected not to offer new services and a majority indicated their hospitals had eliminated services as a result of changes in TennCare/Medicare funding levels. Seventy-nine percent of the CEOs responded that their hospitals had delayed the replacement of capital equipment as a result of changes in the funding levels under study. Sixty percent attributed workforce reductions at their facilities to changes in TennCare/Medicare funding levels. Using subscales, differences were found between the responses of CEOs of for-profit and not-for-profit hospitals with regards to selected goals and with regards to strategy evaluation. In both instances, the mean scores of the subscales for CEOs of not-for-profit hospitals were higher.

## DEDICATION

To my wife, Jo Ann Madden Byington, your love is expressed in so many kind and beautiful ways, not the least of which is your belief in me. Thank you for the sacrifices you made as we pursued this dream together.

## IN MEMORY

In remembrance of my father, Marvin Leon Byington; my mother-in-law Mae King Madden; my paternal grandparents, William Elbert and Jennie Dorton Byington; and my maternal grandparents, Robert Lee and Pearl Skeen Marshall.

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## CHAPTER 1

### INTRODUCTION

As hospitals and health systems develop strategies for survival, effective change becomes a focal point. While individuals often think of change as a noun (the result of changing), strategists view change as a verb defined in terms of making things different, radically different, or giving a different course or direction (*Merriam-Webster's Collegiate Dictionary*, 1986). Organizational change is both necessary and difficult, yet it is through change that organizations mold their futures and redefine themselves. Songwriter Jackson Browne (1974) eloquently described the magnitude of effort needed to effect change and shape the future: "...and while the future's there for anyone to change, still you know it seems it would be easier sometimes to change the past".

While in the past, change might have been viewed as an event; change has become a continuous process initiated by both internal and external variables (Kemelgor, Johnson, & Srinivasan, 2000; Poole, 1998). The pace of change in organizations is both staggering and accelerating. A decade ago, Schein (1993) described this phenomenon. "Only a few years ago we were saying that the 'management of change' is the biggest challenge organizational leaders face. Today we hear that the problem is no longer the management of change but the management of 'surprise'" (Schein, p. 85). There is no reason to believe that this rate of change has slowed. While stopping short of describing the changes in healthcare as surprises, Liebler and McConnell (1999) stated, "...change in healthcare for some time has been more dramatic and more rapid than in most other dimensions of modern life" (p. 3). As the new century dawned, Zuckerman (2002) affirmed this accelerating rate of change in the healthcare environment. He described the rate of change as accelerating and "Each new month and year brings a new peak" (p.248).

Given the rapidity of change, organizations developed processes, a constant restructuring, to navigate or manage the impact of such changes. Strategic management processes (or systems of strategic management) were the methods organizations used to adapt to changes both within the organization and to changes in the external environment of the business sector (Haines, 2000). Zuckerman (2000b) noted that strategic management could help hospitals “better understand the future and the forces driving the need for change and innovation” (p .54). While techniques of strategic management historically varied from organization to organization, they generally included some aspects of each of the traditional four functions of management (planning, organizing, implementing, and controlling) applied in a fashion that maximizes the organization chances to survive or thrive in competitive and often turbulent environments (David, 1999; Ginther, Swayne, & Duncan, 1998; Haines). Stoner (1982) simply described strategy as “the broad program for achieving an organization’s objectives and implementing its mission...the pattern of the organization’s response to its environment over time” (p. 101). Nearly two decades later, Liebler and McConnell (1999) gave a more pragmatic interpretation of strategic management. They described the process as deciding where organizations wanted to go, how organizations should be positioned, a plan to get there, evaluating critical factors impacting the organization’s plan, and the cost of implementation (p.114-115).

There is no doubt that effective strategic planning increases the likelihood of organizational survival; in fact Walton (1986) proposed that a neglect of strategic planning/management was an obstacle to long-range success in organizations. While Walton stated that trivial emergencies consumed the time of administrative leadership, she grasped the importance of proactive thinking (strategic in nature) in organizations and how easily it could be supplanted by reactive thinking (p. 93).

Vital to proactive thinking and the resulting strategic management systems is an understanding of the key variables in the organization's (hospital's) external and internal environment. In concert with the concept of planning, most contemporary models of strategic management included developing a new or formalizing existing organizational mission, vision, and values; identifying external opportunities and threats; determining internal strengths and weaknesses; establishing long-term objectives; generating alternative strategies to meet the objectives and choosing from among these strategies; and evaluation of the effectiveness of the strategic management system (David, 1999; Garner, Smith, & Piland, 1990; Zuckerman, 1998).

In order to identify opportunities or threats in the external environment, multiple segments of the external environment must be assessed. David (1999) described five sectors that comprise the external business environment: 1.) economic forces, 2.) social, cultural, demographic and environmental forces, 3.) political, government and legal forces, 4.) technological forces and, 5.) competitive forces. Changes in the politico-legal segment of the external environment are often reflected in hospitals by changes in the payer mix. Baker and Baker (2000) defined payer mix as “the proportion of revenues realized from different types of payers” (p.200). Foster (2000) reported that government-funded healthcare programs provided 66% of the revenue to hospitals. Commercial insurers, private payments, voluntary nonprofit organizations, and tax revenues levied by local governments provided the remaining sources of revenue (Baker & Baker, 2000).

With 66% of hospitals funding provided by government-funded healthcare programs, Foster (2000) demonstrated that a healthcare organization's financial viability was largely dependent upon two key external environmental factors: 1.) the funding provided by the federal government through its Medicare program for the elderly and disabled and 2.) the federal and

state government partnerships through the Medicaid program for the poor. Evaluating changes and developing and implementing appropriate strategies addressing these two external variables are paramount for ensuring financial viability. Shepherd (2001), quoting LaDonna McDaniel, Vice President of the Hospital Alliance of Tennessee, emphasized that changes to both of these funding sources during the 1990s placed Tennessee hospitals at increased financial risk.

Tennessee hospitals began to experience turbulence in the politico-legal sector of their macroenvironment as the TennCare program was implemented. Mirvis, Chang, Hall, Zaar, and Applegate (1995) described changes that took place after Tennessee was granted a Federal Medicaid waiver in 1993, resulting in Tennessee's TennCare program. The current delivery and reimbursement system known as TennCare began January 1, 1994 (Conover & Davies, 2000). Since that implementation, funding per covered life in Tennessee has fallen from 65% of the national average in 1991 to 57% of the national average in 1998 (1998 is the most recent year for which data were reported by the United States Centers for Medicare and Medicaid Services, see Appendix A). Additionally, Tennessee funding per covered life fell from 76% of the regional average to 69% during the same period (see Appendix A). The Centers for Medicare and Medicaid Services reported that there were 1,270,000 Tennesseans dependent upon TennCare for health insurance coverage (see Appendix B); therefore, in 1998, an additional \$2,802,890,000 would have been required to fund TennCare at the national average, or an additional \$1,615,440,000 required to fund TennCare at the per covered life average of the Southeast Region. Funding per enrollee increased by only 5% from \$2,825 in 1998 to \$2,957 in 2002 ("TennCare Found to be Cheapest Program in Nation, 2002). By 2003 TennCare per enrollee funding had fallen to \$2,534 per enrollee, the lowest in the nation and 10.3% less than per enrollee spending in 1998 (Paine, 2003).

Tennessee hospitals and health systems were dealt a second blow with the passage of the Federal Balanced Budget Act of 1997. Cutbacks at one Tennessee hospital were partially blamed on the Act (Shepherd, 2000). The Balanced Budget Act of 1997 was Federal legislation that reduced Medicare reimbursement to healthcare providers by \$115 billion dollars over 5 years, a \$43.8 billion reduction to hospitals and the remaining reduction to other healthcare providers such as physicians, home health agencies, skilled nursing facilities, etc. (Nowicki, 2001, p.79). Scott (1999) reported that the initial projections of the Congressional Budget Office were revised upward and that the impact of all proposed legislation would cut Medicare spending by \$112 billion annually from 1998 through 2003. This revision reflected a 76% adjustment to the Congressional Budget Office's original projections, an adjustment that trimmed expenditures flowing to healthcare providers including Tennessee hospitals. This decline in growth in Medicare expenditures per enrollee can be seen in Appendix C. The American Hospital Association projected these new estimates would

... result in \$71 billion in decreased Medicare payments to hospitals, or a 33 percent greater decrease than the \$53 billion in cuts originally predicted by Congress; average Medicare margins will range from -4.4 to -7.8 percent. Rural hospitals will be hurt the most, with projected Medicare margins of -7 to -10.4 percent; urban hospitals' margins will range from -3.9 to -7.3 percent (Scott, 1999, p. 25).

Five years after the Amendment, the impact of the Balanced Budget Amendment of 1997 on the nation's hospitals was still felt:

... hospitals are struggling to survive the drastic reductions in Medicare payments that resulted from the legislation, which hit rural health providers particularly hard. While Congress restored some funds in 1999 and again in 2000, spending still was projected to drop by more than \$99 billion through 2005 (Lawmakers Struggle, 2002, p. B15).

With both growth in Federal funding curtailed and per enrollee spending for TennCare enrollees dropping, administrators and directors at hospitals and health systems have been faced

with difficult choices. Hospital leaders are required by accrediting agencies to develop and implement strategic plans. Specifically, the accrediting standards require that leaders plan by “defining a mission, a vision, and values for the hospital and creating the strategic, operational, programmatic and other plans and policies to achieve the mission and vision” (*Comprehensive Accreditation Manual*, 1998, p. LD4) and administrative and medical staff leaders must collaborate on priorities for resource allocation in order to ensure effective strategic planning (*Comprehensive Accreditation Manual*, p. LD4-LD8). With Foster (2000) reporting that 66% of hospitals’ revenues were fixed by governmental policies, hospital leaders have had little ability to impact Federal and State funding in the short run. In order to maintain accreditation, hospital leaders have been forced to adapt their strategies in response to these changes in the external environment of their industry.

#### *Statement of the Problem*

While there are significant problems regarding the status of health funding in Tennessee, the purpose of this study is to determine management’s perceptions of how turbulence in the politico-legal sector of the macroenvironment has impacted the strategic management systems of Tennessee hospitals. In particular, how did Federal and State funding restrictions impact the strategic planning and implementation process of their hospitals? It is also designed to gain insight regarding specific changes to strategic management systems that may have resulted from these funding restrictions. It is well documented that Tennessee spent far less per participant in its TennCare program than did other states in their traditional Medicaid programs (Paine, 2003; United States Centers for Medicare and Medicaid Services, n.d.). Likewise, the Federal Balanced Budget Amendment of 1997 reduced Medicare reimbursement to hospitals and health systems across the nation (Lawmakers Struggle, 2002; Scott, 1999). While the difference in

dollars flowing into Tennessee's healthcare system can easily be calculated, these savings in tax dollars reflected in the state and federal budgets are not without implications. There is little understanding of how these external environmental factors impacted strategic choices made by leaders in Tennessee hospitals and their resulting organizational changes nor is there understanding of how these choices impacted the formulation, implementation, and evaluation of strategic plans.

### *Research Questions*

In the perceptions of hospital administrators:

Question 1: To what extent did hospitals make changes to their missions as a result of changes in TennCare and Medicare funding?

Question 2: To what extent did hospitals make changes to their goals as a result of changes in TennCare and Medicare funding?

Question 3: To what extent did hospitals make changes to strategies as a result of changes in TennCare and Medicare funding?

Question 4: To what extent did hospitals make changes to direct patient care as a result of changes in TennCare and Medicare funding?

Question 5: To what extent did the hospitals' medical staff members support changes in strategies resulting from TennCare and Medicare funding?

Question 6: To what extent did hospitals make changes to the way strategic management systems have been evaluated as a result of changes in TennCare and Medicare funding?

### *Significance of the Study*

There are limited financial resources available at both federal and state levels and many competing societal needs. The healthcare needs of the citizenry compete with other worthy and

just causes such as national defense, education, and law enforcement (Hayes, 2002). The end result of this allocation of state and federal resources is a funding plan for the health of Tennessee citizens and is reflected by both the Federal and State budgets.

This study is significant because while the literature clearly demonstrates reduction of Federal dollars and restriction of State dollars in healthcare spending, there is limited understanding of the impact of these budgetary restrictions on hospitals' strategic plans. This study should yield information that links financial restrictions with their impact on the strategies developed by leaders of Tennessee hospitals.

The information derived from this study could assist Tennessee legislators and policy makers as they contemplate additional modification to the state's insurance program for the poor. Results could be useful as healthcare executives seek to understand the process of strategic management. The information could also give insight into how dual sources of government financing of healthcare combine to impact decisions made by executives at hospitals in local communities.

#### *Delimitations and Limitations*

This study is delimited or limited by the following:

1. The study is delimited to the 115 hospitals within the state of Tennessee listed in the database of the American Hospital Association retrieved November 6, 2002 (see Appendix D).
2. Tennessee's TennCare program is a managed care system that received a federal Medicaid Program waiver. Results of the study may not transferable to states employing traditional Medicaid programs.

3. Because they are funded quite differently than other hospitals, this study excludes the 24 mental health/psychiatric, rehabilitation, children's, and Veterans Administration hospitals in Tennessee (see Appendix E).
4. This study is limited to the perceptions of the selected hospitals' or health systems' chief executive officers and/or presidents.

### *Definition of Terms*

The following terms were operationally defined:

Balanced Budget Act of 1997: Federal legislation that reduced Medicare reimbursement to healthcare providers by \$115 billion dollars over 5 years, a \$43.8 billion reduction to hospitals and the remaining reduction to other healthcare providers such as physicians, home health agencies, skilled nursing facilities, etc. (Nowicki, 2001, p.79).

Macroenvironment: Also known as external forces or external environment, includes five broad areas external to the organization that may impact the organization's strategies. These five areas are: economic forces; social, cultural, demographic, and environmental forces; competitive forces; political, government, and legal forces; and technological forces (David, 1999, p. 104).

Medicaid: Federally aided State operated program for the care of medically indigent.

Established under Title XIX of the Social Security Act of 1965, the program is financed by both federally generated tax revenues and state contributions. The percentage share of funding provided by the federal government differs from state to state. Covered services and reimbursement rates also vary widely from state to state. While the federal government established broad guidelines, each state may elect to set eligibility, payment rates, and service restrictions within that state (Baker & Baker, 2000, p.199; Finkler & Kovner, 2000, p. 499).

Medicare: Actually entitled “Health Insurance for the Aged and Disabled”, a federally funded health insurance program established under Title XVIII of the Social Security Act of 1965 and intended to supplement other benefits provided under the Social Security Act of 1935. The Medicare program consists of two distinct plans, Medicare Part A (also referred to as Hospital Insurance or HI) covering hospital and related benefits and Medicare Part B (also known as SMI or Supplemental Medical Insurance) covering physician fees and related services. Medicare coverage is available for patients over the age of 65 or with an established disability (Blackburn, Klayman & Malin, 1982, p. 474; Chang, Price & Pfoutz, 2001; Finkler & Kovner, 2000, p. 499).

Organizational Change: Change is an active process whereby organizations continually diagnose and adapt their plans (either proactively or reactively) to changing conditions (Szilagyi & Wallace, 1983, p. 519).

Politico-legal Sector: That portion of an organization’s external environment consisting of “local, state, and federal laws, regulatory agencies, and special interest groups [that] can have a major impact on the strategies of small, large, for-profit and nonprofit organizations” (David, 1999, p. 115).

Strategic Management: “Strategic Management can be defined as the art and science of formulating, implementing and evaluating cross-functional decisions that enable an organization to achieve its objectives” (David, 1999, p.5). Strategic Management consists of three distinct stages: Strategy formulation, (sometimes referred to as planning), strategy implementation, and strategy evaluation (David, p.5-6).

Strategic Planning: The process of determining long-term objectives of organizations and should include a mission statement, a definition of major objectives, an action plan, a description of

needed resources, a process for monitoring progress, and a system of evaluation and feedback (Liebler & McConnell, 1999, p. 116).

Strategic Choice: Strategic choice, a part of the decision making process, is the selection of a scenario of action from many possibilities. Strategic choice sets in motion not one decision but a series of decisions (Ginther et al., 1998, p. 170; Schwartz, 1996).

TennCare: A Federally waived Medicaid program designed to offer health insurance to the Medicaid eligible, uninsured and uninsurable through a network of managed care organizations (What is TennCare? n.d.).

### *Organization of the Study*

The study will be detailed using five chapters. Each chapter will address a major portion of the study.

Chapter 1 introduces the reader to the concepts of change and strategic management; major sources of healthcare funding; and the relationship between these concepts. It also presents a statement of the problem to be investigated and research questions. The significance of the study is presented, along with limitations of the study. The chapter concludes with operational definitions of significant terms used throughout the study.

Chapter 2 provides a review of the literature related to strategic management and strategic management in healthcare. It also provides a review of the enabling legislation for major federal healthcare funding initiatives (Medicare and Medicaid), the major Tennessee healthcare funding initiative (TennCare). Pertinent literature reflecting recent concerns regarding adequacy in both Federal and State funding initiatives is presented.

Chapter 3 details the methodologies to be employed during the research. It includes an introduction, description of the study's population, and research design. Techniques used to

develop the survey instrument will be presented as well as data collection and data analysis methods.

Chapter 4 will present the study's data and the analysis of the data. It will include the research findings obtained from the data gathered by the study.

Chapter 5 will present the general conclusions that may be drawn from the study and suggestions for further research.

## CHAPTER 2

### REVIEW OF THE LITERATURE

This research addresses the impact of Federal and State funding levels on the development and implementation of strategic plans in Tennessee hospitals. The literature was reviewed and the information is presented below detailing the historical evolution as well as contemporary models of strategic management. It also addressed strategic management in the healthcare industry. A history of Medicare, Medicaid, and TennCare; their recent revisions; and their role in the funding of healthcare are presented. The review concludes with a review of literature regarding the impact of Federal and State funding shortfalls on Tennessee hospitals.

Multiple sources were used to provide information relevant to this subject. Because of recent and seemingly daily reports of legislative and judicial action regarding changes made to the TennCare program during the latest session of the Tennessee Legislature, electronic archives of the *Kingsport Times News*, *Johnson City Press*, *Bristol Herald Courier*, and the *Nashville Tennessean* were examined. The United States Centers for Medicare and Medicaid Services website provided comparative data.

#### *Historical Evolution of Strategic Management*

Strategy traces its history to approaches used by military leaders in ancient times and the word may be found in the writings of Sun Tzu, Clausewitz, Homer, and Euripides (Ginther et al., 1998; Oliver, 2002). Bracker's derivation of *strategy* (as cited in Ginther, et al. 1998) traced the derivation of the English word *strategy* to its Greek origins and as a verb *stratego* meant to "plan the destruction of one's enemies through effective use of resources" (p. 14). Oliver traced the roots of modern business strategy to World War II, an era in which the complexity of both military and business operations demanded sophisticated and well planned strategies.

### *Strategic Planning in the 1950s*

Although the Korean Conflict interrupted an otherwise peaceful post-war decade of the 1950s, American industry experienced little global competition and views regarding the importance of strategic planning in that era varied. Hayden (1986) stated that strategic planning continued to thrive in the post war era. She stated that during the 1950s company executives began to institute changes based upon the demands of their customers (p. xvi). Oliver (2002), however, stated that due to pent-up consumer demand in the United States and the reconstruction of both Europe and Japan, the 1950s were a decade void of strategic planning. He stated that theoretical micro-economic views were correct in that there was little a company could do to outperform its competitors in a world with such a demand for products (p. 7). Gouillart (1995) viewed the 1950s as an era that merely focused on corporate strengths and weaknesses.

### *Strategic Management in the 1960s and 1970s: From Policy to Planning*

During the 1960s American industry was called upon to supply the products necessary for a protracted war, Vietnam. It was during this decade that strategic policy and planning became an important tool of businesses. Gouillart (1995) stated that the emphasis of strategy during the decade was on stakeholder value and important qualitative (focusing on critical success factors) and quantitative (focusing on developing quantitative grids) methods were introduced into strategic policy formulation during that decade. These events in combination with corporate growth through diversification offered fertile ground for the growth in strategic planning (Hayden, 1986). Oliver (2002), however, wrote that strategic planning came into the mainstream of business processes during the decade because of the publication of two significant works: Alfred Chandler's (1962) *Strategy and Structure* and Kenneth Andrew's (1965) *Concept*

*of Corporate Strategy*. Because hospitals were locally (often municipally) controlled entities they expended little effort on strategic planning during this decade (Zuckerman, 1998, p.3).

While Gouillart (1995) recorded no significant advancements in strategic planning in the 1970s, Oliver (2002) stated that strategies in the decade became more multifaceted and strategic decision making more dependent upon data supplied from corporate information technology systems. Zuckerman (1994) presented a brief review of the evolution of strategic planning in healthcare. In this review Zuckerman described planning in the 1970s as facility (land, plant, and equipment) oriented as hospitals developed strategies based upon delivery of care in an inpatient setting.

*1980s: Strategic Management and Porter's Five Forces Model*

With an emphasis on implementation and controlling functions, the term strategic management replaced strategic planning in the 1980s (Ginther et al., 1998, p. 15). Strategic management in the 1980s evolved, in large part, around the ideas of Michael Porter (Gouillart, 1995; Oliver 2002; Zuckerman, 2002). Porter (as cited in Zuckerman, 2002) stated that the center of survival for firms was competition. Porter stated that successful strategies could be developed by examination of the firm's position within its own competitive environment (industrial, geographical, etc). In the healthcare industry Zuckerman (1994) viewed the 1980s as a decade when strategic management's emphasis shifted toward serving strategically important markets with administrators and planners concerned about inpatient market share. Zuckerman (2002) stated that because resources appeared to be unlimited, the 1980s were a decade in which the focus was only upon the timing of new projects rather than the selection of new projects from among various alternatives.

Authors were in disagreement on how the 1990s will be viewed in the historical context of strategic management. Gouillart (1995) described strategic management in the 1990s as focused on “change management”, “mobilization” and “transformation” (p.20). Oliver (2002) stated that competencies and community building would be the hallmarks of strategic management in the decade. Zuckerman (1994) stated the early 1990s saw healthcare planners experiment with product line management as a device of strategy. He also described attempts to develop a more complete understanding of community health needs as well as the needs of physician, employer, and managed care organizations. Zuckerman (1994) emphasized that the 1990s brought concerns about the future of the marketplace and the economic survival of most healthcare providers weighed heavily on their planning decisions. Zuckerman (2000b) described the 1990s healthcare marketplace as one of “increased market competition, excess capacity, managed care growth, and Medicare payment reductions...(p. 54).

Hammonds (2001) emphasized the continued need for business strategy and strategic planning in a rapidly changing environment. While writing about what he perceived as a falling out of favor of strategy, Hammonds stated that technology changes, but that does not necessarily mean that strategy should. He also wrote that strategy has not changed but change has, and in particular the rate of change has accelerated even beyond what leaders imagined only a few short years ago.

