# The Impact Of Federal And State Funding Levels On Strategic Decisions And How Those Decisions Affect Patient Care

R Byington, K Keene, D Masini

#### Citation

R Byington, K Keene, D Masini. *The Impact Of Federal And State Funding Levels On Strategic Decisions And How Those Decisions Affect Patient Care*. The Internet Journal of Healthcare Administration. 2006 Volume 4 Number 2.

#### Abstract

The impact of Federal and State funding levels on strategic decisions and how those decisions affect patient care

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 these hospitals. Specifically this study was also designed to gain insight into strategic choices and their impact upon patient care.

Data were collected from the Chief Executive Officers (CEOs) of Tennessee's acute care hospitals with fifty five percent participating in the study. The results of the data analysis gave insight into how reductions in TennCare and Medicare funding levels impacted the strategies employed by Tennessee hospital's CEOs, and potential impact of these choices on patient care.

# INTRODUCTION

As hospitals and health systems develop strategies for survival, effective change becomes a focal point. 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. More than 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, 1993, 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, healthcare 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 (2000) 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, 2000). 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 governmentfunded 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 governmentfunded 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 fell from 65% of the national average in 1991 to 57% of the national average in 1998. Additionally, Tennessee's funding per covered life fell from 76% of the regional average to 69% during the same period (United States Centers for Medicare and Medicaid Services, n.d.). The Centers for Medicare and Medicaid Services reported that there were1,270,000 Tennesseans dependent upon TennCare for health insurance coverage, 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 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. 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, 1998, 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.

# PURPOSE OF THE STUDY

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 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? Specifically in the perception of hospital administrators, to what extent did hospitals make changes to direct patient care as a result of changes in TennCare and Medicare funding?

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 how these choices resulted in changes to direct patient care.

# METHODOLOGY

A quantitative approach to this research was taken. The data required for this study could best be 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 should find providing data using a survey instrument much less demanding upon their time. Third, questionnaires are also standardized, highly structured and allow for confidentiality (Gall, Borg, & Gall, 1996, p. 289-290).

# DATA COLLECTION INSTRUMENT AND ITS VALIDITY

As a result of information gleaned from a literature review, a questionnaire, Survey of Tennessee Hospital Executives, was developed using the basic stages of strategic management systems as its foundation.

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 reviewed 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 to 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. This sample consisted of four Chief Executive Officers working in Tennessee hospitals that volunteered to participate in the development study.

# POPULATION

Within hospitals, those most responsible for the development and implementation of their strategic plans are the Chief Executive Officers. The study was limited to those executives within Tennessee hospitals. While there were 140 Tennessee hospitals listed in the database of the American Hospital Association, only 115 hospitals 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. 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 CEOs and

hospital addresses were obtained from the Hospital Blue Book (2001) and The AHA Guide 2001-2002 (2001).

# ANALYSIS OF THE DATA RESPONDENTS

Using a process modeled after Dillman (1978), data was collected. The initial survey mailing and follow-up resulted in 40 responses or 35% of the targeted population. 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 of 115 or 54.8% of the targeted population of Chief Executive Officers of Tennessee Hospitals.

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-profits were slightly underrepresented in the respondents. 27% of the hospitals in the population were listed as for-profit in the AHA Guide 2001-2002 Edition while only 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 from 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).

# Figure 1

Table 1: Comparison of Respondents versus Populationusing Number of Beds as a measure of Hospital Size

Number of	%	%	Expected	Frequency
Beds	Population		Frequency	Respondents.
		Respondents	sample	
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

# IMPACT ON PATIENT CARE

Eight of the study's 26 questions were related to evaluating to what extent did hospitals make changes to direct patient care as a result of changes in TennCare and Medicare funding? This eight question subset of questions from the strategies and implementation section of the survey instrument addressed this question and the responses to these questions are presented in Table 2.

To determine the general direction CEOs strategies were taking, questions 5 and 6 evaluated CEOs use of a specific market expansion strategy and a retrenchment strategy. 66.1% of the respondents elected not to pursue market expansion strategies related to the offering of new services to the community. 53.2% of the CEOs responding had cut existing healthcare services.

# Figure 2

Table 2: Distribution of Responses to Items Related to Direct Patient Care

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree	N/A	Total
	f %	f %	f %	f %	f %	f %	f %
5. Tenn Care/Medicare funding changes prevented our hospital from offering new services to our	0 0.0	16 25.8	5 8.1	26 41.9	15 24.2	0.0	62 100
community. 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 Tenn Care/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
<ol> <li>My hospital changed its organizational structure as a result of changes in Tenn Care/Medicare funding.</li> </ol>	2 3.3	28 46.7	11 18.3	11 18.3	7 1 1.7	1 1.7	60 100
21. Tenn Care/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

Questions 11, 12, 17 and 13 evaluated adaptive strategies with each question targeting a cost containment strategy utilized for major categories of hospital's expenses; supplies, personnel, and capital equipment. Regarding containing the cost of supplies, CEOs were in disagreement on the increased support of Group Purchasing Organizations (GPOs) as a result of TennCare/Medicare funding changes. 30.6% of the CEOs responded their hospital had not increased support of GPOs, 25.8% responded that they neither agreed nor disagreed, and 38.7% responded their hospital had increased support of GPOs as a result of the funding changes under studies.

The majority of CEOs responding (59.6%) agreed that workforce reductions at their facilities were the result of TennCare/Medicare funding changes. This use of workforce reduction as a method of controlling personnel costs was confirmed by the responses of CEOs to a survey question regarding changes in goals for FTEs per Adjusted Occupied Bed.

The greatest agreement among CEOs regarding cost containment strategies was found in response to the question regarding capital equipment replacement. 79% responded that their hospitals had delayed the replacement of capital equipment as a result of changes in TennCare/Medicare funding.