Zuckerman (2002) emphasized the changes in healthcare delivery since 1970. Specifically, Zuckerman stated the industry structure was rapidly changing and in many instances we might consider local hospitals or health departments as small companies in an industry that was being changed by larger corporations or evolving consumer needs (Zuckerman 2002, p. 1-2.).

In the past 50 years the concepts of strategy and strategic management systems have evolved. A global business environment, and a war that left American businesses with little competition required the development of only rudimentary strategic management systems. However, by the end of the century, a global economy evolved and businesses implemented complex and integrated strategic management systems. Hospitals' reimbursement systems changed from fee-for-service to prospective payments. For the first time, financial constraints shaped the evolution of strategic management systems in healthcare.

### *Contemporary Strategic Management Systems*

Traditionally, management was defined in terms of four functions (or variations thereof): planning, organizing, implementing, and controlling (David, 1999; Garner et al., Ginther et al.; 1998; Haines, 2000; Piland, 1990). David (1999) described strategic management in terms of stages--processes at work in organizations. While still relating strategy to the four traditional functions of management, described these stages as living processes within organizations (David, 1999, p. 5-6). The stages are: strategy formulation (planning and organizing), strategy implementation, and strategy evaluation (controlling) (David; Garner et al; Ginther et al.). What was once viewed as strategic planning, therefore, evolved into the critical first step of strategic management.

Haines (2000) framed strategic management somewhat differently. Haines proposed three goals for the strategic management process: plan development, successful change, and an evaluation system (pp. 12-13).

Contemporary strategic management efforts have moved beyond policy planning as the focus of strategic efforts. Strategic management systems now exist and integrate the following components: formulation, implementation, and evaluation.

### *Models Based Upon Competitive Markets*

Christensen, Andrews, Bower, Hamermesh, and Porter (1987) described a framework for strategic planning based upon competitive markets. Christensen et al. suggested that businesses should develop an understanding of four critical areas as they undertook the development of their corporate strategies. First and most obvious, Christensen et al. proposed that businesses should fully understand the concept of strategy and the relationship between strategy and behavior. Changes required while pursuing new business strategies could never be achieved without corresponding changes in organizational behavior. Proceeding with a strategic planning process without this understanding would result in nothing more than a waste of limited organizational resources (p. 115-136). Secondly, Christensen et al. affirmed the interrelationships between a company and its environment, both internal and external, by emphasizing the importance of matching organizational resources to emerging opportunities (p. 227-253). Third, Christensen et al. recognized the impact of the value system of an organization's executives and strategic planners on corporate strategy. They explored the constant and evolving conflict and turmoil resulting from the differing personal value system of key decision makers and pointed out that these key decision makers include members of the corporate board of directors who often bring value systems from their own organizations into the mix (p. 459-469). Finally, they discussed the impact of the collective ethical values and broader social responsibility of the corporation on strategic planning (p. 393-402).

Andrews (1987) defined strategy as:

The patterns of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of human and economic organization it is or intends to be and the nature of the economic and noneconomic contribution it intends to make to shareholders, employees, customers and communities (p. 13).

Andrews stated that corporate strategies determined in which businesses a company would compete and business strategies determined how the companies were to compete and how they would develop a competitive advantage. He wrote that the pattern among goals and the relationships between objectives were vital to successful competitive strategies. Andrews stated that in the absence of knowledge of such patterns or relationships they could be determined by studying the collective behavior of a company. From this study, one could deduce the strategies of competitors (p. 18). Andrews segregated strategic management efforts into two activities: formulation and implementation. Andrews stated that in competitive marketplaces where all players had similar strategies, all but the market leaders would struggle. He wrote that based upon the competitiveness of the marketplace, strategies took two generic forms, low-growth strategies and forced-growth strategies (pp. 23-24).

Michael E. Porter is best known for his work in analyzing forces that drive competition in markets (Mahon & McGowan, 1998, p. 391). Porter's work became known as his "Five Forces Model" (see Figure 1). Porter's model became a standard tool for use in analyzing the external environment of both businesses and healthcare organizations (Zuckerman, 2002). Porter (1985) proposed that the relationship among existing competitors, potential competitors, suppliers, buyers, and available substitutes within a particular industry determined the industry profitability (pp. 4-10). Porter suggested that the level of competition in an industry or in a local market is the single most important factor to be considered when evaluating the external environment. He stated the resulting industry analysis suggested particular generic competitive strategies that would lead to above-average financial performance when compared to competitors in the industry (Porter, pp. 11-26). While developed in the early 1980s, strategic planning consulting

firms used Porter's Five Forces model extensively and software based upon his model was developed and marketed as late as 2002 (Business Insight, Inc., 2002; Sterling, 1995).

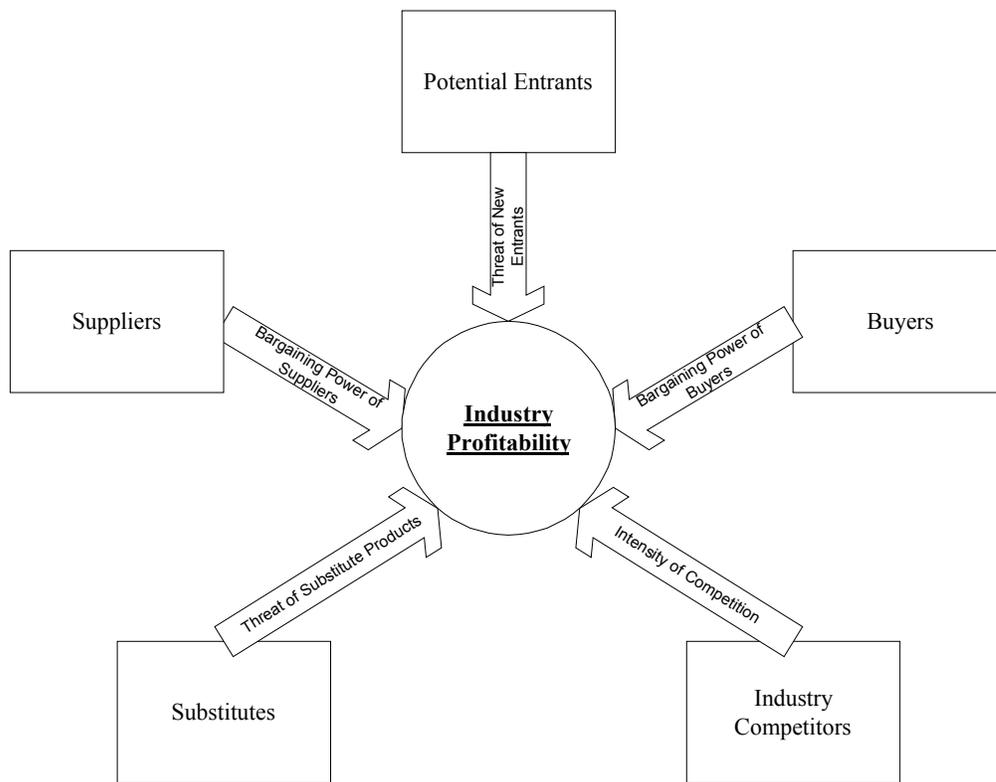


Figure 1. Adapted from *Competitive Advantage*, by Michael E. Porter, 1985, New York: The Free Press, p.5.

Porter (1991) elaborated on how his thinking had evolved since the development of his “Five Forces Model”. While he reduced strategy to the simple concept of making choices about how to position a company in its competitive environment, he took the opportunity to reemphasize his model and reflect upon its importance to smaller businesses. He proposed that strategy and strategic planning resulted from the answers to two simple questions. First was, “What is the structure of your industry, and how is it likely to develop over time?” And

secondly, “What is your company’s relative position within the industry?” (Porter, p. 4). Porter stated the answers to these questions would lead corporations to select one of two generic strategies in an effort to seek a competitive advantage: cost leadership and differentiation or scope (Partridge & Perren, May 1994; Porter, p.5). Partridge and Perren (May 1994) cautioned that competitive advantages built upon cost leadership carried the risk of creating a commodities market and suggested that strategies to develop product differentiation might be of more value to organizations (p. 28).

Porter (1991) wrote that the manner in which companies in an industry chose to compete could have significant impact upon the industry as a whole. He expanded his thinking to include the possibility that an individual company could reshape its industry and impact the industry structure represented by his model because of strategic choices implemented and risks taken. He emphasized that industry wide, only large companies could achieve impact, and stated that small companies must establish a good position within their industry based upon a strategic advantage they possess. He described these strategic advantages as low cost or production of a differentiated product. He warned that the worst strategy of all is to attempt to be all things to all people and in effect avoid the choice of any strategy (Porter, p. 93).

Christensen et al. (1987), Andrews (1987), and Porter (1985) acknowledged the impact of the external environment on the success of organizations and developed models and techniques to help companies develop competitive advantages. Porter’s Five Forces Model demonstrated that the most important determinant of profitability in any industry is the competitive nature of the local marketplace. Porter emphasized that only large companies could achieve a significant upon the marketplace, leaving small companies to carve out competitive advantages based upon low production costs or product differentiation.

### *Models Based Upon Competition Challenged*

Competitive, profit-driven models were considered foundational methods of strategic planning for traditional corporations and endorsed by some healthcare strategists (Zuckerman, 2002). However, Partridge and Perren (April, 1994) discussed the difficulties of defining competitors. Abell (as cited in Partridge & Perren, April, 1994) stated that there rather than a single competitive marketplace; competitors actually represented a series of intersecting businesses or business sectors competing for the same customer base. Questioning the practicality of Porter's work, Partridge and Perren suggested caution be exercised as firms define their competitive marketplace. They concluded that competitors defined in a manner too narrow would result in potential competitors ignored and competitors defined in a manner too broad could result in confusion as strategies are developed. They suggested that Porter's Five Forces Model be used not to examine a firm's *single* competitive marketplace but the *multiple* competitive marketplaces that compete for the firms customers (Partridge & Perren, April, 1994, p. 42-43).

Mahon and McGowan (1998) suggested that Porter's model might be flawed because product-market-technologies were overly central to its focus. Mahon and McGowan stated that by focusing on competitive marketplaces, Porter's model failed to recognize the importance of nonmarket factors and their impact on business' strategies. Mahon and McGowan suggested that political or governmental action represented the single most important nonmarket factor that shaped strategy (p. 391). They stated, "This is a key weakness because many of the sources of surprise for an industry and an individual firm arise out of changing social mores and action in the social and political arena" (p. 391).

Liedtka (1992) raised questions regarding the applicability of these models in the healthcare setting. Liedtka stated that the focus on a narrow set of market-driven factors, such as those focused upon by Porter was questionable (p. 21). She wrote that healthcare organizations, while still profit motivated, were structured within American society to fill additional roles that were social and philanthropic. She also stated that the healthcare workforce (with its professions and their associated and sometimes competing professional values system) offered a challenge not faced in traditional businesses (p. 21). Liedtka pointed out that burdens of societal responsibility faced by healthcare providers might be viewed as a social responsibility and not shared equally by all segments of the competitive environment. Liedtka stated that a model of strategy in which hospital leadership focused on “the articulation of the vision and purpose that the institution serves with strategy providing the road map through which that vision and purpose are achieved” (p.21-22). Liedtka stated that successful healthcare organizations must broaden their scope beyond competitive factors to include a more comprehensive analysis of the external environment (p. 22).

Although questioning the changes that were required for rapid adaptation to a changing external environment, Liedtka (1992) confirmed her belief in the utilitarian value of Porter’s adaptive strategies (p. 18-21). She stated that more emphasis should be placed on a basic question regarding Porter’s differentiation and focus emphasis: What should healthcare organizations do? Liedtka wrote that this key question should be answered within the context of the limited resources, the professional and institutional values and the needs of the local community (p. 21).

Given the dual pyramid (medical and administrative) nature of leadership in healthcare organizations, the single factor influencing the ability to adapt and change (a critical factor in

strategy implementation) was how effectively the organization could establish a shared vision with its physicians (Liebler & McConnell, 1999; Liedtka, 1992). As opposed to traditional corporations, Liedtka viewed strategy implementation in healthcare as distinct and separable from strategy formulation. She stated that implementation methods using methods of reward and punishment found in traditional corporations were ineffective when working with healthcare professionals, particularly with physicians and also with nurses. Liedtka stressed the importance of education and dialogue rather than reward and punishment when implementing strategic change among these professionals (Liedtka, p. 23-26).

Lack of emphasis on clear definition of competitors proved to be a weakness of strategic management models based upon competition. In addition, these models largely ignored non-market factors. Liedtka concluded that these models were useful in the healthcare setting, but that the structure of healthcare organizations presented unique challenges for their use.

#### *Strategic Management Models for the 21<sup>st</sup> Century*

With competitive models of strategic management challenged by the early 1990s attention turned to the study of successful corporations that exhibited alternative yet effective models of strategy. The evolution of the global marketplace and its intense competition demonstrated the need for new models for strategic management. Moore (1996) wrote that competition was dead; alternatives to strategic management models based upon competition were needed.

One such alternative was described as a cooperative, strategic alliance or ecosystems based model (Moore, 1996; Ohmae, 1990). Ohmae described the parallels between strategic political alliance and strategic business alliances. Ohmae wrote:

Corporate leaders are beginning to learn what the leaders of nations have always known: in a complex, uncertain world filled with dangerous opponents, it is best

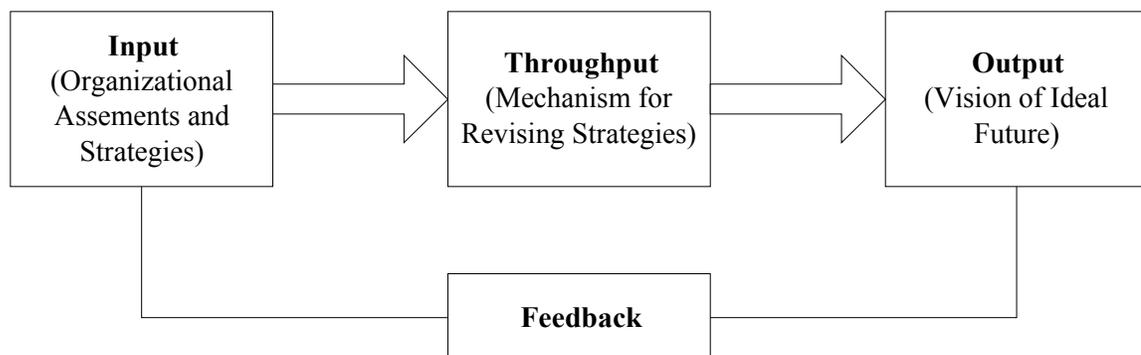
not to go it alone. Great powers operating across broad theaters of engagement have made common cause with others whose interests ran parallel with their own. There is no shame to this. Entente—the striking of an alliance—is a responsible part of every good strategist’s repertoire (p. 18).

Ohmae (1990) recognized that strategies focus upon competition prevented companies from forming strategic alliances and thereby maximizing the contribution to offset corporate fixed costs. He wrote that companies could no longer afford to be the best at everything (p.19). As an example, he suggested that companies evaluate their core competencies and find other firms with strengths that complemented these core competencies. Fear of alliances and traditional reliance upon equity ownership by either purchase or joint venture were cited as reasons companies didn’t implement strategic alliances (Ohmae). Ohmae wrote, “...There may be no external enemy. Instead the enemy is within ourselves and within our companies—in the form of conservative stagnant approaches” (Vive la revolution, 2000, p. 3).

Collins and Porras (1994) described the strategies employed by visionary companies. Contrary to traditional thinking, they reported that visionary companies did not exhibit complex strategic management techniques but rather succeeded by a great deal of trial and error. They wrote that this paralleled Darwinian concepts and strategic management of visionary companies imitated an ecosystem-based evolutionary process (pp. 141-150).

Moore (1996) expanded upon the concept of business ecosystems-based strategies. Moore described strategies that depended upon cooperation as well as competition. He pointed out that businesses could not be separated from their environment, and that cooperative efforts within the business ecosystem could be beneficial to all members of the ecosystem. Moore wrote that true competitive advantages came from cooperative coevolving relationships with selected firms in the business ecosystem (p.8).

Haines (2000) advocated a systems thinking approach to strategic planning and management. Haines suggested the use of a classic systems model (input, throughput, output) to build a strategic management system in organizations (Figure 2). He suggested that organizations equate output with a vision of their ideal future, consider the inputs to be today's organizational assessment and strategies, and the throughput to be a vibrant mechanism for revising strategies. Haines detailed 10 steps for use in various aspects of this systems based model: Plan-to-Plan, Ideal Future Vision, Key Success Measures or Goals, Current State Assessment, Strategy Development, Business Units and Three-year Business Planning, Annual Plans and Strategic Budgets, Plan-to-Implement, Strategy Implementation and Change, Annual Strategic Review and Update (pp. 49-52).



*Figure 2.* Basic Systems Model of Strategic Management. Adapted from: *The Systems Thinking Approach to Strategic Planning and Management*, by Stephen G. Haines, 2000, San Diego, CA: St. Lucie, p.35.

Models of strategic management based upon cooperation developed during the last decade. Corporation sought and developed partnerships with companies that complemented their businesses. The concept that corporations were a part of a larger system shaped the development of new models for use in the evolving global environment.

### *Strategic Management in the Healthcare Industry*

Building upon the dual pyramid structure of leadership in healthcare organizations, Zuckerman (1994) presented a strategic planning approach that integrated physicians served by the healthcare organization more completely in the organizational planning process. The goal of this approach was to bring the medical staff and hospital administrative staff together so that the synergy developed could produce more effective plans for both the physician practices as well as the hospital. Zuckerman proposed to develop this synergy by increasing the “breath and depth of strategic planning analysis as they relate to physicians” and their practices (p. 16). His primary focus was to create a medical staff subcommittee as a part of the healthcare organizations overall strategic planning committee structure. To prevent the development of an isolated strategy by and for physicians, Zuckerman suggested that this medical staff subcommittee be composed of both physicians and hospital administrators.

Zuckerman’s works followed the path of the evolving (and prevailing) healthcare delivery models, the vertical integration of healthcare known as integrated delivery systems. He presented a case study on how an independent delivery system could position itself for strategic success and ultimately what he considered survival by moving toward market changes expected to drive the movement toward integrated delivery systems (Zuckerman & Finarelli, 1997). Zuckerman and Finarelli defined these emerging market forces as: increased managed care penetration (75-90% in metropolitan and urban areas), decreases to consumers in their monthly healthcare premiums, and a decline in acute care use, an acceleration in the use of nonacute care settings (p.33). Zuckerman stated that

Typical mature systems have excess acute care capacity; an expensive and underperforming primary care network; low subacute care, long-term care, and home care capacities; and an asset base, debt load, and cost structure that will be impossible to carry in the long run (p.33).

In an effort to reduce operating costs and match healthcare assets with emerging needs, he advocated a strategy of gradual adaptation.

Zuckerman (2000a) stated that healthcare lagged other industries in their understanding and effective use of strategic vision. He advocated that the vision statement should serve as the cornerstone for strategic planning in healthcare organizations and should serve an organization for a period of 5 to 10 years (p. 294). He stated that a vision statement should serve as the reference point for all strategy development and implementation, including goals, objectives, and action plans. Paradoxically, he stated that the currently developed visions of healthcare organizations were poorly thought out and often confused with goals, purposes, and strategies. He stated that a vision statement should project the organization forward to a point in time far enough from the present such that the future becomes unpredictable. It should be a description of the future organization, yet not a path to get there. Zuckerman emphasized that while the mission of an organization should be timeless, the vision should be bound by time (p. 297).

Zuckerman (2000b) explored the relationship between strategic planning and financial performance. He stated that the strategic planning process in healthcare had evolved to a point where it now drove “the allocation of capital and other resources of the organization” (p. 54). Zuckerman noted the change from the use of planning in cost reduction initiatives to its use for revenue enhancement and ultimately to pursue new sources of revenue. While some of these may seem obvious, strategic planners are more carefully evaluating the following as sources of new revenue:

Increasing market share by expanding the depth of existing services or adding new lines of service partnering with other strong organizations to fill in gaps in an evolving integrated delivery system, developing niche services, repackaging existing services to be more appealing to market segments (p. 55).

These five sources when carefully evaluated within the constructs of a healthcare organization's mission, vision, and strategy can add to the long term profitability and hence survival of the organization (Zuckerman, 2000b).

The dual pyramid organizational structure prevalent in healthcare required that significant effort be expended to develop a shared vision with both hospital administration and medical staffs. Zuckerman wrote that the concept of vision was vital yet poorly understood by healthcare executives and medical professionals. The link between strategy formulation and financial planning became apparent and new sources of revenue (or revenue enhancement) strategies became important for healthcare organizations. Revenue enhancement replaced cost reduction as a focus for strategic management.

#### *The Emerging Use of Information Technology in Healthcare Strategic Planning*

Healthcare organizations compile extensive and varying databases of both clinical and financial information and in the past these databases were used by decision makers to facilitate financial, patient, and support functions (Austin, Trimm, & Sobczak, 1995). As healthcare organizations evolved and competed this valuable information became more useful for strategic planning efforts. Austin et al. reported that there was no evidence that clinical and financial information was used effectively for strategic planning in the healthcare industry. The authors stated that in order to use hospitals' substantial clinical and financial data, strong decision support software was vital to increasing the effective use of this information. Citing a five-year study performed at the Massachusetts Institute of Technology, researchers found that, "Alignment of strategy, business structure and information technology is an essential management concept for the 1990s [and] the management of information technology can no longer be left solely to systems professionals if strategic benefit is to be realized (p.26)."

While no other examples of changes in organizational structures used to enhance the strategic management function of hospitals were found, the changing relationship between the use of healthcare data and the need to expand its management outside the sphere of information systems professionals brought about innovative partnerships within one hospital. Children's Hospital of Columbus, OH took bold steps to change the traditional reporting relationships (Murray, 1992). In an unusual organizational structure change, the hospital merged the Planning, Marketing, and Information Services departments. The hospital's chief information officer headed the department. This change in organizational structure was seen as a method to enable the information services staff to be more responsive to the needs of the hospital's marketers and planners. As employees of the merged department, marketers and planners were given more access to the data available in the organization's clinical and financial databases. Additionally, specialists were added that focused on mining external data sources to provide information needed in the decision making process. Murray reported that this new organizational structure had resulted in an improvement in the availability of information for use in strategic analysis (Murray). No additional information confirmed the impact of this change in organizational structure.

### *A Brief History of Medicare, Medicaid and TennCare*

#### *Medicare*

In less than three months from its introduction, H.R. 6675, President Lyndon B. Johnson signed The Social Security Amendments of 1965, sponsored by Representative Wilbur Mills, into law on July 30, 1965. Because government-sponsored health insurance for the aging was first introduced by President Harry Truman, Johnson elected to use Independence, Missouri, Truman's hometown, as the backdrop for the signing ceremony. Truman became the first

Medicare enrollee (United States Center for Medicare and Medicaid Services, History of Medicare and Medicaid n.d.). The legislation was intended to supplement other retirement or disability plans available to United States Citizens under the Social Security Program. Medicare consisted of two components, Part A, covering hospitalization and Part B reimbursing other providers of healthcare such as physicians (Baker & Baker, 2000, p. 25; Medicare, 1996). Liebler and McConnell (1999) considered the introduction of the Medicare program to be one reasons for escalating healthcare costs in the United States (p. 4). When Medicare was established in 1965 the estimated cost of the program in 1990 was \$10 billion, yet the actual cost approached \$100 billion (Liebler & McConnell, 1999, p. 6). The first significant amendment to the Medicare legislation came in 1972, when benefits were expanded to include those citizens who were under 65 years of age but were enrolled in the Social Security Program due to disabilities or end stage renal disease (Nowicki, 2001, p. 75).

With Medicare costs escalating, President Ronald Reagan, fulfilling a campaign promise, introduced his Tax Equity and Fiscal Responsibility Act of 1982 and Social Security Amendments of 1983. These pieces of legislation brought the first significant attempt to reduce the federal government's cost of the Medicare program. With this reform, hospital reimbursement shifted from a fee-for-service system to a fixed-fee prospective payment system. Payments under this prospective payment system were based upon the Medicare patient's diagnosis and Diagnosis Related Groups or DRGs were established (Nowicki, 2001, pp. 77-79).

Prior to 1990, Medicare used a system of reimbursement for capital expenditures based upon reasonable costs (Herr & Kovener, 1990). The Omnibus Budget Reconciliation Act of 1990 signed by President George H. W. Bush ended that practice and rolled the reimbursement

for capital equipment into the fixed-rate system now commonly referred to as DRGs (Nowicki, p. 79).

Between the years of 1960 and 1993, total spending on healthcare in the United States had grown from 5.1% to 13.7% of the Gross Domestic Product and between 1993 and 1998 the percentage actually dropped from 13.7% to 13.5% (Hoffman, Klees, & Curtis, 2001). In an effort to control the growth of spending on healthcare for Americans, the Federal Balanced Budget Act of 1997 reduced Medicare reimbursement to healthcare providers by \$115 billion dollars over 5 years, a \$43.8 billion reduction to hospitals and the remaining reduction to other healthcare providers such as physicians and implement prospective payment systems for home health agencies, skilled nursing facilities, etc. (Nowicki, 2001, p.79; President Clinton Signs Budget Bill into Law, 1997). Scott (1999) reported that the initial projections of the Congressional Budget Office were revised upward and that the impact of all proposed legislation would cut Medicare spending by \$112 billion annually from 1998 through 2003. The American Hospital Association projected these new estimates would:

... Result in \$71 billion in decreased Medicare payments to hospitals, or a 33 percent greater decrease than the \$53 billion in cuts originally predicted by Congress; average Medicare margins will range from -4.4 to -7.8 percent. Rural hospitals will be hurt the most, with projected Medicare margins of -7 to -10.4 percent; urban hospitals' margins will range from -3.9 to -7.3 percent (Scott, p. 25).

Because indications were that the budgetary restraints imposed by the Balanced Budget Act of 1997 were adversely impacting access to healthcare, Congress restored a portion of the funds with the passage of The Balanced Budget Refinement Act of 1999 (Foster, 2000). While Congress restored some funds in 1999 and again in 2000, spending was projected to drop by “more than \$99 billion through 2005” (Lawmakers Struggle, 2002, p. B15). Significant legislation concerning Medicare was outlined in Appendix F.

## *Medicaid*

Medicaid was established in 1965 with the passage of Title XIX of the Social Security Amendments Act as a program designed to provide healthcare insurance for those who were medically indigent (Hoffman et al., 2001). State and federal governments jointly funded this entitlement program and programs were and still are specific to each state. The federal government provides broad guidance and each state has the ability to tailor its Medicaid program within the federal guidelines (Baker & Baker, 2000). Originally eligibility was limited to those individuals who qualified for Federal Aid for Dependent Children or Supplemental Security Income (Nowicki, 2001).

Two significant federal legislative efforts added to the Medicaid program. The Omnibus Reconciliation Act of 1986 expanded the program to include low-income children regardless of their eligibility for federal Aid for Dependent Children. Whereas the Federal Balanced Budget Act of 1997 reduced Medicare spending, it also increased funding for children's health initiatives at the state level (Nowicki, 2001). Significant federal legislation impacting the Medicaid program is detailed in Appendix G.

## *TennCare*

TennCare became a significant yet unpredictable source of revenue for Tennessee hospitals. In order to understand the magnitude of the problem and the cloud of uncertainty the development of TennCare must be reviewed. TennCare was initiated predominantly because of fiscal concerns in a state that is dependent upon sales taxes as its primary source of revenue (Conover & Davies, 2000). Conover and Davies (p.27-28) provide a succinct summary of the financial and social environment from which TennCare evolved.

While Medicaid expenditures had nearly tripled between fiscal year 1987 and fiscal year 1993, they were projected to increase another 17 percent in fiscal year

1994, in part as a result of federally mandated eligibility expansions beyond the state's control. By the early 1990s, Tennessee had become highly successful in obtaining and increasingly reliant on federal disproportionate share hospital (DSH) payments, financing the state share [of Medicaid] with provider taxes and donations. In 1992, DSH payments constituted 17.6 percent of Medicaid spending in Tennessee, making it a "high-DSH" state subject to a 12 percent cap established by federal legislation enacted in late 1991....Accordingly, the state had adopted a 6.75 percent gross receipts tax on hospitals and other professional services on July 1, 1992.

Because there no longer was any guarantee that the size of the hospital's payment to the state would later be fully repaid in Medicaid DSH reimbursements, this tax was unpopular among hospitals, with the results that by March 1993 the Tennessee Hospital Association was actively seeking the tax's repeal.... Faced with a loss of nearly \$500 million in federal funding, the state legislature considered the alternatives: both raising state sales taxes and cutting eligibility, benefits, or provider payments by 20 percent were viewed as either infeasible or undesirable. Therefore, state policymakers concluded that Medicaid would have to be radically overhauled and alternative financing sources found to offset the projected DSH cuts. At the same time, there was a growing sentiment among the public nationally favoring universal coverage. A [Federal Medicaid] Section 1115 waiver was viewed as the only plausible mechanism to achieve both objectives. With the waiver, Medicaid eligible patients could be required to enroll in managed care plans, and the resultant savings, along with the reallocation of DSH funds, could be used to expand coverage to large numbers of uninsured persons traditionally not eligible for Medicaid.

In early April 1993, Tennessee Governor McWherter presented a draft plan to the General Assembly and quickly received broad legislative authority to continue designing the program through administrative regulations. Tennessee received the Section 1115 Federal Medicaid waiver on November 18, 1993. On January 1, 1994 TennCare became the insurance plan for the poor and uninsurable residents of Tennessee (Conover & Davies, 2000).

Criticism in the popular media followed quickly. Gleick (1995) compared the development of Arizona's federally waived Medicaid replacement with TennCare. Her comparison was less than favorable, calling TennCare a "stealth attack" from then-governor Ned McWherter, a one-and-one-half page bill that passed with virtually no debate. She pointed out that the enactment of the TennCare legislation forced providers and patients to shift from a fee-

for-service model to a managed-care model in a very short period of time and the change was chaotic (Gleick).

Criticism of TennCare was not limited to the United States. Charatan (1999), writing in the *British Medical Journal* cited the number of Tennesseans using TennCare as 1.3 million or one-quarter of the state's total population. He further stated that the \$36 million received in premiums from those who were uninsured and uninsurable represented \$72.00 per person per year, and called that a small amount given the benefits they received. He stated that a proposal to reform TennCare was to be presented to the Legislature in May of 1999 (Charatan).

As the debate regarding rising costs of healthcare intensified on the national level, Porter (1999) stated that

Healthcare is another pressing social concern facing the nation, where high costs and the large number of people without health insurance have triggered a national debate on how best to restructure the system....cost cutting and managed care will not provide a sustainable solution (Porter, 1999, p. 481).

TennCare has been plagued with funding problems. Revenue shortfalls in the first three months of Tennessee's fiscal year 2001-2002 totaled \$100 million. Even conservative senators such as Sullivan County's Ron Ramsey agree that it would be difficult to cover a potential \$400-million shortfall if this trend continued (Whaley, 2001). TennCare reform continued to be a highly visible and prime target when budget cutting was discussed for the current fiscal year.

Reforms to the TennCare program for Tennessee's fiscal 2002-2003 included a reverification of eligibility process for 577,000 TennCare recipients (Legg, 2002). The reverification process required each enrollee to respond to a letter from TennCare, schedule a meeting with a representative of the Department of Human Services, and supply financial documentation regarding income, assets, and access to other insurance sources. Those suffering from severe medical conditions lacking adequate assistance with personal financial matters or

those suffering from mental illness found this reverification process difficult (TennCare Gap Warrants Attention from Bredesen, 2002). As a result of this reverification process, more than 159,000 TennCare recipients failed to meet eligibility requirements and were removed from the TennCare program. Of that 159,000, 23,282 lost benefits due to new eligibility requirements resulting from action of the last Tennessee General Assembly and more than 100,000 TennCare enrollee's eligibility had yet to be reviewed for reverification. Of the 23, 282 dropped from the TennCare program, more than 10,000 were reinstated upon appeal (Legg). Those trimmed from TennCare may lack access to primary healthcare, and representatives of the Tennessee Hospital Association expressed concern that these cuts in TennCare enrollment would worsen the already overcrowded conditions found in the emergency departments of Tennessee hospitals (Hurst, 2002).

The legality of the TennCare reverification process was challenged by a lawsuit filed by the Tennessee Justice Center on behalf of Rosen and others losing TennCare benefits (Current Cases-Rosen Case, n.d.). On December 18, 2002, U.S. District Judge William J. Haynes agreed that the process developed by Tennessee for removing enrollees from the TennCare program did violate the enrollees' constitutional rights. As a result of this ruling, nearly 200,000 Tennesseans were ordered reinstated to the TennCare program within 10 working days of the court's order. This order resulted in an additional \$300 million in state funding needed to ensure the solvency of the TennCare program in fiscal 2002-03. In reaction, Governor Don Sunquist stated that this court ruling could jeopardize the continued existence of TennCare (Lewis & Cheek, December 20, 2002).

Tennessee appealed the ruling of Judge William J. Haynes to the 6<sup>th</sup> District Court of Appeals. The appellate court granted an emergency stay on January 12, 2003, ruling that it was

not necessary for Tennessee to reinstate TennCare benefits to those removed from the program during the reverification process in the interim period before the case was heard before the appellate court (Lewis, January 3, 2003). On January 13, the appellate court granted a permanent stay in the case until its final ruling, leaving approximately 150,000 Tennesseans without healthcare insurance coverage (Lewis, January 14, 2003). Significant events in the history of the TennCare Program are detailed in Appendix H.

The fiscal year 2002-2003 TennCare deficit was projected to be \$370 million. Faced with an increasing deficit in the Tennessee state budget, the administration of the newly elected Governor Phil Bredesen proposed fundamental changes in the TennCare program. TennCare Director Manny Martins proposed the following among several other strategies to save \$155 million in the TennCare program: withhold supplemental payments to disproportionate-share hospitals (“hospitals serving a disproportionate number of low income patients with special needs” [Coughlin and Liska, n.d, paragraph 1]), limit hospital visits to 21 days per enrollee per year, and limit X-rays and laboratory visits to 30 per year per enrollee (De la Cruz, 2003).

While several writers (De la Cruz, 2003; Hayes, 2003a; Lewis & Cheek, 2003) described the TennCare budget shortfall, authors disagree regarding the financial status of the program. Estimates of the deficit vary from \$322 million (Hayes, 2003a) to \$370 million (De la Cruz). In addition, confusion about the financial impact of the recent changes in TennCare eligibility was apparent. Hayes’s (2003a) following statements are contradictory.

TennCare officials say that moving 150,000 clients off the rolls has *failed to save the state any money* [italics added]. The [Bredesen] administration projects a \$500 million TennCare shortfall in the next fiscal year that could *grow by \$300 million* [italics added] if a federal appeals court re-enrolls those who were removed through a federally-approved reverification process (Hayes, 2003a, Paragraph 12).

Hayes (2003b) detailed the Bredezen administration's announcement of further measures geared toward lowering Tennessee's cost for the TennCare program. After negotiating with the United States Center for Medicare and Medicaid services for a \$175 million infusion of cash for the current fiscal year, the administration announced additional plans for cuts in the upcoming fiscal year. Bredezen administration officials proposed to eliminate the pharmacy benefit for Medicare recipients who also qualify for TennCare. An additional recommendation was made to remove those uninsurable Tennesseans with incomes in excess of \$13,000 from the TennCare roles.

TennCare funding grew by \$330 million to approximately \$7 billion in Tennessee's \$21 billion 2003-2004 budget (Hayes, 2003c). By July 2003, the Bredezen administration promised to have a solution developed for TennCare by the end of 2003, with the changes to be implemented in the 2004-2005 Tennessee budget. Hayes (2003d) reported options under consideration were "terminating the program and returning to a limited Medicaid program, and having HMOs only in urban areas" (Paragraph 3).

### *Summary*

Strategic management evolved from a military concept to a complex formulation, implementation, and evaluation system that is often used by many of today's corporations. Models based upon analysis of the competitive marketplace were popularized in the 1980s and are still in current use. The evolution of integrated global economies and the resulting global competition encouraged the development of new systems for strategic management. Models based upon systems thought and the development of strategic business alliances were developed.

The politico-legal sector of the external environment of Tennessee hospitals demonstrates few clear opportunities but presents serious threats. These threats are financial in nature and

exhibit themselves as declining reimbursement levels. Per-enrollee TennCare reimbursement levels have fallen to pre-1998 levels (Paine, 2003). Even with an aging population, Congress reduced Medicare expenditures by enacting the Balanced Budget Act of 1997.

Largely because of the methods of reimbursement, healthcare strategic management systems lagged those found in other business sectors. During the period when third-party payers reimbursed hospitals using a cost-plus mechanism, no strategy could fail. Medicare reforms resulting in prospective (DRG-based) payment systems forced hospital executives to use strategic management techniques to survive. The Federal Balanced Budget Act of 1997 brought additional financial pressures to bear upon the nation's hospitals.

Tennessee hospitals were faced with additional financial pressures when the state's traditional Medicaid system evolved into TennCare. This combination of federal and state funding constraints resulted in difficult choices for hospital executives as strategic management evolved into a technique used to allocate capital and other resources within hospitals.

This review provides the reader with a historical overview strategic management during the last five decades. Contemporary strategic management systems are reviewed above, including those based upon competition and their weaknesses and strategic management systems for the 21<sup>st</sup> century are presented. Strategic management in the healthcare industry is examined, and the impact of changes to Medicare reimbursement systems is described. TennCare and the controversies surrounding this Tennessee program of insurance for the poor are reviewed.

## CHAPTER 3

### METHODS

#### *Overview*

This chapter presents detailed information regarding the study's quantitative research design: population, survey development and pilot study, survey validity, and data collection procedures. Also presented are the data analysis procedures that were employed.

#### *Research Design*

This project investigated hospital executives' perceptions of the environmental turbulence in the politico-legal sector of the macroenvironment of Tennessee hospitals and its resulting impact on their hospitals' strategic management systems. In this study, perceptions regarding two significant changes in the political-legal macroenvironment of Tennessee hospitals, reductions in Medicare reimbursement and the advent of TennCare were addressed. Specifically the research addressed the following question: What significant changes were made in the following areas of strategy -- mission, goals, objectives, implementation, and evaluation? After a review of the literature, a quantitative design using descriptive methods was selected to investigate and describe this political-legal impact. Descriptive methods allowed careful examination of the perceived impact of TennCare/Medicare funding levels on the strategic management systems of Tennessee hospitals. Gall, Borg, and Gall (1996) described such an approach as an "... investigation that measures the characteristics of a sample or population on prespecified variables" (p. 757).

The data required for this study were collected via quantitative methodologies and a survey questionnaire was developed to facilitate this investigation. Questionnaires offered several advantages for this study. First, hospital's CEOs have complex appointment schedules

and limited time available for interviews. Second, hospital CEOs were expected to view providing data using a survey instrument much less demanding upon their time. Third, questionnaires, by their design, are standardized, highly structured, and allow for confidentiality (Gall et al., 1996, p. 289-290).

### *Survey Instrument Development*

After an intense review of the literature, I did not find an existing survey instrument that addressed the problem under investigation. However, portions of a survey instrument developed by Zimmerer, Rockmore, and Miller (1996) that assessed the strategic and operational effectiveness of Tennessee hospitals informed the survey that I developed. A letter of permission to use the survey of Zimmerer, Rockmore, and Miller with or without modification was obtained (Appendix I).

As a result of information gleaned from the literature review, a questionnaire, Survey of Tennessee Hospital Executives, was developed using the basic stages of strategic management systems as its foundation (Appendix J). Questions addressing strategy formulation (mission, goals), implementation strategies (physician involvement, community involvement, etc.), and evaluation were included.

### *Instrument Validity*

Of particular interest to this instrument was the concept of content validity. Content validity "... refers to the degree to which the scores yielded by a test adequately represent the ...conceptual domain that these scores purport to measure (Gall et al., 1996, p.249). Berdie, Anderson, and Niebuhr (1986) described survey validity as a collection of valid items. They wrote that valid items are those that "stimulate accurate, relevant data" (p. 3). The three stages of strategic management systems (formulation, implementation, and evaluation) served as the

framework for questionnaire content. The review of the literature (presented in Chapter 2) informed the process of content development.

Practitioners in the field of strategic management systems and a panel of healthcare executives established content validity of the Survey of Tennessee Hospital Executives. Because the questionnaire was developed specifically for this research, two content experts performed an initial review, one a faculty member with expertise in strategic management and one a practitioner working in the area of healthcare strategy. These individuals were instructed to review the study's research questions and evaluated the content validity of the questionnaire within that context. After this review, changes suggested by these content experts were incorporated into the survey instrument. A developmental test instrument was then completed by a sample of the population for content validity, question clarity, and the overall questionnaire. The sample consisted of four Chief Executive Officers working in Tennessee hospitals who volunteered to participate in the development study. Each participant completed the survey and then completed the Survey Assessment Tool (Appendix K). The Chief Executives were asked which questions should be deleted from the questionnaire, what questions should be added to the questionnaire, what questions should be modified, and in what ways should they be modified. The amount of time required to complete the survey was recorded. Additional comments regarding the questionnaire were solicited and this information was also collected using the Survey Assessment Tool (Appendix K). Changes suggested by healthcare executives participating in the developmental study were integrated into the questionnaire. Only one suggestion for improvement was made: to change the frequency reference from *monthly* to *timely* in question 25 which referred to strategic plans.

### *Population*

Within hospitals, the individual most responsible for the development and implementation of their strategic plans are the Chief Executive Officers. The study was limited to those executives in Tennessee hospitals. While there were 140 Tennessee hospitals listed in the database of the American Hospital Association as of November 6, 2002, only 115 hospitals (Appendix D) were represented in the population to be studied. The study was limited to acute care hospitals and excluded Veterans Administration hospitals, children's hospitals, rehabilitation hospitals, and mental health/psychiatric hospitals (Appendix E). These specific hospital types were excluded because their TennCare and Medicare reimbursement procedures and rates are quite different from acute care facilities. Assuming that each healthcare facility employed a Chief Executive Officer, the population to be surveyed in this study was 115 senior healthcare executives of acute care hospitals in Tennessee. Names of CEO's and hospital addresses were obtained from the *Hospital Blue Book* (2001) and *The AHA Guide 2001-2002* (2001).

### *Data Collection Procedures*

The following timeline and procedure guided the data collection.

Step 1: A copy of the questionnaire was mailed to chief executive officers in the targeted population. Data were collected during April and May 2003. Included in this initial mailing was a cover letter (Appendix L) explaining the usefulness of the study, the impact the respondent could have by participating, assurance of respondent confidentiality, and a self addressed stamped envelope for return of the questionnaire (Dillman, 1978, p. 160-199). The responses were confidential but not anonymous. To facilitate follow-up, the questionnaires were coded so that those not responding to the initial mailing could be identified.

Step 2.: One week after the first mailing, a follow-up letter (Appendix M) was mailed to each executive who did not respond to the first mailing.

Step 3: Three weeks after the first mailing a follow-up packet was mailed to each executive who had not responded to the questionnaire. The packet included a third follow-up letter (Appendix N), a copy of the questionnaire, and a self addressed stamped envelope for return of the questionnaire.

Step 4: The returned questionnaires were organized according to the initial coding system and the data were input into SPSS (Statistical Package for Social Studies). Answers of strongly agree were assigned a value of 5, agree a value of 4, neither agree nor disagree a value of 3, disagree a value of 2, strongly disagree a value of 1, and not applicable a value of 9. Questions with no responses were excluded from calculations.

#### *Research Questions*

Survey questions 1 through 4 addressed changes in hospital's missions resulting from changes in TennCare and Medicare funding. Survey questions 5 through 14 addressed changes in the strategies of hospitals as a result of changes in TennCare and Medicare funding. Questions 15 through 18 addressed changes in organizational goals or measures that resulted from TennCare and Medicare funding changes. Questions 19 through 23 addressed key implementation issues encountered while implementing strategies, and questions 24 through 27 addressed changes in the evaluation of strategic initiatives resulting from changes in TennCare and Medicare funding. Questions 5, 6, 11, 12, 13, 17, 21, and 22 address issues related to direct patient care. Question 23 addresses physician support for changes in hospital strategies. A matrix detailing the relationship between each questionnaire item and the study's research questions along with their relationship is presented in Appendix O. The research questions are:

1. To what extent did hospitals make changes to their mission as a result of changes in TennCare and Medicare funding?
2. To what extent did hospitals make changes to their goals as a result of changes in TennCare and Medicare funding?
3. To what extent did hospitals make changes to strategies as a result of changes in TennCare and Medicare funding?
4. To what extent did hospitals make changes to direct-patient care as a result of changes in TennCare and Medicare funding?
5. To what extent did the hospital's medical staff members support changes in strategies resulting from TennCare and Medicare funding?
6. To what extent did hospitals make changes to the way strategic management systems are evaluated as a result of changes in TennCare and Medicare funding?

#### *Data Analysis*

The results of the data analysis are reported for each research question in Chapter 4. The results are presented within the framework of the basic strategic management model (formulation, implementation, evaluation). Quantitative analysis yielding frequency counts and resulting distributions were compiled for each of the items found in the questionnaire. Frequency distributions were converted to percentages of total responses to facilitate reporting. Results were calculated based upon the number of responses for each question. Frequency distributions are but one tool used for “for organizing, summarizing, and displaying a set of numerical data” (Gall et al., 1996, p. 757). Descriptive statistics allow the researcher to measure the perceptions of a single sample (healthcare executives) on survey questionnaire items related

to the turbulence in the politico-legal sector of the external environments of their hospitals, specifically changes in TennCare and Medicare funding levels.

Comments of the respondents were reviewed and summarized.

### *Summary*

This chapter contains information regarding the research design for this study. It also described the procedures for the development of the survey questionnaire, establishment of validity for the instrument, and the procedures for its use for data collection. The population to be studied was reviewed. Research questions and their associated hypothesis were presented. Data analysis procedures were summarized.

## CHAPTER 4

### PRESENTATION AND ANALYSIS OF THE DATA

While there are significant problems regarding the status of health funding in Tennessee, the purpose of this study was to determine management's perceptions of how turbulence in the politico-legal sector of the macroenvironment have impacted the strategic management systems of Tennessee hospitals. In particular, how did Federal and State funding restrictions impact the strategic planning and implementation process of their hospitals? It was also designed to gain insight regarding specific changes to strategic management systems that may have resulted from these funding restrictions. Histograms of responses to each question are presented in Appendix P.

The study asked questions of hospital's Chief Executive Officers in an effort to answer the following questions:

Question 1: To what extent did hospitals make changes to their missions as a result of changes in TennCare and Medicare funding?

Question 2: To what extent did hospitals make changes to their goals as a result of changes in TennCare and Medicare funding?

Question 3: To what extent did hospitals make changes to strategies as a result of changes in TennCare and Medicare funding?

Question 4: To what extent did hospitals make changes to direct patient care as a result of changes in TennCare and Medicare funding?

Question 5: To what extent did the hospital's medical staff members support changes in strategies resulting from TennCare and Medicare funding?

Question 6: To what extent did hospitals make changes to the way strategic management systems have been evaluated as a result of changes in TennCare and Medicare funding?

### *Analysis of the Data*

#### *Respondents*

Using the data collection procedure detailed in Chapter 3 and modeled after Dillman (1978), data were collected during a six-week period of April and May 2003. The initial survey mailing and follow-up resulted in 40 (35%) responses. A second survey and follow-up letter was mailed to Chief Executive Officers not responding to the initial survey. An additional 23 responses were received for a total of 63 (55%) of the targeted population of Chief Executive Officers of Tennessee Hospitals.

#### *Population*

The CEOs responding were representative of the population. For example, the population contained 20 Small Rural Hospitals as defined by the Health Resources Services Administration's Department of Rural Health Policy, 50% (10 responses) of their CEOs responded (Small Rural Hospital Improvement Grant Program, List of Eligible Hospitals, n.d.). With regards to profit status, for-profit hospitals were slightly underrepresented in the respondents. Twenty-seven percent of the hospitals in the population were listed as for-profit in the *AHA Guide 2001-2002 Edition* while 22% of the respondents were CEOs of for-profit hospitals. In order to compare the proportions of respondents from large and small hospitals versus those population proportions, a Chi-Square test for goodness of fit was performed using the data presented in Table 1. The data demonstrated there was no significant difference in the sample proportions and the proportions found in the population (Chi Square=.986,  $df=6$ ,  $p=.986$ ).

Table 1

Comparison of Respondents Versus Population Using Number of Beds as a Measure of Hospital Size

Number of Beds	% in Population	% of Respondents	Expected Frequency sample	Frequency of Respondents.
1-75	28.7	28.6	18	18
76-150	29.6	31.7	19	20
151-225	13.9	14.3	9	9
226-300	7.8	7.9	5	5
301-375	3.5	3.2	2	2
376-450	3.5	4.8	2	3
>450	13.0	9.5	8	6

To facilitate further analysis, subscales for each of the major areas under study (mission, strategies, goals, implementation, and evaluation) were developed. Reliability measures for each subscale were performed (See Table 2).

Table 2

Reliability Analysis of Subscales Developed from Survey of Tennessee Hospital Executives

Area	Number of Cases	Reliability Coefficient ( $\alpha$ )
Mission: Questions 1,2,3, and 4	32	0.6540
Strategies: Questions 5,6,12, and 13	61	0.8473
Goals: Questions 15, 16, 17, and 18	59	0.7572
Implementation: Questions 19, 20, 21, and 22	58	0.6130
Evaluation: Questions 24, 25, 26, and 27	56	0.6111

For areas containing more than 4 survey items, items for inclusion into the subscale were selected such that the reliability measure for the subscale was maximized. Because nearly half of the respondents determined that question 3 was not applicable, the number of cases included in the subscale calculation for *mission* was fewer than the other areas.

Each of the 27 items in the questionnaire addressed one or more aspects of the research questions. The study’s research questions framed the data analysis, and the results are presented in that context.

*Research Question Number 1: Mission*

Research question number one was stated as follows: To what extent did hospitals make changes to their goals as a result of changes in TennCare and Medicare funding? Regarding the first survey item, a small percentage of the respondents agreed or strongly agreed that the changes in these funding levels resulted in a change in the mission of their organization (See Table 3).

Table 3

*Distribution of Responses to Items Related to Strategy Formulation: Mission*

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	N/A	Total
	<i>f</i> %	<i>f</i> %	<i>f</i> %	<i>f</i> %	<i>f</i> %	<i>f</i> %	<i>f</i> %
1. TennCare/Medicare funding changes forced changes to our hospital’s mission statement.	13 21.3	31 50.8	8 13.1	6 9.8	3 4.9	0 0.0	61 100
2. TennCare/Medicare funding changes resulted in a change to my hospital’s profit/not for profit status.	11 17.7	26 41.9	2 3.2	4 6.5	14 22.6	5 8.1	62 100
3. TennCare/Medicare funding changes were a major factor in our decision to join a healthcare system.	4 6.5	14 22.6	5 8.1	7 11.3	3 4.8	29 46.8	62 100
4. My hospital’s emphasis on Wellness Programs has decreased because of TennCare/Medicare funding changes.	1 1.6	17 27.9	14 23.0	18 29.5	8 13.1	3 4.9	61 100

However, nearly a third agreed or strongly agreed that their profit/not-for-profit status had changed as a result of TennCare and Medicare funding levels (Item 2). While most expressing an opinion disagreed or strongly disagreed that the funding changes under study were a major factor in deciding to join a healthcare system, nearly half of the CEOs responded that the

question was not applicable to their organization, the highest frequency for *not applicable* in the entire study (Item 3). There was little agreement among the respondents regarding the impact of TennCare/Medicare funding changes and their initiatives centered on Wellness Programs with almost one fourth of the respondents neither agreeing nor disagreeing (Item 4).

Resulting subscales for *mission* were analyzed for differences between small (0-75 beds), medium (76-150 beds), and large (greater than 150 beds) hospitals. Using an analysis of variance, no differences were found ( $F=.370$ ,  $df=2,29$ ,  $p=.694$ ). The subscales were also examined for differences between for-profit and not-for-profit hospitals, again, no differences were found ( $t=-.795$ ,  $df=30$ ,  $p=.433$ ).

In summary, considering the items related to changes in mission, most CEOs reported that the mission of hospitals did not change as a result of changes in TennCare/Medicare funding. Almost a third of hospitals changed their profit/not-for-profit status as a result of the changes in funding investigated by this study.

#### *Research Question Number 2: Goals*

The second research question for this study was: To what extent did hospitals make changes to their goals as a result of changes in TennCare and Medicare funding? Almost all of the CEOs responding to Item 15 agreed or strongly agreed that their hospitals had adjusted targets for profitability as a result of changes in TennCare and Medicare reimbursement rates (See Table 4).

Table 4

*Distribution of Responses to Items Related to Goals*

	Strongly Disagree		Disagree		Neither		Agree		Strongly Agree		N/A		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
15. My hospital has adjusted its profitability projections as a result of TennCare/Medicare funding changes.	0	0.0	2	3.2	0	0.0	26	41.9	34	54.8	0	0.0	62	100
16. My hospital has adjusted its targets for Average Length of Stay as a result of TennCare/Medicare funding changes	0	0.0	16	26.7	17	28.3	16	26.7	10	16.7	1	1.7	60	100
17. My hospital has adjusted its goal for FTE's per Adjusted Occupied Bed as a result of TennCare/Medicare funding changes.	1	1.7	13	21.7	8	13.3	20	33.3	18	30.0	0	0.0	60	100
18. My hospital has adjusted focus on short-term rather than long-term goals as a result of TennCare/Medicare funding.	0	0.0	13	21.7	12	20.0	21	35.0	14	23.3	0	0.0	60	100

Nearly half of the respondents agreed or strongly agreed that their organizations had adjusted targets for Average Length of Stay (ALOS) as a result of TennCare/Medicare funding changes (Item 16). Just under two thirds of the hospital CEOs agreed or strongly agreed that adjustments had been made to their organization's target for Full Time Equivalent Employees per Adjusted Occupied Bed (FTE/AOB) (Item 17). FTE/AOB is a measure of manpower expended to provide care. A majority of CEOs responding agreed or strongly agreed that their hospital was more likely to focus on short-term rather than long-term goals as a result of the funding changes under study (Item 18).

Resulting subscales for *goals* were analyzed for differences between small (0-75 beds), medium (76-150 beds), and large (greater than 150 beds) hospitals. Using a one-way analysis of variance, no differences were found ( $F=.703$ ,  $df=2,56$ ,  $p=.499$ ). The subscales were also

examined for differences between for-profit and not-for-profit hospitals, differences were found ( $t=2.020$ ,  $df=57$ ,  $p=.048$ ). The mean of the subscale for CEOs of not-for-profit hospitals was higher than the mean of for-profit CEOs.

The goal that CEOs agree was most likely to be changed as a result of changes in TennCare/Medicare funding was profitability projections. In response to these changes, CEOs were likely to change staffing goals (FTE/AOB), and the strategic management focus shifted to managing progress toward goals in the short run. CEOs of for-profit and not-for-profit hospitals differed in their responses to the items concerning goals.

*Research Question Number 3: Strategies*

The third research question of the study was: To what extent did hospitals make changes to strategies as a result of changes in TennCare and Medicare funding? By a 2 to 1 margin regarding Item 5 of the survey, CEOs agreed that changes in TennCare/Medicare funding prevented their organizations from offering new services to their communities (See Table 5).

Table 5

*Distribution of Responses to Items Related to Strategies*

	Strongly Disagree		Disagree		Neither		Agree		Strongly Agree		N/A		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
5. TennCare/Medicare funding changes prevented our hospital from offering new services to our community.	0	0.0	16	25.8	5	8.1	26	41.9	15	24.2	0	0.0	62	100
6. As a result of TennCare/Medicare funding changes our hospital eliminated existing services to our community.	2	3.2	25	40.3	2	3.2	22	35.5	11	17.7	0	0.0	62	100
7. My hospital is more likely to seek strategic business alliances with physicians or physician groups as a result of TennCare/Medicare funding changes.	3	4.8	11	17.7	18	29.0	23	37.1	6	9.7	1	1.6	62	100

Table 5 Continued

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	N/A	Total
	<i>f</i> %	<i>f</i> %	<i>f</i> %	<i>f</i> %	<i>f</i> %	<i>f</i> %	<i>f</i> %
8. My hospital has <b>increased</b> the number of owned physician practices as a result of TennCare/Medicare funding changes.	14 22.6	27 43.5	3 4.8	4 6.5	4 6.5	10 16.1	62 100
9. My hospital has <b>reduced</b> the number of owned physician practices as a result of TennCare/Medicare funding changes.	5 8.1	17 27.4	10 16.1	10 16.1	5 8.1	15 24.2	62 100
10. My hospital has sold or spun-off business units as a result of TennCare/Medicare funding changes.	3 4.8	24 38.7	8 12.9	14 22.6	5 8.1	8 12.9	62 100
11. My hospital joined or increased the support of a Group Purchasing Organization as a result of TennCare/Medicare funding changes.	2 3.2	17 27.4	16 25.8	14 22.6	10 16.1	3 4.8	62 100
12. TennCare/Medicare funding changes resulted in a workforce reduction at my hospital.	1 1.6	10 16.1	13 21.0	18 29.0	19 30.6	1 1.6	62 100
13. My hospital delayed the replacement of capital equipment as a result of change in TennCare/Medicare funding.	0 0.0	10 16.1	3 4.8	23 37.1	26 41.9	0 0.0	62 100
14. My hospital changed its strategic management processes (hired a strategist, involved more employees in the process, etc.) as a result of TennCare/Medicare funding changes.	2 3.2	19 30.6	19 30.6	15 24.2	5 8.1	2 3.2	62 100
20. My hospital increased marketing efforts as a result of changes in TennCare/Medicare funding.	2 3.3	25 41.7	11 18.3	19 31.7	2 3.3	1 1.7	60 100

CEO’s were almost evenly split regarding the elimination of existing services in their communities (Item 6). While a significant number disagreed or strongly disagreed, a majority (52.2%) agreed or strongly agreed that existing services offered to their communities were eliminated as a result of changes in TennCare and Medicare funding levels. While nearly a third

neither agreed or disagreed, just less than half CEOs responding agreed or strongly agreed that they were more likely to form strategic alliances with physicians or physician groups (Item 7). The data demonstrated that nearly two thirds of the CEOs responding disagreed or strongly disagreed that their organizations have not increased the number of owned physician practices as a result of the funding changes under study (Item 8). Responses regarding the reduction in numbers of owned practices were mixed (Item 9). Slightly more than one third disagreed or strongly disagreed that their organizations had decreased the number of owned practices, approximately one fourth agreed or strongly agreed with the statement and approximately one fourth responded that the statement was not applicable to their organization (the remainder neither agreed nor disagreed). The majority of CEO's responding indicated their organizations had not spun-off business units as a result of changes in the funding levels of TennCare and/or Medicare (Item 10). Thirty-nine percent of the CEOs indicated (agreed or strongly agreed) their organizations were more likely to join or increase the support of Group Purchasing Organizations (GPOs) as a result of changes in TennCare/Medicare funding (Item 11). Nearly 60% of the CEOs responding agreed or strongly agreed that changes in TennCare/Medicare funding levels resulted in workforce reductions at their hospitals (Item 12). Seventy-nine percent of CEOs responding agreed or strongly agreed that they had elected to delay replacement of capital equipment as a result of changes in the funding levels under study (Item 13). While this study demonstrated the marked changes in the politico-legal sector of the external environment resulting from changes in TennCare/Medicare funding, only approximately a third agreed or strongly agreed that their hospitals had changed their strategic management processes as a result (Item 14). Regarding marketing efforts, slightly less than half disagreed or strongly disagreed

that their organizations had increased marketing efforts as a result of changes in TennCare/Medicare funding levels (Item 20).

Resulting subscales for *strategies* were analyzed for differences between small (0-75 beds), medium (76-150 beds), and large (greater than 150 beds) hospitals. Using a one-way analysis of variance, no differences were found ( $F=.135, df=2,58, p=.874$ ). The subscales were also examined for differences between for-profit and not-for-profit hospitals, again, no differences were found ( $t=1.947, df=59, p=.056$ ).

The changes in TennCare/Medicare funding levels are not without corresponding changes to the way hospitals deliver care to those they service, changes in strategies. These changes resulted in delays in new service offerings and in most cases elimination of existing services. CEOs responded that changes in TennCare/Medicare funding levels were directly responsible for workforce reductions at their facilities.

*Research Question Number 4: Impact on Patient Care*

The study’s fourth research question was: To what extent did hospitals make changes to direct patient care as a result of changes in TennCare and Medicare funding? A subset of questions (5, 6, 11, 12, 13, 17, 19, 21, and 22) from the strategies and implementation section of the survey instrument addressed this question (See Table 6).

Table 6

*Distribution of Responses to Items Related to Direct Patient Care*

	Strongly Disagree		Disagree		Neither		Agree		Strongly Agree		N/A		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
5. TennCare/Medicare funding changes prevented our hospital from offering new services to our community.	0	0.0	16	25.8	5	8.1	26	41.9	15	24.2	0	0.0	62	100

Table 6 Continued

	Strongly Disagree		Disagree		Neither		Agree		Strongly Agree		N/A		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
6. As a result of TennCare/Medicare funding changes our hospital eliminated existing services to our community.	2	3.2	25	40.3	2	3.2	22	35.5	11	17.7	0	0.0	62	100
11. My hospital joined or increased the support of a Group Purchasing Organization as a result of TennCare/Medicare funding changes.	2	3.2	17	27.4	16	25.8	14	22.6	10	16.1	3	4.8	62	100
12. TennCare/Medicare funding changes resulted in a workforce reduction at my hospital.	1	1.6	10	16.1	13	21.0	18	29.0	19	30.6	1	1.6	62	100
13. My hospital delayed the replacement of capital equipment as a result of change in TennCare/Medicare funding.	0	0.0	10	16.1	3	4.8	23	37.1	26	41.9	0	0.0	62	100
17. My hospital has adjusted its goal for FTE's per Adjusted Occupied Bed as a result of TennCare/Medicare funding changes.	1	1.7	13	21.7	8	13.3	20	33.3	18	30.0	0	0.0	60	100
19. My hospital changed its organizational structure as a result of changes in TennCare/Medicare funding.	2	3.3	28	46.7	11	18.3	11	18.3	7	11.7	1	1.7	60	100
21. TennCare/Medicare funding changes increase the difficulty recruiting nursing staff for my hospital relative to other competitors.	0	0.0	12	20.0	9	15.0	23	38.3	16	26.7	0	0.0	60	100
22. The patient to nurse ratio at my hospital increased as a result of TennCare/Medicare funding changes.	3	5.0	26	43.3	15	25.0	14	23.3	2	3.3	0	0.0	60	100

To determine the general direction CEOs strategies were taking, items 5 and 6 evaluated CEOs use of a specific market expansion strategy and a retrenchment strategy. Data regarding Item 5 demonstrated that nearly two thirds agreed or strongly agreed changes in the funding levels under study had prevented their organizations from offering new services (market

expansion strategy). Slightly more than half of the CEOs responding agreed or strongly agreed that their organizations had cut existing healthcare services (Item 6, retrenchment strategy).

Items 11, 12, 13, 17, and 19 evaluated adaptive strategies with each question targeting a cost containment strategy used for major categories of hospital's expenses; supplies, personnel, and capital equipment. Regarding containing the cost of supplies (Item 11), there was little agreement among CEOs regarding the increased support of Group Purchasing Organizations (GPOs) as a result of TennCare/Medicare funding changes. Slightly less than a third of the CEOs responding disagreed or strongly disagreed that their hospital had joined or increased support of GPOs, approximately a fourth responded that they neither agreed nor disagreed, and slightly more than a third agreed or strongly agreed their hospital had increased support of GPOs as a result of the funding changes under studies. The majority of CEOs responding agreed or strongly agreed that workforce reductions at their facilities were the result of TennCare/Medicare funding changes (Item 12). The greatest agreement among CEOs regarding cost containment strategies was found in response to the question regarding capital equipment replacement. Seventy-nine percent agreed or strongly agreed that their hospitals had delayed the replacement of capital equipment as a result of changes in TennCare/Medicare funding (Item 13). Nearly two thirds of the CEOs agreed or strongly agreed that the goal for FTE's per Adjusted Occupied Bed were adjusted as a result of the funding under study. This use of workforce reduction as a method of controlling personnel costs was confirmed by the responses of CEOs to the question regarding changes in goals for FTEs per Adjusted Occupied Bed (Item 17). In addition to the workforce reductions, approximately a fourth of the CEOs agreed or strongly agreed that there were changes to the organizational structure as a result of changes in the funding levels under study (Item 19).

The items regarding difficulty in nurse recruitment and changes in patient to nurse ratios investigated the impact of TennCare/Medicare changes on “bedside” patient care. Nearly two thirds of the CEOs agreed or strongly agreed that changes in TennCare/Medicare funding increased the difficulty recruiting nursing staff for their hospitals relative to other competitors (Item 21). Only slightly more than one fourth of the CEOs agreed or strongly agreed that this difficulty had translated to changes in the number of patients nurses were assigned (Item 22).

*Research Question Number 5: Medical Staff Support*

Research question number 5 was stated: To what extent did the hospital’s medical staff members support changes in strategies resulting from TennCare and Medicare funding? A single item on the questionnaire was designed to answer this question (Item 23). Slightly more than half of the CEOs responding agreed or strongly agreed that the medical staff at their hospital supported the change efforts brought about by changes in TennCare/Medicare funding (See Table 7).

Table 7

*Distribution of Responses to Items Related to Medical Staff Support*

	Strongly Disagree		Disagree		Neither		Agree		Strongly Agree		N/A		Total	
	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>	<i>f</i>	<i>%</i>
23. The Medical Staff at my hospital supports our hospital’s change efforts brought about by changes in TennCare/Medicare funding.	1	1.7	5	8.3	18	30.0	32	53.3	2	3.3	2	3.3	60	100

*Research Question Number 6: Changes in Strategic Management Systems*

Research question number 6, to what extent did hospitals make changes to the way strategic management systems have been evaluated as a result of changes in TennCare and Medicare funding, was addressed by items 24, 25, 26, and 27 of the survey (See Table 8).

Table 8

*Distribution of Responses to Items Related to Changes in Strategic Management Systems*

	Strongly Disagree		Disagree		Neither		Agree		Strongly Agree		N/A		Total	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
24. Strategic decisions are evaluated more frequently by our Board of Directors as a result of changes in TennCare/Medicare funding.	0	0.0	9	15.3	21	35.6	25	42.4	4	6.8	0	0.0	59	100
25. My hospital makes timely changes to our strategic plan based upon significant changes in the external environment.	0	0.0	3	5.0	5	8.3	35	58.3	17	28.3	0	0.0	60	100
26. The Hospital's Board of Directors receives regular updates concerning progress on strategic initiatives.	0	0.0	0	0.0	2	1.7	38	63.3	20	33.3	0	0.0	60	100
27. Joint Commission evaluates our progress toward strategy implementation in light of our strategic plan.	1	1.8	6	10.5	10	17.5	30	52.6	10	17.5	0	0.0	57	100

While slightly less than half of the respondents agreed or strongly agreed that strategic decisions are evaluated more frequently by their hospital's board of directors as a result of changes in TennCare and Medicare funding, more than a third neither agreed nor disagreed with the statement (Item 24). A large majority of the respondents agreed or strongly agreed that their organizations made timely changes to strategic plans based upon significant changes in the external environment (Item 25).

Almost all of the CEOs responding agreed or strongly agreed that the Board of Directors of their organizations received regular updates regarding progress on strategic initiatives (Item 26). This response reflected the highest level of agreement on any item under evaluation.

The Joint Commission on the Accreditation of Healthcare Organizations mandates that hospitals develop strategic plans (*Comprehensive Accreditation Manual*, 1998, p. LD4). Just less than three fourths of CEOs responding agreed that the Joint Commission focused attention

upon strategic planning by reviewing the organizations' progress with regards to strategy implementation (Item 27).

Resulting subscales for *evaluation* were analyzed for differences between small (0-75 beds), medium (76-150 beds), and large (greater than 150 beds) hospitals. Using a one-way analysis of variance, no differences were found ( $F=.063$ ,  $df=2,53$ ,  $p=.939$ ). The subscales were also examined for differences between for-profit and not-for-profit hospitals, differences were found ( $t=2.512$ ,  $df=54$ ,  $p=0.015$ ). The mean scores of the subscales CEOs of not-for-profit hospitals were higher than those of for-profit CEOs.

#### *Comments*

While each survey instrument provided space for comments, only 6 of 63 (10%) responding CEOs made comments regarding the research (Appendix Q). Two thirds of the comments made concerned reimbursement or reimbursement methods and their impact on hospitals. One CEO attributed changes at their hospital to a recent merger and not changes in TennCare and Medicare funding levels. Another CEO commented on the difficulty of determining the portion of changes that have resulted from reduced TennCare funding levels and those changes resulting from reduced Medicare funding levels.

#### *Summary*

This chapter presented the data analysis resulting from the CEOs responding to the study's questionnaire. Chapter 5 will present the conclusions and recommendations that evolve from this study.

## CHAPTER 5

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter concludes the study and includes the findings and conclusions.

Recommendations for further research are also presented.

While the literature clearly demonstrated a reduction of Federal dollars and restriction of State dollars in healthcare spending, there was limited understanding of the impact of these budgetary restrictions on hospitals' strategic plans (Lawmakers Struggle, 2002; Paine, 2003; Scott, 1999; United States Centers for Medicare and Medicaid Services, n.d.). In addition to a historical perspective of Federal and state healthcare funding mechanisms, the literature suggested several models that could provide insight into how hospital executives might evaluate changes that occur from turbulence in the politico-legal sector of the macroenvironment that has impacted the strategic management systems of Tennessee hospitals (Haines, 2000; Moore, 1996; Ohmae, 1990; Porter, 1985; Zuckerman, 1994).

The primary focus of this study was to determine management's perceptions of how turbulence in the politico-legal sector of the macroenvironment has impacted the strategic management systems of Tennessee hospitals. In particular, how did Federal and State funding restrictions impact the strategic planning and implementation process of their hospitals? It was also designed to gain insight regarding specific changes to strategic management systems that may have resulted from these funding restrictions.

Data were collected using the Survey of Tennessee Hospital Executives developed as described in Chapter 3. Data were collected using the methodology outlined by Dillman (1978) and the instrument was mailed to the 115 Chief Executive Officers of Tennessee's acute care hospitals.

## *Findings*

The following findings are derived from the data analysis and interpretations of the data generated from the Survey of Tennessee Hospital Executives. The findings are framed by the study's research questions.

Sixty-three (54.8%) of CEOs in Tennessee hospitals provided input for the study. Using key measures (hospital bed size, profit status, and rural versus urban designation), the sample resulting from CEOs responding was very similar to the population under study. The response rate is relatively high given the targeted population of executives and can probably be attributed to the number of follow-up attempts. Paxson (1995) estimated the nationwide average return rate for mail surveys to be 20%, while Harbaugh (2002) reported mail survey response rates of 40% from physicians.

## *Summary of Findings*

### *Changes to Mission*

Seventy-two percent of the CEOs responding disagreed that TennCare and Medicare funding levels had forced changes in their hospital's mission statements. Hospital's missions are long lasting, yet CEOs must determine how to best accomplish their organization's mission in an era of shrinking reimbursement.

While 59.6% of CEOs responded that TennCare and Medicare funding levels had not resulted in a change in the profit status of their facilities, the CEOs responding that there were changes in profit status as a result of changes in TennCare and Medicare funding is notable (29.1%). Changes in profit status of hospitals often result from the sale of small private hospitals to for profit hospital companies, and one CEO commented that Health Management Associates

(HMA) had recently acquired his hospital. The purchase of such hospitals by for profit companies is quite risky given the instability in TennCare and Medicare funding levels.

Forty-seven percent of the respondents indicated that TennCare/Medicare funding changes were not applicable to their decisions to join a healthcare system. When these *not applicable* responses are discounted, 30.3% of those responding indicated that the funding changes under study were factors that were a major factor in their decision to join a healthcare system. Strategic alliances resulting from the formation of healthcare systems or integrated delivery systems could represent a shift from competition to cooperation with regards to strategic management at these hospitals.

TennCare uses a managed care approach to provide healthcare for the indigent, uninsured, and uninsurable in Tennessee. Healthcare delivery systems built upon managed care models are known to emphasize preventative care and wellness. Forty-three percent of the CEOs responding indicated that changes in TennCare and Medicare funding levels had the opposite impact on their facilities. Changes in TennCare and Medicare funding levels reduced emphasis on Wellness programs at their hospitals.

#### *Changes to Goals*

Given the decreases in per enrollee funding resulting from the implementation of Tennessee's TennCare program and the reduction in Medicare funding levels resulting from the Federal Balanced Budget Act of 1997, it is not surprising to find that 96.7% of CEOs responding indicated that their organizations had adjusted profitability goals as a result. Given the turbulence in the politico-legal sector of the external environment resulting from these changes, profitability goals were adjusted, and most likely were adjusted downward.

A measure of efficiency, goals for Average Length of Stay (ALOS) were adjusted by 43.4% of those responding. Hospital executives began to monitor ALOS after the implementation of prospective payment systems (Medicare DRGs) in 1982. For various reasons, including but not limited to shifts to outpatient care and the advent of noninvasive technologies, average hospital stays have decreased since that time. Hospital CEOs strive to decrease ALOS, while maintaining quality.

Sixty-three percent of the CEOs responding indicated that changes in TennCare and Medicare funding were responsible for changes in goals for FTE/AOB (full-time equivalent employees per adjusted occupied bed). This coupled with their response concerning workforce reductions at their hospitals indicates that the funding changes under study forced hospitals to use less human resources to deliver patient care.

Subscale comparison of the questions related to goals demonstrated differences in the way for profit and not-for-profit hospital CEOs responded to these questions. The subscale mean for not-for-profit hospital CEOs (mean=15.511, std. dev.=3.057) was significantly higher ( $t=2.020$ ,  $df=57$ ,  $p=0.048$ ) than for-profit CEOs (mean=13.643, std. dev.=2.900). Various reasons may explain such a difference. For example, it could be said that CEOs of for-profit hospitals had targets that maximized stockholder value prior to the funding changes under study and the changes did not necessitate responding changes in goals. CEOs of not-for-profit hospitals might have been less likely to risk community backlash by changing these goals before the changes in TennCare and Medicare funding levels left them little choice. In effect, these changes in funding levels could have narrowed the distinction between for-profit and not-for-profit hospitals with regards to these select goals.

### *Changes to Strategies*

Without question, changes to TennCare and Medicare funding levels impacted the availability of healthcare services to Tennesseans. By a two to one margin (66.1% to 33.9%) CEOs agreed that these changes in funding had prevented their organizations from offering new services to their communities and a majority (52.2%) agreed that their organizations had eliminated existing services.

Nearly 80% of CEOs responding agreed that changes in TennCare and Medicare funding levels delayed the replacement of capital equipment. The healthcare infrastructure available to Tennesseans is aging. The clinical impact of such an aging infrastructure is unknown.

CEOs agree that changes in TennCare and Medicare funding levels resulted in a workforce reduction at their facilities. While the exact mechanisms used to achieve workforce reductions are unknown, a minority of CEOs agreed that these workforce reductions had changed the patient to nurse ratio at their facilities. These two survey items, workforce reduction and stability in patient to nurse ratios, in tandem indicate that employee lay-offs occurred among non-nursing staff, and while ratios did not change, with fewer support personnel, there may have been a change in the workload expected of nurses just the same. Citing TennCare and Medicare funding levels as impacting their abilities to recruit nurses (65%), this shift in the skill mix of hospital staff could be significant.

There was little activity regarding the purchase or sale of hospital owned physician practices as a result of the funding changes under study. CEOs did agree that they were more likely to form strategic alliances with physicians or physician groups. While the past decade brought about a flurry of activity as hospitals bought physician practices, the survey responses

may indicate that strategic alliances has become the method of choice to cement relationships between hospitals and physicians.

#### *Impact on Patient Care*

In addition to the impact on nursing staffs via workforce reductions of other employees, the questions related to offering new services and eliminating existing services give insight into the trend regarding hospital's expansion strategies. At this time, the study indicates that hospitals are using a status quo strategy (66.1% agreed that they were not offering new services to the community) or a retrenchment strategy (53.2% agreed they had eliminated existing services) with regards to new opportunities in the healthcare marketplace.

#### *Medical Staff Support*

Hospitals use a dual pyramid organizational structure. Hospital employed physicians in partnership with other physicians form the medical staff's committee structure. Cooperation and support of individual physicians and this committee structure are vital to the successful implementation of strategic initiatives. The findings indicate that 56.6% of the CEOs responding indicated their medical staffs supported strategic changes brought about as a result of changes in TennCare and Medicare funding levels. Surprisingly, 30% of the respondents neither agreed nor disagreed with the statement. This large percentage of neither agree nor disagree responses could indicate a disinterested medical staff or a medical staff that has become disillusioned by the impact of these funding levels upon both their personal incomes and their physician-patient relationships.

#### *Changes to Strategic Management Systems Evaluation*

While 49.2% of the CEOs responding indicated that their organizations Boards of Directors evaluated strategic decisions more frequently as a result of changes in the funding

levels under study, 96.6% indicated that the Boards received regular updates concerning progress towards strategic initiatives. Eighty-seven percent of the CEOs responding indicated they believed their organizations made timely changes to their strategic plans as factors in the external environment changed.

Differences were found in the subscale scores mean between not-for-profit hospitals (mean=16.07, std. dev=2.005) and for-profit hospitals (mean=14.57, std. dev.=1.697). Again these differences could be attributable to a narrowing of distinction between the management practices of for-profit and not-for-profit hospitals. It could also indicate that members of the Boards of Directors of not-for-profit hospitals are taking a more active role in the strategic management process.

#### *Changes in Strategic Management Systems*

While not addressed by a specific research question, the study was also designed to gain insight regarding specific changes to strategic management systems that may have resulted from these funding restrictions. Fifty-eight percent of the CEOs responding agreed that their organizations focused more on short-term goals rather than long term goals as a result of changes in TennCare/Medicare funding. Reduction in these funding levels can force CEOs to focus considerable efforts on short-term profitability. When asked if their organizations had changed strategic management processes (hired a strategist, involved more employees in the process, etc.), only 32.3% responded that changes had been made as a result of funding changes under study.

#### *Conclusions*

In drawing conclusions, one must be cognizant that the study was limited to the perceptions of the CEOs of 115 hospitals within the state of Tennessee listed in the database of

the American Hospital Association as of November 6, 2002, and excludes psychiatric, rehabilitation, children's, and Veterans Administrations hospitals. It is also of note that Tennessee's TennCare is a managed care system that received a federal Medicaid waiver. The conclusions of this study may not be transferable to states employing traditional Medicaid systems. The politico-legal sector of a hospital's external environment encompasses many factors. The most significant politico-legal factor for Tennessee hospitals at this time is the decline in TennCare/Medicare reimbursements. The following conclusions can be drawn concerning the turbulence in the politico-legal sector of the external environment and its impact of state and federal funding levels on the implementation of strategic plans at Tennessee hospitals.

1. While most CEOs perceived the impact of the funding levels under study on their hospital's mission to be minimal, nearly one third of the CEOs responded that their hospitals missions had changed. Missions, as reflected by mission statements, legitimize an organization's function and responsibility in society. Missions are usually enduring and form a directional<sup>1</sup> strategy for organizations. Surprisingly 30.1% of hospitals represented by the CEOs responding changed their profit/not-for-profit status as a result of the funding changes under study, a number that did not paralleled the number reporting changes in mission (less than 15%). The reason for this incongruence is not readily apparent. Rarely do hospitals revert to not-for-profit status once they are purchased by for-profit organizations. This surprising and significant shift in profit status could signal a shift toward more hospital care delivered to Tennesseans by for-profit companies.

2. Changes in TennCare/Medicare funding did impact the decision of approximately one third of those hospitals joining healthcare systems. As TennCare and Medicare reimbursements declined, profits shrank and healthcare executives believe that participation in a healthcare system allowed hospitals to become more cost effective by sharing resources, particularly administrative and information technology resources. Health systems also formalize patient referral patterns, often providing a seamless continuum of patient care services, a stable patient base for the health system and negotiating strength for health systems when competing for managed care contracts (TennCare uses managed care organizations).
3. CEOs in Tennessee hospitals adjusted goals as a result of changes in TennCare and Medicare funding levels. In particular, profitability projections were adjusted, and since the funding under study decreased, a logical conclusion is that the profitability goals were likewise adjusted downward. Hospital CEOs were forced to focus on short-term goals as a result of this decrease in funding.
4. CEOs of not-for-profit hospitals were more sensitive to changes in strategic goals than were for-profit CEOs. Now more than ever, not-for-profit hospital executives are forced to increase their focus on profitability, FTE's/AOB, Average Length of Stay. This may represent a shift in focus among executives in not-for-profit hospitals and is worthy of further investigation.
5. Given the downward shift in profitability projections, the study demonstrated that both directional and operational strategies were impacted. Without doubt directional strategies favored status quo or retrenchment and Tennesseans were

denied new services and in some instances lost existing services in their communities as a result of these funding changes. Additionally, capital equipment replacement was delayed, resulting in an aging healthcare infrastructure. While the shift in availability of services is not surprising, given the rapid changes in technology used to provide patient care, the delays in capital equipment replacement could represent a serious threat to the healthcare of Tennesseans. If this trend does not reverse, this lack of up-to-date infrastructure could necessitate that many Tennesseans could be traveling further (possibly to nearby states) to undergo needed procedures.

6. While the trend of related diversification by purchase of physician practices slowed as a result of changes in TennCare/Medicare funding levels, hospitals were more likely to seek strategic alliances with physicians or physician groups. Before managed care made significant inroads into healthcare, hospital executives obtained patient referrals by purchasing physician practices and offering a seamless continuum of care to patients. With the increased market penetration in Tennessee of managed care organizations (including those enrolling TennCare patients) patients selected services based upon the requirements of their managed care organization, not upon the recommendation of their physician. Ownership of physician practices no longer offered a competitive advantage for hospitals and health systems. This trend is likely to continue with the proposed reforms in Medicare related to prescription drug benefits. Current Medicare prescription drug proposals

strongly encourage enrollees to forgo traditional Medicare in favor of a system based upon managed care.

7. It is likely that direct patient care has suffered as a result of the decreasing levels of TennCare and Medicare funding. Most hospital CEOs indicated that they had not decreased the patient to nurse ratios for their hospitals, yet had used workforce reductions. One could conclude that hospitals reduced workforce by some combination of elimination of existing services, spin-offs of business units, or workforce reduction among non-nursing staff. With the exception of spin-offs of business units unrelated to healthcare, each of the remaining workforce reduction mechanisms impacts the community's healthcare. Elimination of existing services forces patients to look outside their local communities for their care. Workforce reductions in already "lean" non-nursing departments forces nursing staff to assume the duties of those lost by lay-offs or attrition.

#### *Recommendations for Further Study*

While this study provides a broad overview of the impact of state and federal funding levels on the implementation of strategic plans at Tennessee hospitals, the following are recommendations for further study:

1. A similar study should be conducted to determine if physicians or CEOs of physician practices took similar actions in response to the changes in TennCare and Medicare funding levels.
2. This study indicated that new services are not being offered to Tennessee's communities and that in many cases existing services have been eliminated.

Although the impact of these funding levels upon Tennessee's community health status will not be apparent for many years, a study should be undertaken to determine what services have been impacted and what areas of the community's health might likely be impacted by these changes in funding levels.

3. Children's hospitals have a very low number of Medicare patients (dialysis and end stage renal disease). A study should be completed to determine the impact of TennCare funding levels at Tennessee's children's hospitals.
4. There was a notable difference between the percentage of Tennessee hospitals that changed their profit status as a result of changes in TennCare/Medicare funding levels and the percentage reflecting changes in missions. A study should be undertaken to investigate this apparent disconnect between profit status and hospital mission.
5. This study indicated that new services were not being offered to Tennessee's communities and that in many cases existing services have been eliminated. A study should be undertaken to determine public perception regarding the impact of these changes.
6. Because the funding level for TennCare is a function of the Tennessee Legislature, a study should be developed in order to determine the level of knowledge among Tennessee Legislators regarding their understanding of the impact of funding levels upon Tennessee hospitals.

### *Recommendations to Tennessee Hospital Executives*

With both state governments and the Federal government currently facing significant budget deficits and economic contraction, it is unlikely that additional government funding will be available in the near future. Those with both voice and responsibility for the healthcare of the citizens of Tennesseans must develop strategies to compete with other state and Federal agencies for adequate funding. The following are recommendations to executives in Tennessee hospitals.

1. Healthcare providers of Tennessee must educate the citizens of Tennessee concerning the need for publicly funded healthcare (in this state TennCare). To continue to allow misconceptions to abound in the marketplace, could result in citizen pressure upon the legislature that might result in the revision of or replacement of TennCare with a system that provides fewer resources for patient care.
2. While the study suggested that hospital CEOs now focus more on short-term goals rather than long-term goals, CEOs must develop comprehensive long-term strategies to minimize the impact of shrinking government reimbursements for healthcare upon their organizations.
3. To better use the existing financial resources provided in large part by the state and Federal governments, healthcare executives should evaluate opportunities for cooperation as well as arenas for competition. While each is appropriate in a free-market system, the provision of a public good such as healthcare should afford providers considerable opportunities for cooperation.

## ENDNOTE

<sup>1</sup>While most business strategists do not consider mission, vision, and values as strategies, Ginther, Swaine and Duncan (1998) referred to mission, vision and values as directional strategies. They wrote, "Mission, vision, values and strategic goals are appropriately called directional strategies because they guide strategists when they make key organizational decisions." (p. 177, 4th edition)

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## APPENDICES

APPENDIX A

1998 State Estimates (State of Residence)—Medicaid—Per Enrollee Personal Health Care

	1991	1992	1993	1994	1995	1996	1997	1998
U.S.	\$3566	\$3387	\$3551	\$3713	\$3888	\$4153	\$4714	\$5032
Southeast Region	\$3042	\$2657	\$2828	\$2990	\$3020	\$3143	\$3939	\$4097
Alabama	\$2496	\$2468	\$2540	\$2746	\$3121	\$3401	\$4172	\$4138
Arkansas	\$3337	\$2855	\$2974	\$3127	\$3274	\$3427	\$4557	\$4323
Florida	\$3236	\$2551	\$2633	\$2895	\$3157	\$3204	\$4003	\$4280
Georgia	\$3063	\$2537	\$2719	\$2734	\$2750	\$2746	\$3387	\$3439
Kentucky	\$2746	\$2665	\$2844	\$2883	\$3005	\$3328	\$4523	\$4686
Louisiana	\$3582	\$3067	\$3874	\$4364	\$4304	\$3904	\$5056	\$5500
Mississippi	\$2032	\$1849	\$2128	\$2191	\$2548	\$2805	\$3530	\$3774
North Carolina	\$3451	\$2855	\$2949	\$3028	\$3360	\$3627	\$4768	\$4947
South Carolina	\$4017	\$3152	\$3282	\$3543	\$3714	\$3860	\$4441	\$4141
Tennessee	\$2315	\$2506	\$2404	\$2738	\$2082	\$2197	\$2474	\$2825
Virginia	\$3394	\$2767	\$2894	\$2737	\$2786	\$3258	\$3844	\$4092
West Virginia	\$3110	\$2927	\$3166	\$3122	\$3002	\$2981	\$5577	\$4463

Adapted from: United States Centers for Medicare and Medicaid Services. (n.d.). 1998 State estimates (state of residence) number of Medicaid enrollees. Retrieved November 14, 2002, from <http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/medicaid-enrollment120.asp>

APPENDIX B

1998 State Estimates (State of Residence)—Medicaid—Enrollees (Thousands)

	1991	1992	1993	1994	1995	1996	1997	1998
U.S.	25,081	29,993	32,543	34,110	35,210	35,159	32,209	31,641
Southeast Region	5,909	7,766	8,589	9,068	9,837	9,848	8,311	8,283
Alabama	371	466	520	544	539	546	494	498
Arkansas	234	321	340	340	353	363	285	322
Florida	1,039	1,538	1,745	1,727	1,735	1,766	1,520	1,466
Georgia	659	856	945	1,085	1,147	1,185	966	950
Kentucky	454	572	602	638	641	641	539	526
Louisiana	551	702	751	778	785	776	593	569
Mississippi	413	487	486	537	520	510	427	401
North Carolina	571	785	898	985	1,084	1,130	918	913
South Carolina	299	431	470	486	496	503	465	544
Tennessee	699	785	909	939	1,466	1,409	1,330	1,270
Virginia	393	515	576	643	681	623	562	540
West Virginia	227	308	347	367	389	395	213	284

Adapted from: United States Centers for Medicare and Medicaid Services. (n.d.). 1998 State estimates (state of residence) number of Medicaid enrollees. Retrieved November 14, 2002, from <http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/medicaid-enrollment120.asp>

APPENDIX C

1998 State Estimates (State of Residence)—Medicare—Per Enrollee Personal Health Care

	1991	1992	1993	1994	1995	1996	1997	1998
U.S.	\$3556	\$3387	\$3551	\$3713	\$3888	\$4153	\$4714	\$5032
Southeast Region	\$3042	\$2657	\$2828	\$2990	\$3020	\$3143	\$3939	\$4097
Alabama	\$2496	\$2468	\$2540	\$2746	\$3121	\$3401	\$4172	\$4138
Arkansas	\$3337	\$2855	\$2974	\$3127	\$3274	\$3427	\$4557	\$4323
Florida	\$3236	\$2551	\$2633	\$2895	\$3157	\$3204	\$4003	\$4280
Georgia	\$3063	\$2537	\$2719	\$2734	\$2750	\$2746	\$3387	\$3439
Kentucky	\$2746	\$2665	\$2844	\$2883	\$3005	\$3328	\$4523	\$4686
Louisiana	\$3582	\$3067	\$3874	\$4364	\$4304	\$3904	\$5056	\$5500
Mississippi	\$2032	\$1849	\$2128	\$2191	\$2548	\$2805	\$3530	\$3774
North Carolina	\$3451	\$2855	\$2949	\$3028	\$3360	\$3627	\$4768	\$4947
South Carolina	\$4017	\$3152	\$3282	\$3543	\$3714	\$3860	\$4441	\$4141
Tennessee	\$2315	\$2506	\$2404	\$2738	\$2082	\$2197	\$2474	\$2825
Virginia	\$3394	\$2767	\$2894	\$2737	\$2786	\$3258	\$3844	\$4092
West Virginia	\$3110	\$2927	\$3166	\$3122	\$3002	\$2981	\$5577	\$4463

Adapted from: United States Centers for Medicare and Medicaid Services. (n.d.) 1998 State estimates (state of residence) Medicare per enrollee personal health care. Retrieved November 14, 2002, from <http://www.cms.hhs.gov/statistics/nhe/state-estimates-residence/medicaid-per-capita10.asp>

APPENDIX D

Tennessee Hospitals Included in Study Population

<b>Hospital Name</b>	<b>City</b>
Athens Regional Medical Center	Athens
Baptist Dekalb Hospital	Smithville
Baptist Hickman Community Hospital	Centerville
Baptist Hospital of Cocke County	Newport
Baptist Hospital of East Tennessee	Knoxville
Baptist Hospital	Nashville
Baptist Memorial Hospital-Huntingdon	Huntingdon
Baptist Memorial Hospital-Lauderdale	Lauderdale
Baptist Memorial Hospital-Union City	Union City
Baptist Memorial Hospital-Tipton	Covington
Baptist Memorial Hospital	Memphis
Bedford County Medical Center	Shelbyville
Bledsoe Community Hospital	Pikeville
Blount Memorial Hospital	Maryville
Bolivar General Hospital	Bolivar
Bradley Memorial Hospital	Cleveland
Camden General Hospital	Camden
Carthage General Hospital	Carthage
Centennial Medical Center	Ashland City
Centennial Medical Center	Nashville
Claiborne County Hospital	Tazewell
Cleveland Community Hospital	Cleveland
Coffee Medical Center	Manchester
Cookeville Regional Medical Center	Cookeville
Copper Basin Medical Center	Copperhill
Crockett Hospital	Lawrenceburg
Cumberland Medical Center	Crossville
Cumberland River Hospital	Celina
Decatur County General Hospital	Parsons
Delta Medical Center	Memphis
Erlanger Health System	Chattanooga
Fentress County General Hospital	Jamestown
Fort Sanders-Loudon Medical Center	Loudon
Fort Sanders Regional Medical Center	Knoxville
Fort Sanders-Parkwest Medical Center	Knoxville
Fort Sanders-Sevier Medical Center	Sevierville
Gateway Health System	Clarksville
Gibson General Hospital	Trenton
Grandview Medical Center	Jasper
Hardin County General Hospital	Savannah

Harton Regional Medical Center	Tullahoma
Hendersonville Hospital	Hendersonville
Henry County Medical Center	Paris
Hillside Hospital	Pulaski
Horizon Medical Center	Dickson
Humboldt General Hospital	Humboldt
Indian Path Medical Center	Kingsport
Jackson-Madison County General Hospital	Jackson
Jefferson Memorial Hospital	Jefferson City
Jellico Community Hospital	Jellico
Johnson City Medical Center	Johnson City
Johnson City Specialty Hospital	Johnson City
Kindred Hospital-Chattanooga	Chattanooga
Lakeway Regional Hospital	Morristown
Laughlin Memorial Hospital	Greeneville
Lincoln County Health Facilities	Fayetteville
Livingston Regional Hospital	Livingston
Macon County General Hospital	Lafayette
Marshall Medical Center	Lewisburg
Maury Regional Medical Center	Columbia
Medical Center of Manchester	Manchester
Memorial Health Care System	Chattanooga
Methodist Healthcare-Dyersburg	Dyersburg
Methodist Healthcare	Brownsville
Methodist Healthcare	McKenzie
Methodist Healthcare	Somerville
Methodist Healthcare-Jackson	Jackson
Methodist Healthcare-Lexington	Lexington
Methodist Healthcare-McNairy	Selmer
Methodist Healthcare-Memphis	Memphis
Methodist Healthcare-Volunteer	Martin
Methodist Medical Center of Oak Ridge	Oak Ridge
Metro Nashville General Hospital	Nashville
Middle Tennessee Medical Center	Murfreesboro
Milan General Hospital	Milan
Morristown-Hamblen Hospital	Morristown
Nashville Metro Bordeaux Hospital	Nashville
North Crest Medical Center	Springfield
North Side Hospital	Johnson City
Parkridge Medical Center	Chattanooga
Perry Community Hospital	Linden
Regional Medical Center at Memphis	Memphis
Rhea Medical Center	Dayton
River Park Hospital	McMinnville
Roane Medical Center	Harriman

Saint Francis Hospital	Memphis
Scott County Hospital	Oneida
Skyline Medical Center	Nashville
Smith County Memorial Hospital	Carthage
Southern Hills Medical Center	Nashville
Southern Tennessee Medical Center	Winchester
Saint Mary's Health System	Knoxville
Saint Mary's Medical Center	La Follette
Saint Thomas Health Services	Nashville
Stones River Hospital	Woodbury
Summit Medical Center	Hermitage
Sumner Regional Medical Center	Gallatin
Sweetwater Hospital	Sweetwater
Sycamore Shoals Hospital	Elizabethton
Takoma Adventist Hospital	Greeneville
Tennessee Christian Medical Center	Madison
Three Rivers Hospital	Waverly
Trinity Hospital	Erin
Unicoi County Memorial Hospital	Erwin
University of Tennessee Bowld Hospital	Memphis
University of Tennessee Memorial Hospital	Knoxville
University Medical Center	Lebanon
Vanderbilt University Hospital	Nashville
Wayne Medical Center	Waynesboro
Wellmont Bristol Regional Medical Center	Bristol
Wellmont Hawkins County Memorial Hospital	Rogersville
Wellmont Holston Valley Medical Center	Kingsport
White County Community Hospital	Sparta
Williamson Medical Center	Franklin
Woods Memorial Hospital District	Etowah

Adapted from: American Hospital Association, Inc. *AHAData.com: Listing of Tennessee hospitals*. Retrieved November 6, 2002, from [http://www.aha.com/aha/aha\\_search.php3](http://www.aha.com/aha/aha_search.php3)

APPENDIX E

Tennessee Hospitals Excluded from Study

<b>Hospital Name</b>	<b>City</b>
Baptist Rehab-Germantown	Germantown
East Tennessee Children's Hospital	Knoxville
HealthSouth Chattanooga Hospital	Chattanooga
HealthSouth Rehab Hospital	Kingsport
HealthSouth Rehab Hospital	Memphis
James H. Quillen Veterans Administration Hospital	Mountain Home
Lakeshore Mental Health Institute	Knoxville
Lakeside Behavioral Health System	Memphis
Memphis Mental Health Institute	Memphis
Middle Tennessee Mental Health Institute	Nashville
Moccasin Bend Mental Health Institute	Chattanooga
Nashville Rehabilitation Hospital	Nashville
Pathways	Jackson
Peninsula Hospital	Louisville
Plateau Mental Health Center	Cookeville
Psychiatric Hospital at Vanderbilt	Nashville
Quillen Rehabilitation Hospital	Johnson City
Ridgeview Psychiatric Hospital & Center	Oak Ridge
Siskin Hospital for Physical Rehabilitation	Chattanooga
Saint Jude Children's Research Hospital	Memphis
Veterans Administration Tennessee Valley Healthcare System	Nashville
Vanderbilt Stallworth Rehab	Nashville
Veterans Affairs Medical Center	Memphis
Western Mental Health Institute	Bolivar
Woodridge Hospital	Johnson City

Adapted from: American Hospital Association, Inc. *AHAdata.com: Listing of Tennessee hospitals*. Retrieved November 6, 2002, from [http://www.aha.com/aha/aha\\_search.php3](http://www.aha.com/aha/aha_search.php3)

## APPENDIX F

### Significant Medicare History Impacting Hospitals

<b>Date</b>	<b>Event</b>	<b>Impact</b>
1965	Title XVIII of the Social Security Amendments signed by President Lyndon Johnson	Established Medicare as a federally funded program designed to provide health insurance to Americans age 65 or older. Provider payments were based upon reasonable costs incurred to provide care.
1972	Medicare benefits expanded	Medicare benefits were expanded to include those under the age of 65 that were eligible for Social Security Disability and those with end stage renal disease
1982	Tax Equity and Fiscal Responsibility Act signed by President Ronald Regan	Brings price controls to the Medicare system by introducing cost limits per case and year.
1983	Social Security Amendments of 1983 signed by President Ronald Regan	Introduced prospective payments for hospital care based upon 468 diagnostic-related groups of health conditions (DRGs).
1990	Omnibus Budget Reconciliation Act of 1990 signed by President George Bush	Consolidated the reimbursement of cost of capital equipment with DRG rates.
1997	Balanced Budget Act of 1997 signed by President Bill Clinton	Reduced Medicare reimbursements to healthcare providers by \$115 billion over a five-year period.
1999	Balanced Budget Refinement Act of 1999 signed by President Bill Clinton	Restored \$17 billion dollars of funding previously cut by the Balanced Budget Act of 1997

Sources: Nowicki, 2001, pp. 75-83; Shortell, Morrison and Friedman, 1990, p.3-4; Weisgrau, 2000.

## APPENDIX G

### Significant Events in Medicaid History

1965	Title XIX of the Social Security Amendments signed by President Lyndon Johnson	Established a federal and state jointly funded insurance program for those deemed medically indigent. Eligibility linked to eligibility for Federal Supplemental Security Income (SSI) or Aid to Families with Dependent Children (AFDC).
1986	Omnibus Budget Reconciliation Act of 1986 signed by President Ronald Regan	Expanded Medicaid eligibility to low-income pregnant women, children and infants regardless of eligibility for AFDC.
1997	Balanced Budget Act of 1997 signed by President Bill Clinton	Provided \$23.4 billion over a five-year period for State Children's Health Care Program, a program for children whose parents' income was too high to qualify for Medicaid.

Source: Nowicki, (2001), p. 83.

## APPENDIX H

### Significant Events in TennCare History

April, 1993	Tennessee Governor Ned McWherter presented draft plan for Medicaid revisions to General Assembly	Framework for TennCare Program established
November 18, 1993	Tennessee awarded Section 1115 Federal Medicaid Waiver	Permitted Tennessee to develop a Managed Care Plan replacing traditional Tennessee Medicaid. The program was developed via administrative regulations rather than legislative actions.
January 1, 1994	TennCare Program Initiated	Tennessee Medicaid program discontinued
July 1, 2002	Effective Date of TennCare reforms of 2002	Reverification process began for 577,000 TennCare recipients. Recipients required to schedule appointments with the Department of Human Services as well as provide personal financial information
December 18, 2002	Preliminary Ruling in Rosen Case	Court ruled that constitutional rights of those removed from TennCare program were violated in the reverification process, 200,000 Tennesseans ordered to be reinstated to TennCare Program
January 12, 2002	Emergency stay issued in Rosen Case	Appellate Court ruled that Tennessee needed not restore healthcare benefits under the TennCare Program to those in question.
January 13, 2002	Permanent stay issued in Rosen Case	Appellate Court ruled that Emergency Stay would become permanent until such time as Appellate Court issued ruling in case.

Sources: (Current Case-Rosen Case; Lewis & Cheek, December 20, 2002; Lewis, January 3, 2003; Lewis, January 14, 2003)

## APPENDIX I

### Letter of Permission



**East Tennessee State University  
College of Business**

Graduate Studies in Business • Box 70699 • Johnson City, Tennessee 37614-1710 • (423) 439-5314

April 2, 2002

To Whom It May Concern:

I have spoken with Dr. Tom Zimmerer, Dr. B. Wayne Rockmore, and Dr. Phil Miller who developed a survey instrument used to assess the strategic and operational effectiveness of Tennessee hospitals. According to our conversations, Randy Byington is authorized to use this survey in its present or modified form in making a current assessment of hospitals in Tennessee. He is also authorized to use the data previously collected by the developers in order to make a baseline comparison. The developers only ask that he properly reference them and their previously generated research in any publications that may result.

Please contact me if I can provide any additional information.

Sincerely,

A handwritten signature in cursive script that reads "Ronald F. Green".

Ronald F. Green, Ph. D.  
Associate Dean and Director of Graduate Studies in Business

APPENDIX J

Survey of Tennessee Hospital Executives

**Directions: Consider the impact of TennCare and Medicare funding on your organization's strategic management system and circle the most appropriate response.**

**Strategy Formulation: Mission**

1. TennCare/Medicare funding changes forced changes to our hospital's mission statement.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
2. TennCare/Medicare funding changes resulted in a change to my hospital's profit/not for profit status.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
3. TennCare/Medicare funding changes were a major factor in our decision to join a healthcare system.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
4. My hospital's emphasis on Wellness Programs has decreased because of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable

**Strategies:**

5. TennCare/Medicare funding changes prevented our hospital from offering new services to our community.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
6. As a result of TennCare/Medicare funding changes our hospital eliminated existing services to our community.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
7. My hospital is more likely to seek strategic business alliances with physicians or physician groups as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
8. My hospital has <b>increased</b> the number of owned physician practices as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
9. My hospital has <b>reduced</b> the number of owned physician practices as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
10. My hospital has sold or spun-off business units as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
11. My hospital joined or increased the support of a Group Purchasing Organization as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
12. TennCare/Medicare funding changes resulted in a workforce reduction at my hospital.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
13. My hospital delayed the replacement of capital equipment as a result of change in TennCare/Medicare funding.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
14. My hospital changed its strategic management processes (hired a strategist, involved more employees in the process, etc.) as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable

**Goals**

15. My hospital has adjusted its profitability projections as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
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16. My hospital has adjusted its targets for Average Length of Stay as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
17. My hospital has adjusted its goal for FTE's per Adjusted Occupied Bed as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
18. My hospital has adjusted focus on short-term rather than long-term goals as a result of TennCare/Medicare funding.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable

**Strategy Implementation:**

19. My hospital changed its organizational structure as a result of changes in TennCare/Medicare funding.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
20. My hospital increased marketing efforts as a result of changes in TennCare/Medicare funding.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
21. TennCare/Medicare funding changes increase the difficulty recruiting nursing staff for my hospital relative to other competitors.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
22. The patient to nurse ratio at my hospital increased as a result of TennCare/Medicare funding changes.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
23. The Medical Staff at my hospital supports our hospital's change efforts brought about by changes in TennCare/Medicare funding.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable

**Strategy Evaluation:**

24. Strategic decisions are evaluated more frequently by our Board of Directors as a result of changes in TennCare/Medicare funding.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
25. My hospital makes timely changes to our strategic plan based upon significant changes in the external environment.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
26. The Hospital's Board of Directors receives regular updates concerning progress on strategic initiatives.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
27. Joint Commission evaluates our progress toward strategy implementation in light of our strategic plan.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable

**Additional comments:**

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**Thank you for your time.**

Please check here if you would like a copy of the Executive Summary of this survey \_\_\_\_\_

Code \_\_\_\_\_

APPENDIX K

Survey Assessment Tool

			Is this Question:	
<b>Please answer the following questions regarding each item on the Survey of Healthcare Executives.</b>			<b>Clear and unambiguous?</b>	<b>Relevant to this Study?</b>
<b>Write recommended changes to question number:</b>			<b>Yes or No</b>	<b>Yes or No</b>
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
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19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
<b>What Questions or Issues should be added to this Survey?</b>				
Add:				
Add:				
Add:				
<b>How many minutes did it take you to complete this survey?</b>				

## APPENDIX L

### Initial Mailing Letter

Date

CEO

Hospital Name

Hospital Address

City, State Zip

There is little doubt that changes to Tennessee's TennCare program and the impact of the Federal Balanced Budget Act of 1997 resulted in significant changes to strategic management plans at Tennessee hospitals. Numerous studies and articles in the popular media detail (in terms of dollars) the budget shortfalls that hospitals face, however no one has articulated how these budget shortfalls result in changes to the local healthcare delivery system.

As the CEO of a Tennessee hospital, you are asked to give your opinions on the strategic changes that were made by your hospital as a result of changes in TennCare and Medicare funding levels. In order to obtain a complete understanding of the strategic changes that were implemented, it is important that each questionnaire be completed and returned.

You can be assured of complete confidentiality. The questionnaire has been numerically coded for mailing purposes only. This number has been added so that I may remove your name from the mailing list when you respond and follow up with CEO's who do not respond. Your name will never be placed on the questionnaire.

An executive summary of this study will be mailed to you if you choose by checking the appropriate box on the questionnaire.

I would be happy to answer any questions you might have regarding this study. You may contact me by phone at (423) 323-9535 or by email at [Byington@Chartertn.net](mailto:Byington@Chartertn.net).

Thank you for your assistance.

Randy L. Byington  
Doctoral Fellow  
East Tennessee State University

## APPENDIX M

### Follow-up Letter

Date

CEO

Hospital Name

Hospital Address

City, State ZIP

Last week a questionnaire soliciting your opinions regarding how changes in TennCare and Medicare funding levels impacted the strategic management plans of your hospital.

If you have already returned your questionnaire, please accept my thanks for your promptness. If you haven't, please do so today. In order to obtain a complete understanding of these changes at Tennessee hospitals, your input is needed.

If by some chance you did not receive the questionnaire, or it has been misplaced, please contact me as quickly as possible by calling me at (423) 323-9535 or by email at [Byington@Chartertn.net](mailto:Byington@Chartertn.net).

Thanks again for your input.

Randy L. Byington  
Doctoral Fellow  
East Tennessee State University

APPENDIX N

Second Follow-up Letter

Date

CEO

Hospital Name

Hospital Address

City, State ZIP

I am contacting you regarding the current study of changes made to strategic management plans at Tennessee Hospitals resulting from changes in TennCare and Medicare funding levels. I have not received your questionnaire.

In order to get a thorough understanding of this issue, it is important that each hospital's CEO take time to give their input. While many CEO's have responded, past experiences show that those who do not return questionnaires may have significantly different opinions from those who have already responded.

Because your opinions are important to the results of this study, I urge you to complete this questionnaire and return it as quickly as possible. Your response will be kept confidential.

By completing and returning the enclosed questionnaire, you will contribute to the success of this important study. I would be happy to answer any questions you might have regarding this study. You may contact me by phone at (423) 323-9535 or by email at [Byington@Chartertn.net](mailto:Byington@Chartertn.net)

Thank you for your participation.

Sincerely,

Randy L. Byington

Doctoral Fellow

East Tennessee State University

## APPENDIX O

### Matrix of Relationship of Survey Questions to Research Questions

#### Strategy Formulation: Mission

Survey Question	Research Question	Rationale
1. TennCare/Medicare funding changes forced changes to our hospital's mission statement.	1	A straightforward relationship to research question.
2. TennCare/Medicare funding changes resulted in a change to my hospital's profit/not for profit status.	1	A change in profit status results in a corresponding change to mission.
3. TennCare/Medicare funding changes were a major factor in our decision to join a healthcare system.	1	When joining a healthcare system, hospital's missions are often replaced by the mission of the healthcare system, if not they are modified to align with the mission of the system
4. My hospital's emphasis on Wellness Programs has decreased because of TennCare/Medicare funding changes.	1	This variable reflects a change in emphasis from promoting wellness to treatment of illness, a change in mission.

#### Strategies:

5. TennCare/Medicare funding changes prevented our hospital from offering new services to our community.	3,4	Market expansion strategy impacting availability of care to patients in the hospitals local service area.
6. As a result of TennCare/Medicare funding changes our hospital eliminated existing services to our community.	3,4	Retrenchment strategy impacting availability of care to patients in the hospitals local service area.
7. My hospital is more likely to seek strategic business alliances with physicians or physician groups as a result of TennCare/Medicare funding changes.	3	An emerging method of vertical integration strategy, along or based upon a continuum of care.
8. My hospital has <b>increased</b> the number of owned physician practices as a result of TennCare/Medicare funding changes.	3	A vertical integration expansion strategy along or based upon a continuum of care.
9. My hospital has <b>reduced</b> the number of owned physician practices as a result of TennCare/Medicare funding changes.	3	A retrenchment strategy along or based upon a continuum of care.
10. My hospital has sold or spun-off business units as a result of TennCare/Medicare funding changes.	3	A retrenchment strategy
11. My hospital joined or increased the support of a Group Purchasing Organization as a result of TennCare/Medicare funding changes.	3,4	A cost reduction strategy based upon medical or pharmaceutical supply cost reduction or supply chain management changes. Can result in changes to patient care protocols.
12. TennCare/Medicare funding changes resulted in a workforce reduction at my hospital.	3,4	A personnel based cost reduction strategy.
13. My hospital delayed the replacement of capital equipment as a result of change in TennCare/Medicare funding.	3,4	A cost reduction strategy that can impact patient care.
14. My hospital changed its strategic management processes (hired a strategist, involved more employees in the process, etc.) as a result of TennCare/Medicare funding changes.	3	A process change strategy impacting how future strategies are developed and evaluated.

**Goals**

15. My hospital has adjusted its profitability projections as a result of TennCare/Medicare funding changes.	2	A financial viability goal.
16. My hospital has adjusted its targets for Average Length of Stay as a result of TennCare/Medicare funding changes.	2	A measure of clinical effectiveness
17. My hospital has adjusted its goal for FTE's per Adjusted Occupied Bed as a result of TennCare/Medicare funding changes.	2,4	A measure of effective use of human resources. Can impact patient care.
18. My hospital has adjusted focus on short-term rather than long-term goals as a result of TennCare/Medicare funding.	2	Determines the priorities and balance of short range and long-range priorities.

**Strategy Implementation:**

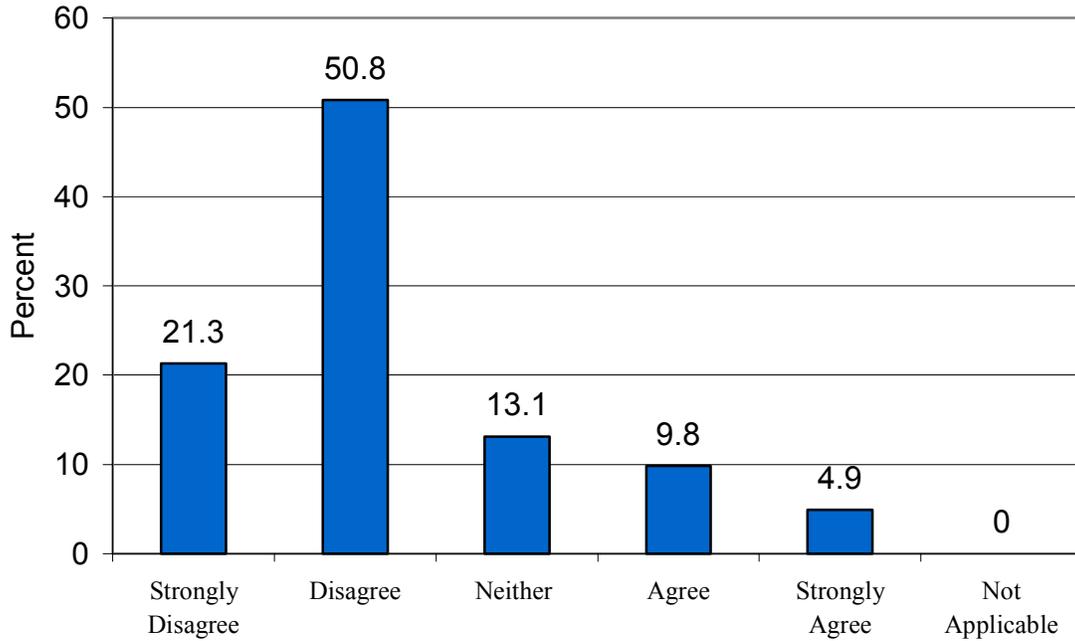
19. My hospital changed its organizational structure as a result of changes in TennCare/Medicare funding.	3	Adaptive strategy used in an effort to increase operating efficiency.
20. My hospital increased marketing efforts as a result of changes in TennCare/Medicare funding.	3	Indicative of level of emphasis on expansionary strategies.
21. TennCare/Medicare funding changes increased the difficulty recruiting nursing staff for my hospital relative to other competitors.	4	Direct indicator of ability to provide quality or quantity of patient care.
22. The patient to nurse ratio at my hospital increased as a result of TennCare/Medicare funding changes.	4	Direct indicator of ability to provide quality or quantity of patient care.
23. The Medical Staff at my hospital supports change efforts brought about by changes in TennCare/Medicare funding.	5	Straightforward relationship to research question. Physician involvement is key to strategy implementation.

**Strategy Evaluation:**

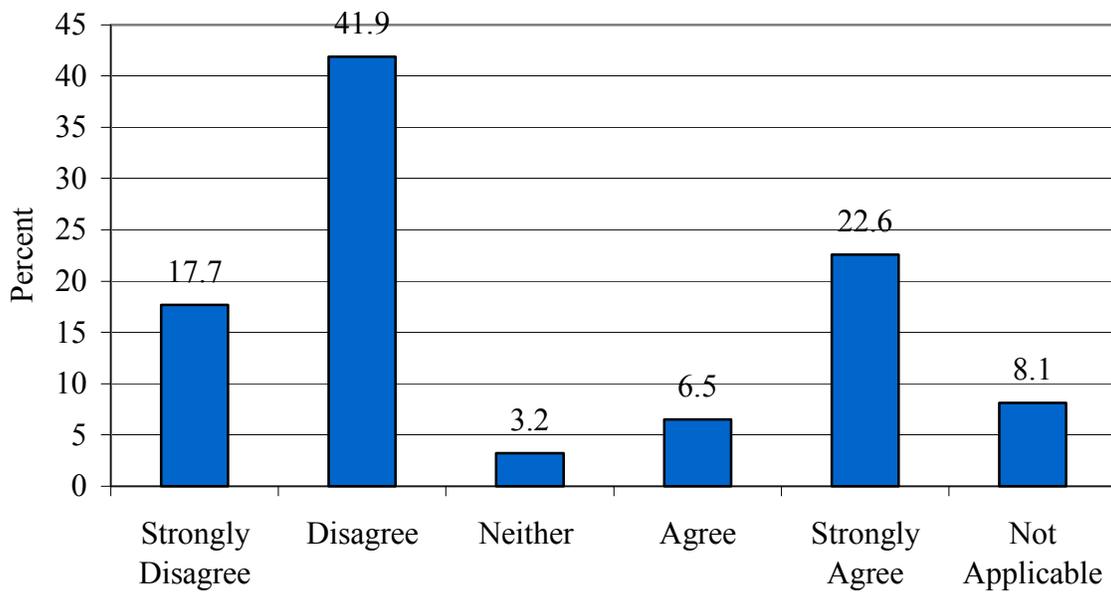
24. Strategic decisions are evaluated more frequently by our Board of Directors as a result of changes in TennCare/Medicare funding.	6	Indicator of level of importance strategic decisions hold in the organization.
25. My hospital makes monthly changes to our strategic plan based upon significant changes in the external environment.	6	Indicator of presence of a yearly strategic plan or an ongoing strategic management process within the organization.
26. The Hospital's Board of Directors receives regular updates concerning progress on strategic initiatives.	6	Indicator of level of importance Board of Directors places upon strategic management.
27. Joint Commission evaluates our progress toward strategy implementation in light of our strategic plan.	6	Indicator of level of importance accrediting agency places upon strategic management.

APPENDIX P  
Survey Question Histograms

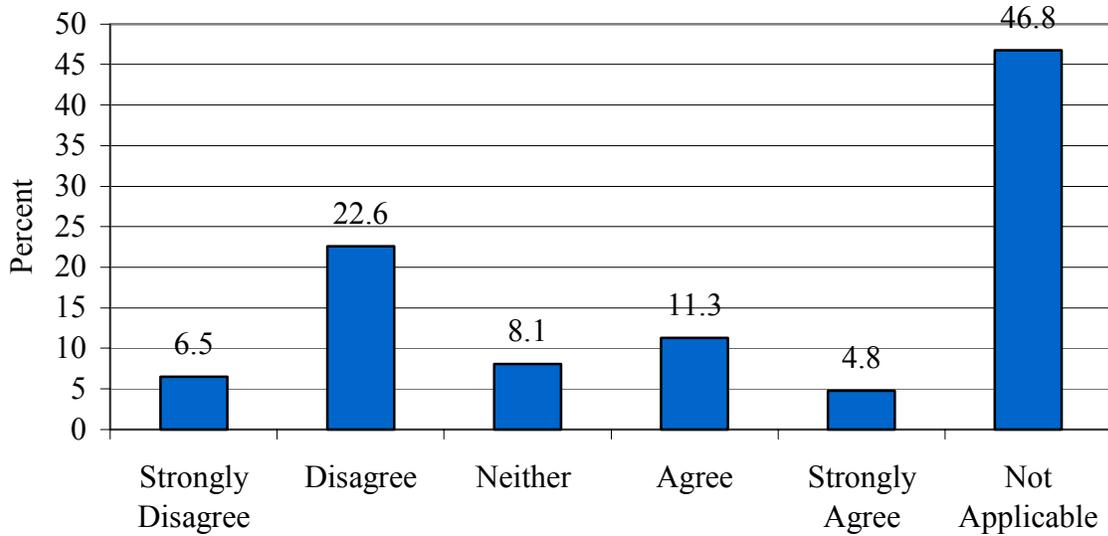
Question 1: TennCare/Medicare Funding changes forced changes to our hospital's mission statement



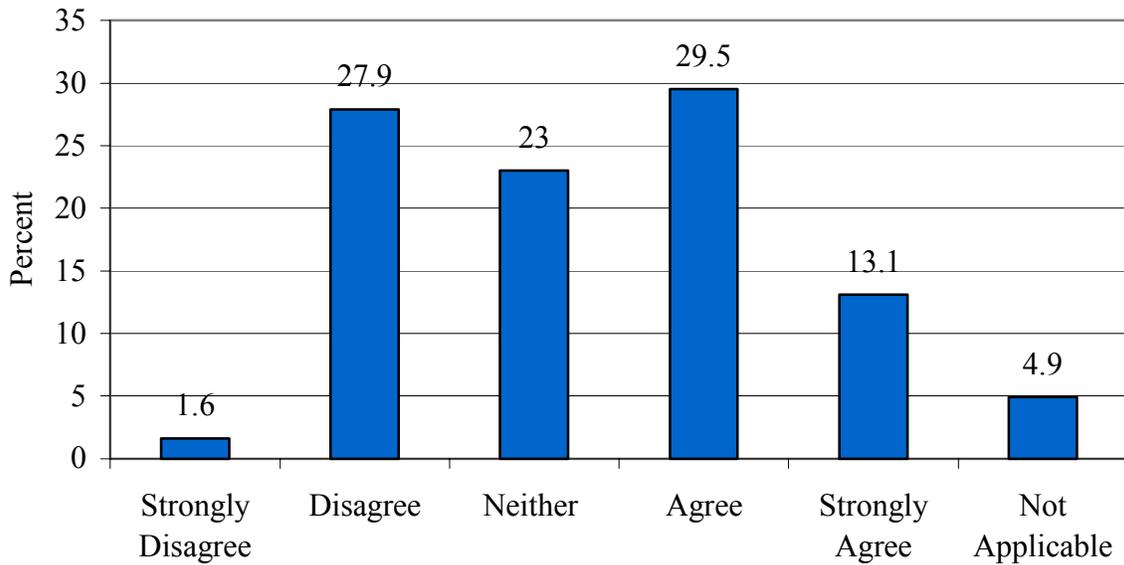
Question 2: TennCare/Medicare funding changes resulted in a change to my hospital's profit/not for profit status.



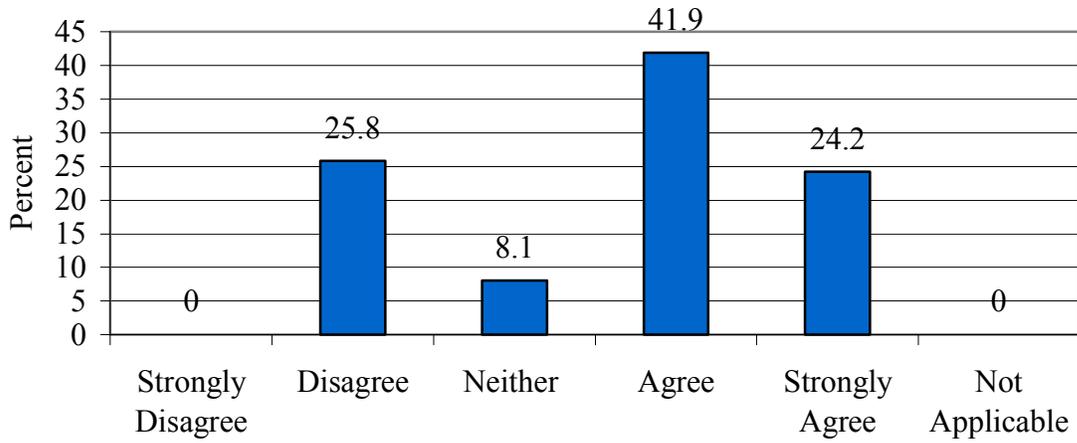
Question 3: TennCare/Medicare funding changes were a major factor in our decision to join a healthcare system.



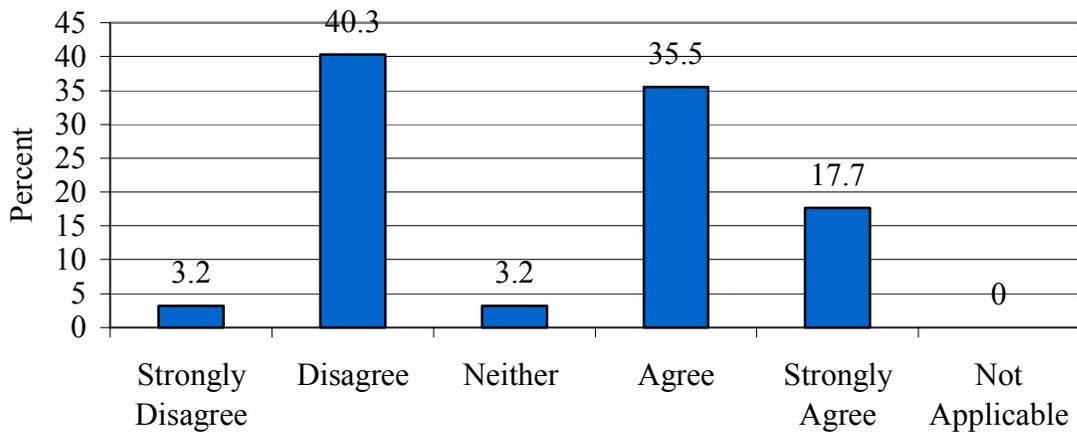
Question 4: My Hospital's emphasis on Wellness Programs has decreased because of TennCare/Medicare funding.



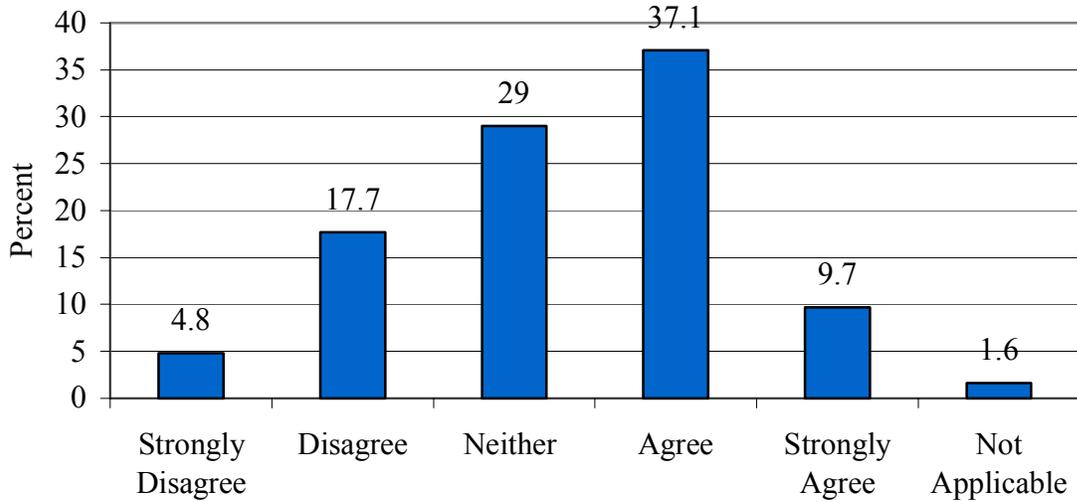
Question 5: TennCare/Medicare funding changes prevented our hospital from offering new services to our community.



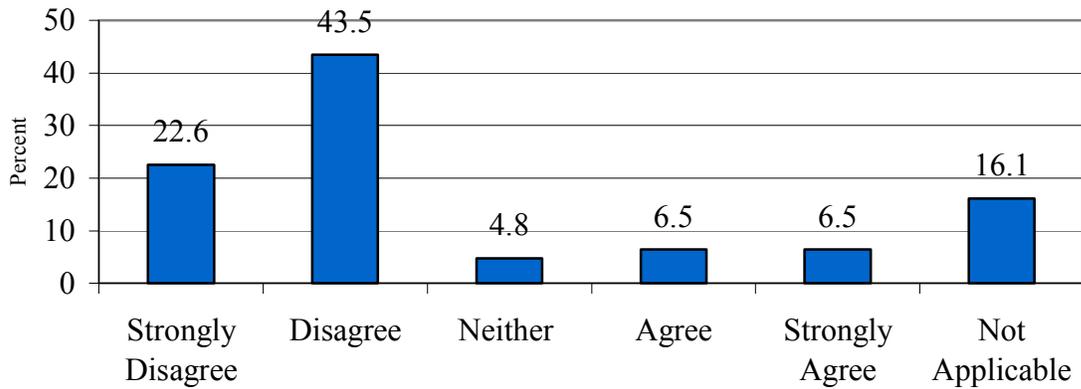
Question 6: As a result of TennCare/Medicare funding changes our hospital eliminated existing service to our community.



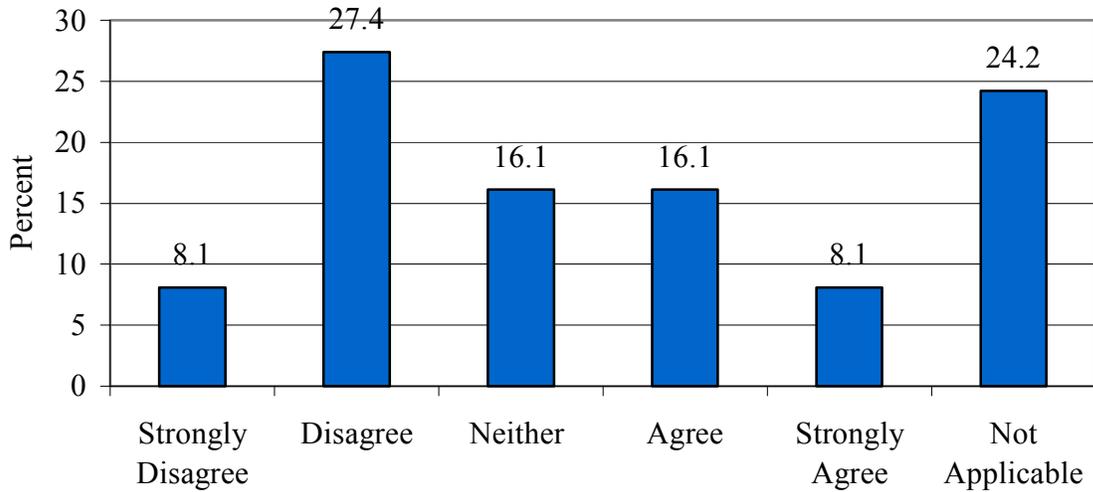
Question 7: My hospital is more likely to seek strategic business alliances with physicians or physician groups as a result of TennCare/Medicare funding.



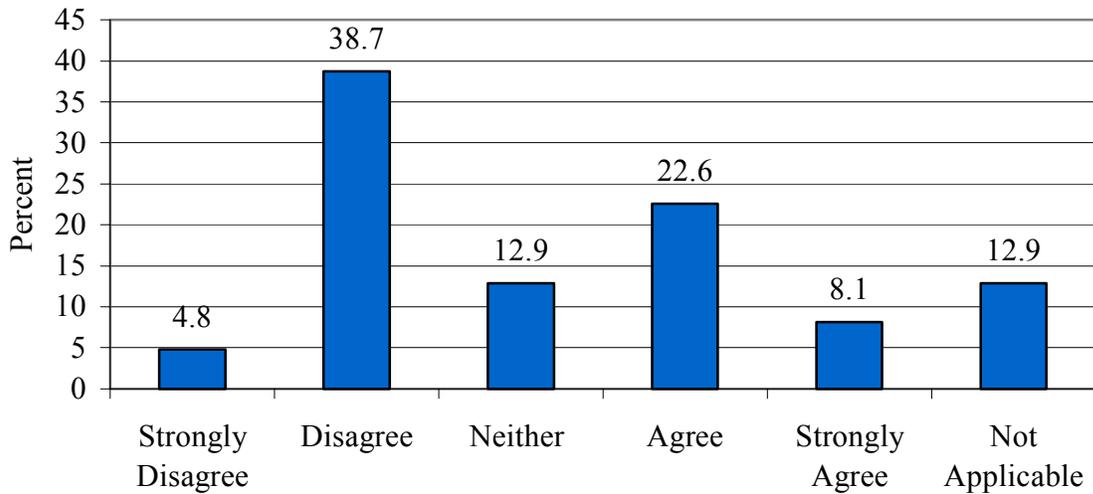
Question 8: My hospital has increased the number of owned physician practices as a result of TennCare/Medicare funding changes.



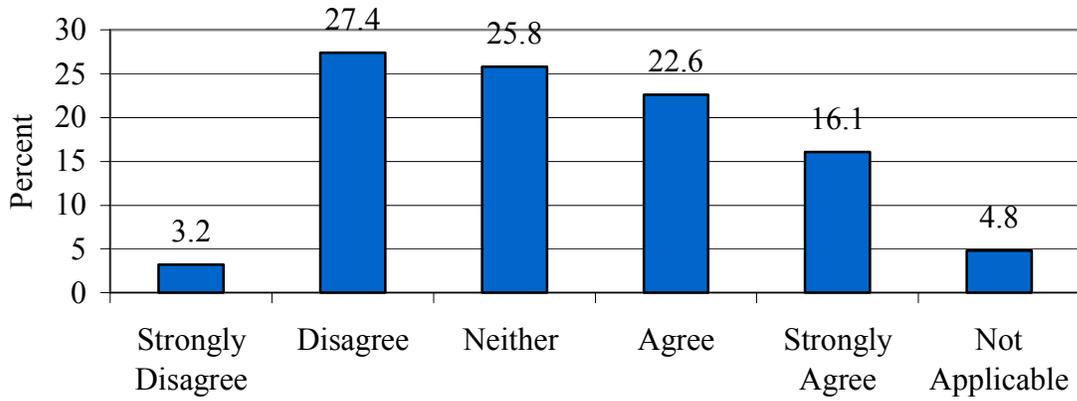
Question 9: My hospital has reduced the number of owned physician practices as a result of TennCare/Medicare funding changes.



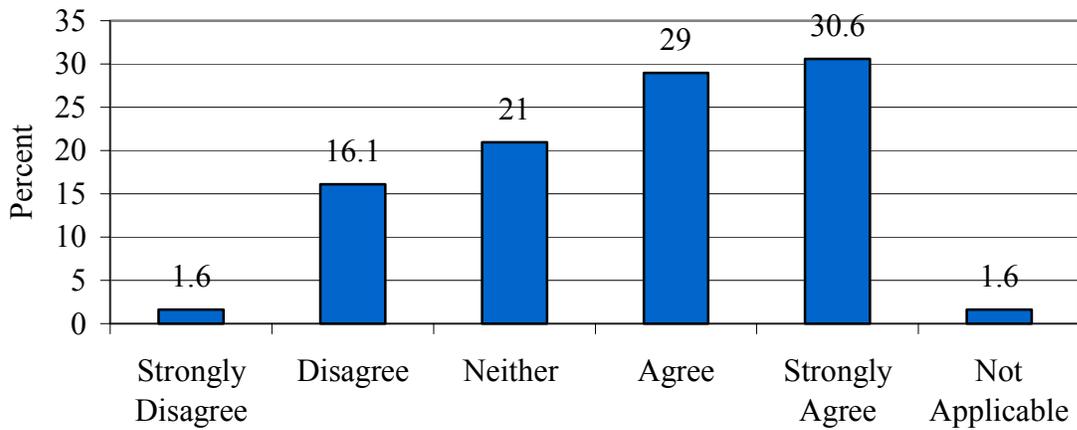
Question 10: My hospital has sold or spun-off business units as a result of TennCare/Medicare funding changes.



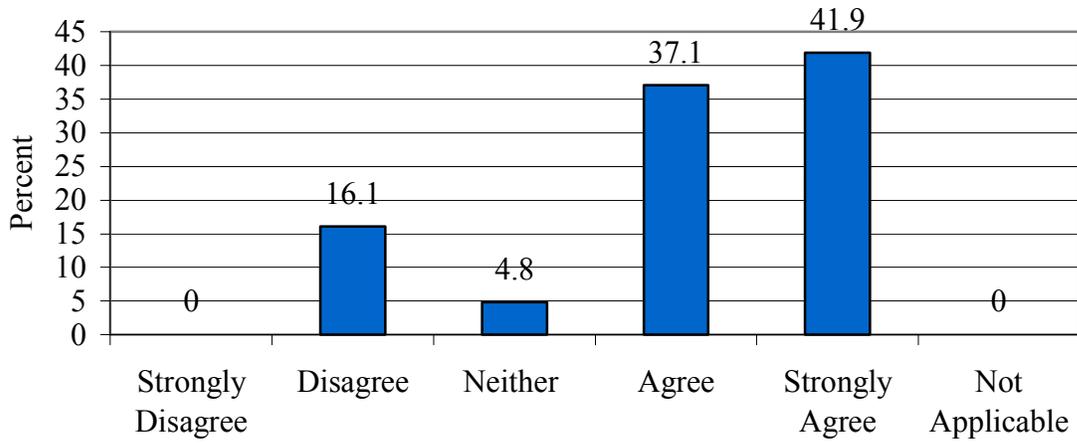
Question 11: My hospital joined or increased support of Group Purchasing Organizations as a result of TennCare/Medicare funding changes.



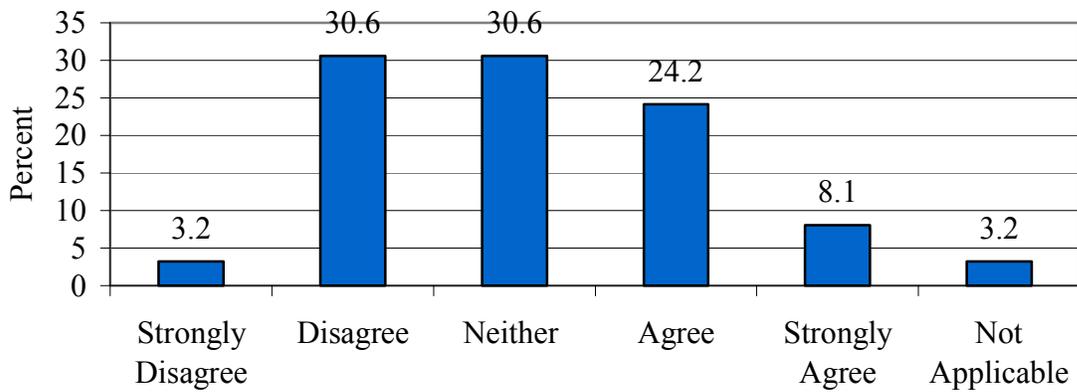
Question 12: TennCare/Medicare funding changes resulted in a workforce reduction at my hospital.



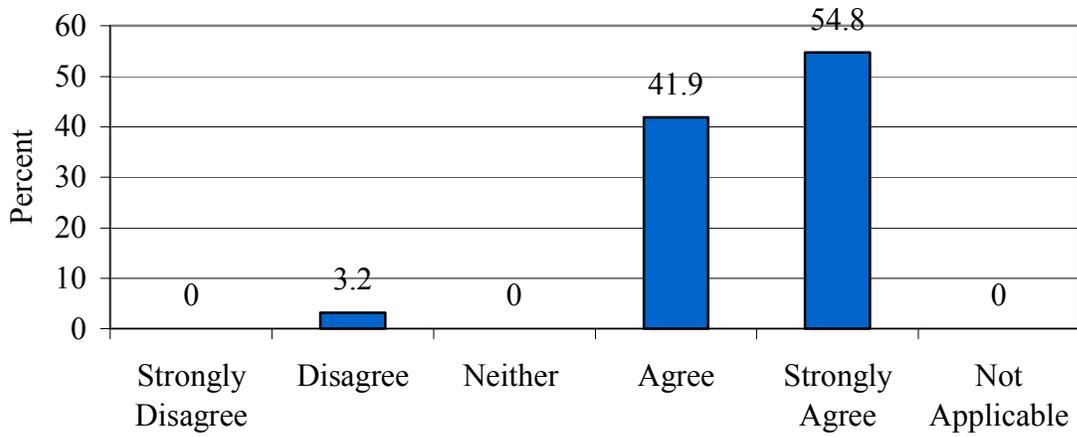
Question 13: My hospital delayed the replacement of capital equipment as a result of changes in TennCare/Medicare funding.



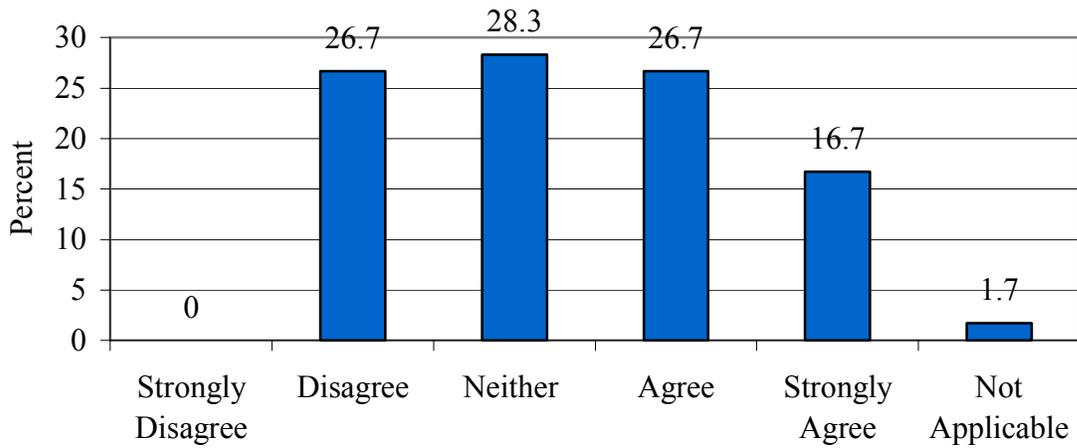
Question 14: My hospital changed its strategic management processes (hired a strategist, involved more employees in the process, etc.) as a result of TennCare/Medicare funding changes.



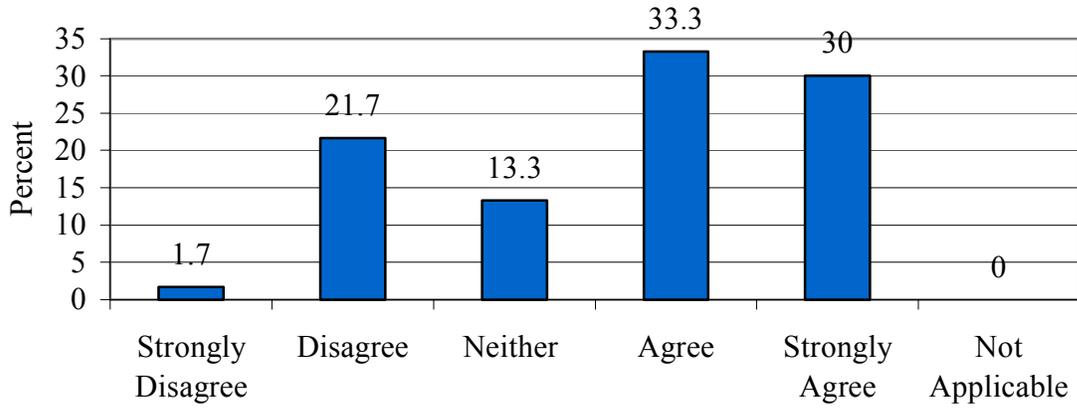
Question 15: My hospital has adjusted its profitability projections as a result of TennCare/Medicare funding changes.



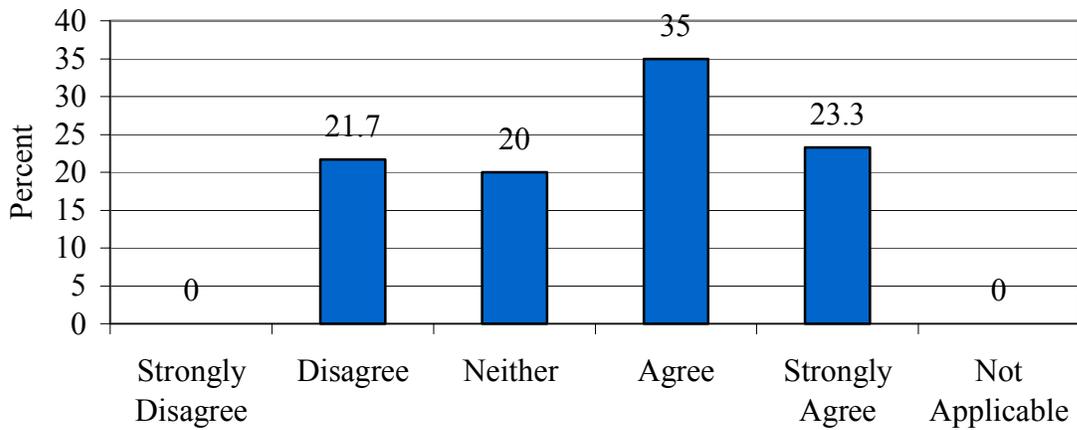
Question 16: My hospital has adjusted its targets for Average Length of Stay as a result of TennCare/Medicare funding changes.



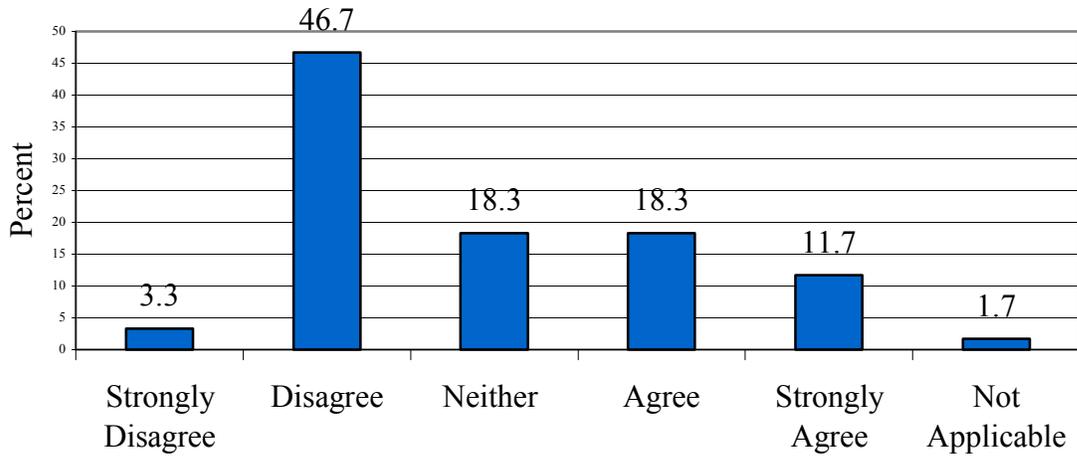
Question 17: My hospital has adjusted its goal for FTE's per Adjusted Occupied Bed as a result of TennCare/Medicare funding changes.



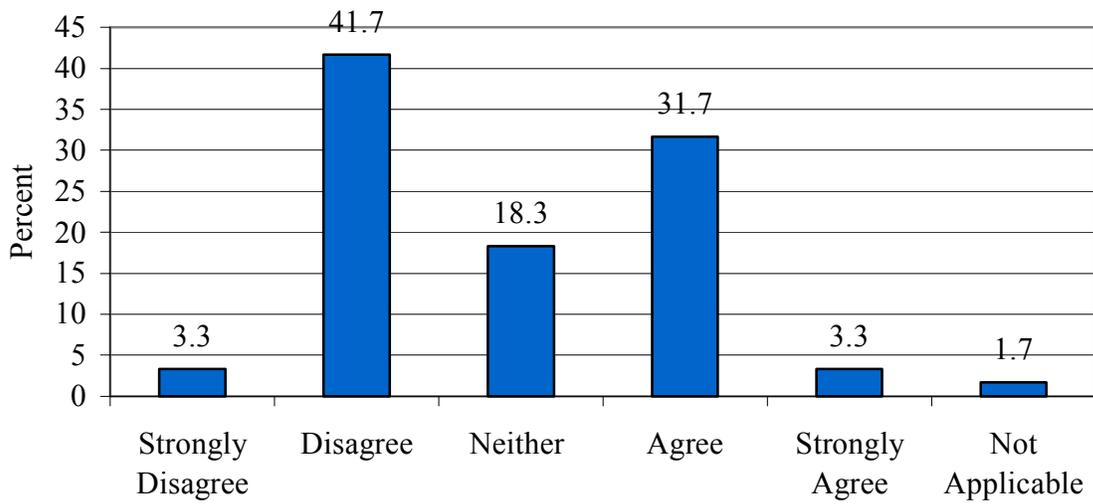
Question 18: My hospital has adjusted its focus on short-term rather than long-term goals as a result of TennCare/Medicare funding.



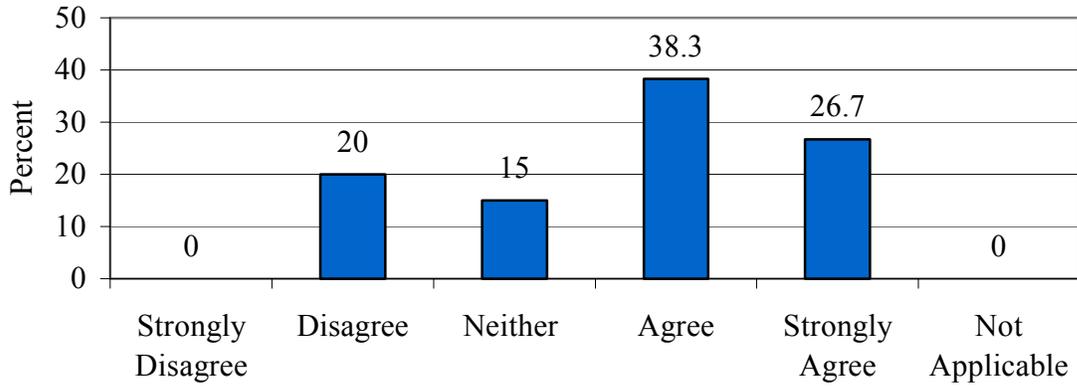
Question 19: My hospital changed its organizational structure as a result of changes in TennCare/Medicare funding.



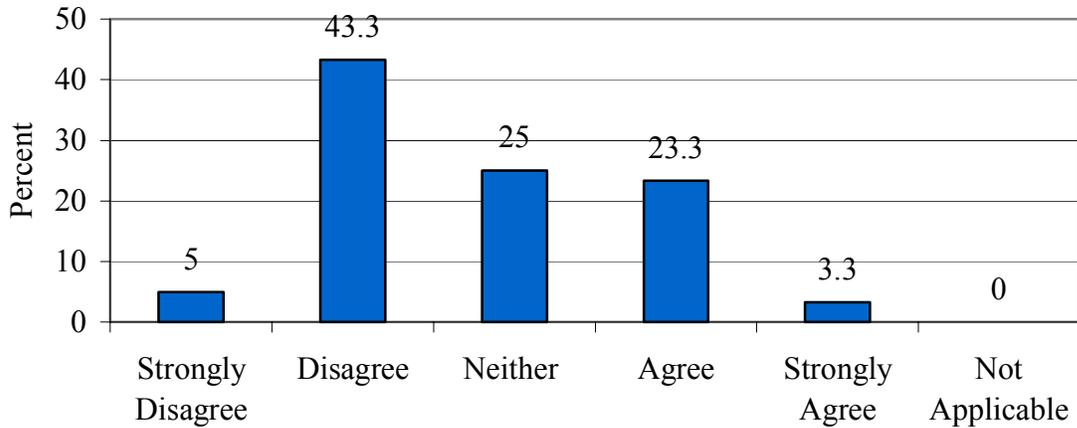
Question 20: My hospital increased its marketing efforts as a result of changes in TennCare/Medicare funding.



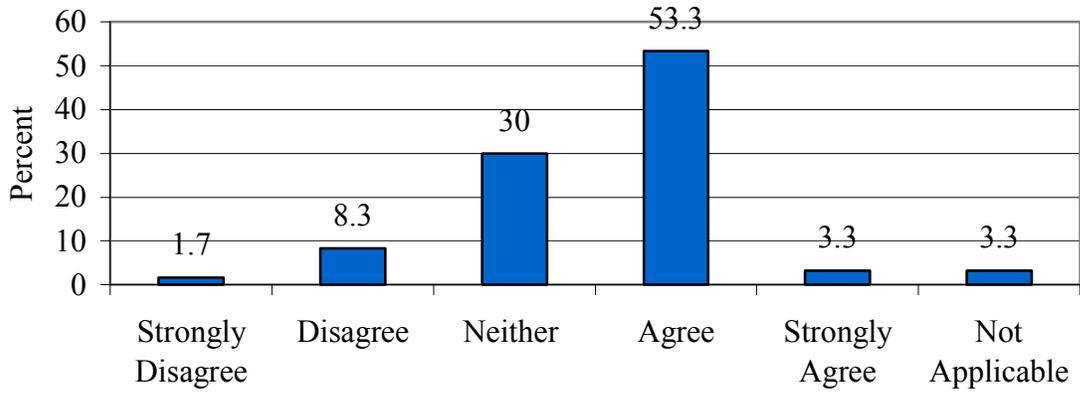
Question 21: TennCare/Medicare funding changes increase the difficulty recruiting nursing staff for my hospital relative to other competitors.



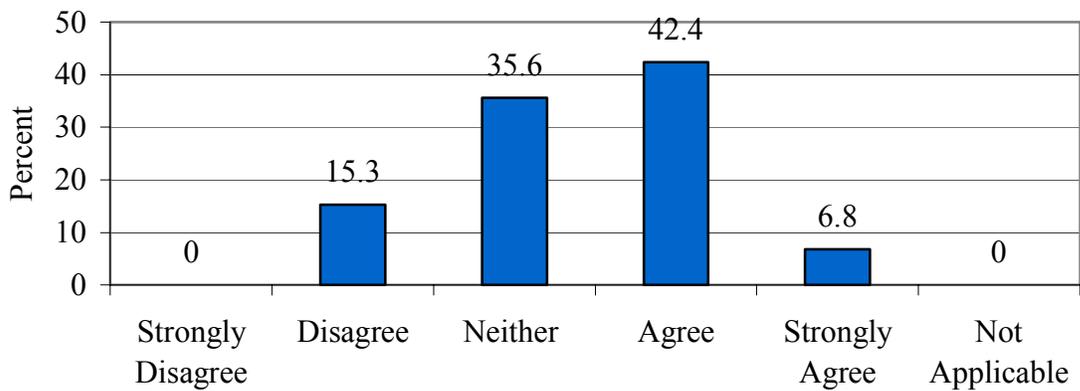
Question 22: The patient to nurse ratio at my hospital has increased as a result of TennCare/Medicare funding changes.



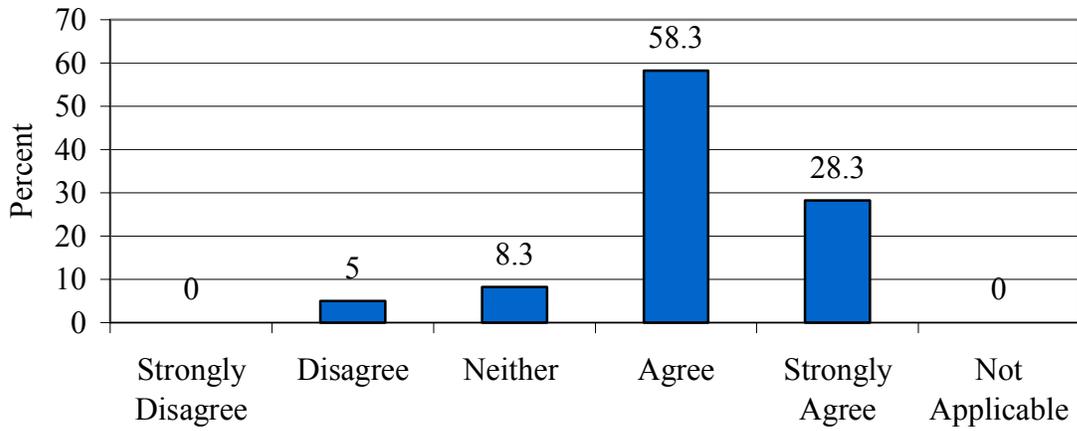
Question 23: The Medical Staff at my hospital supports our hospital's change efforts brought about by changes in TennCare/Medicare funding.



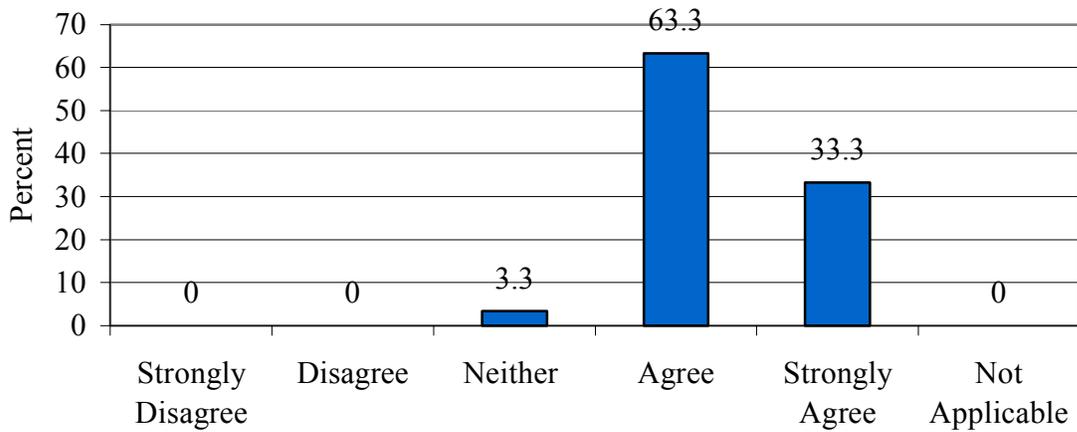
Question 24: Strategic decisions are evaluated more frequently by our Board of Directors as a result of changes in TennCare/Medicare funding.



Question 25: My hospital makes timely changes to our strategic plan based upon significant changes in the external environment.



Question 26: The hospital's Board of Directors receives regular updates concerning progress on strategic initiatives.



## APPENDIX Q

### Comments

“As a Rural Hospital, we have always received lower reimbursement than our urban counterparts.”

“[Hospital Name] is a ‘new’ acquisition by HMA. Most changes are a result of that, not TennCare.”

“The TNCare MCOs must be forced to pay what they owe providers.”

“Days in A/R [Accounts Receivable] have increased as a result of lower funding.”

“The reduction in Medicare and TennCare funding has made our hospitals existence questionable!”

“Combining these two programs into the same questions makes answering difficult. Medicare is such a large portion of our business and TennCare has never paid much, so they are really like two separate programs. TennCare has not made us do many things but it has influenced things.”

## VITA

### RANDY LEE BYINGTON

- Personal Data: Date of Birth: May 10, 1956  
Place of Birth: Kingsport, Tennessee  
Marital Status: Married
- Education: Public Schools, Nickelsville, Virginia  
University of Virginia's College at Wise (formerly Clinch Valley College of the University of Virginia), Wise, Virginia;  
Medical Technology, B.S., 1978  
East Tennessee State University, Johnson City, Tennessee;  
Business Administration, M.B.A., 1989  
East Tennessee State University, Johnson City, Tennessee;  
Education, Ed.D., 2003
- Professional Experience: Medical Technologist, Holston Valley Hospital, Kingsport, Tennessee, 1978-1986  
Laboratory Business Manager, Holston Valley Hospital, Kingsport, Tennessee, 1986-1989  
Senior Quality Management Consultant, Holston Valley Hospital, Kingsport, Tennessee, 1989-1990  
Purchasing Systems Coordinator, Holston Valley Health Care, Kingsport, Tennessee, 1991-1996  
Materials Manager, Wellmont Bristol Regional Medical Center, Bristol, Tennessee, 1996-2000  
Assistant Director of Materials Management, Wellmont Health System, Kingsport, Tennessee, 2000-2001  
Doctoral Fellow, East Tennessee State University, College of Education-Office of Student Life and Leadership, 2001-2003  
Adjunct Professor, East Tennessee State University, Johnson City, Tennessee; Virginia Intermont College, Bristol, Virginia; and Northeast State Community College, Blountville, Tennessee, Present

Publications: Byington, R., & Justice, A. (February 8, 1993). "Work Redesign: Getting at the heart of quality patient care." MT Today. pp. 8-9.

Honors and

Awards: Kappa Delta Phi  
East Tennessee State University.

SACS Scholar

Southern Association of Colleges and Schools, Commission on Colleges.