The questions regarding difficulty in nurse recruitment and changes in patient to nurse ratios investigated the impact of TennCare/Medicare changes on "bedside" patient care. 65% of the CEOs responded that changes in TennCare/Medicare funding increased the difficulty recruiting nursing staff for their hospitals relative to other competitors. Only 26.6% of the CEOs responded that this difficulty had translated to changes in the number of patients nurses were assigned.

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, it appears 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.

# 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 late 2002 and excluded 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 following conclusions can be drawn:

- Given the downward shift in profitability projections, it appears 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.
- 2. 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 utilized 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 nonnursing 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.

Many citizens have an aversion to taxes in general and tax increases in particular and Tennessee's citizens are no different than those of other states. It is unfortunate that Tennessee's citizens do not understand that their personal healthcare is linked to that of all residents of the State regardless of their ability to pay. According to the data provided by the CEOs of Tennessee's acute care hospitals, an unwillingness to fund the public healthcare system in Tennessee at a level equivalent to the average of the southern region left Tennesseans with, at best a healthcare system that was able to maintain status quo and at worst a crumbling and outdated healthcare infrastructure that denied them access to new services.

As representatives of a state's citizens debate the allocation

of scarce funds it is of vital importance that they understand the implications of their decisions. The results of these

decisions ultimately impact the healthcare of all that reside in the state.

#### References

r-0. AHA Guide 2001-2002 Edition, (2001).

Chicago:HealthForum.

r-1. Baker, J. J., & Baker. R. W. (2000). Health care finance: Basic tools for nonfinancial managers. Gaithersburg, MD: Aspen.

r-2. Browne, J. (1974). Fountain of sorrow. On Late for the

sky [CD]. New York: Elektra/Asylum/Nonesuch Records.

r-3. Comprehensive accreditation manual for hospitals, (1998). Oakbrook Terrace, IL: Joint Commission on

Accreditation of Healthcare Organizations.

r-4. Conover, C. J., & Davies, H. H. (2000). The Role of TennCare in Health Policy for Low Income People in

Tennessee. Retrieved November 30, 2002 from

http://newfederalism.urban.org/html/occa33.html#system r-5. David, F. R. (1999). Strategic management concepts (7 th ed). Upper Saddle, NJ: Prentice Hall.

r-6. Dillman, D. A. (1978). Mail and telephone surveys: The

total design method. New York: John Wiley & Sons.

r-7. Foster, R. S. (2000). Trends in Medicare expenditures and financial status 1966-2000. Healthcare Financing Review, 22(1), 35.

r-8. Gall, M. D., Borg, W. R., & Gall, J. P. (1996).

Educational research: An introduction (6 th ed). White Plains, NY: Longman.

r-9. Garner, J. F., Smith, H. L. & Piland, N. F. (1990). Strategic nursing management: Power and responsibility in a

new era. Rockville, MD: Aspen. r-10. Ginther, P. M., Swayne, L. M., & Duncan, W. J.

(1998). Strategic management of healthcare organizations, (3 rd Edition). Malden, MA: Blackwell.

r-11. Haines, S. G. (2000). The systems thinking approach to strategic planning and management. Boca Raton, FL: St.

Lucie Press. r-12. Hospital Blue Book, (2001). Atlanta: Billian Publishing.

r-13. Kemelgor, B. H., Johnson, S. D., & Srinivasan, S. (2000). Forces driving organizational change: A business school perspective. Journal of Education for Business, 75(3), 133-143.

r-14. Lawmakers struggle to reverse Balanced Budget Act impact, (2002, April 12). Long Island Business News, 49(16), B15.

r-15. Liebler, J. G., & McConnell, C. R. (1999).

Management principles for health professionals, (3 rd ed).

Gaithersburg, MD: Aspen.

r-16. Mirvis, D. M., Chang, C. F., Hall, C. J., Zaar, G. T., & Applegate, W. B. (1995). TennCare-health system reform for Tennessee. JAMA, Journal of the American Medical Association,

274(15), 1235-1242.

r-17. Nowicki, M. (2001). The financial management of hospitals and healthcare organizations, (2 nd ed.). Chicago: Health Administration Press.

r-18. Paine, A. (2003). Medicaid shares TennCare's troubles. The Nashville Tennessean. Retrieved February 23, 2003 from

http://www.tennessean.com/government/archives/03/02/292 27304.shtml?Element\_ID=29227304

r-19. Poole, P.P. (1998). Words and deeds of organizational change. Journal of Managerial Issues, 10(1), 45-59. r-20. Schein, E. H. (1993). How can organizations learn

faster: The challenge of entering the green room. Sloan Management Review, 34(2), 85-93.

r-21. Scott, J. S. (1999). BBA bad news gets worse thanks to flawed calculations: Effects of the Balanced Budget Act of 1997 to the healthcare industry. Healthcare Financial Management, 53(9), 24-26.

r-22. Shepherd, S. (2001, May 18). Hospitals: Businesses bearing brunt of TennCare funding woes. Memphis Business Journal, 23(3), 15.

r-23. Shepherd, S. (2000, November 3). Methodist Hospital-Fayette cuts staff, limits services. Memphis Business Journal, 22(27), 9.

r-24. Small Rural Hospital Improvement Grant Program, List of Eligible Hospitals, n.d. Retrieved May 14, 2003 from http://ruralhealth.hrsa.gov/funding/Eligiblehospitals.htm. r-25. Stoner, J. A. F. (1982). Management (2 nd ed.).

Englewood Cliffs, NJ: Prentice-Hall. r-26. TennCare found to be cheapest program in nation, (2002, August 5). Managedhealthcare.Info, 11.

r-27. United States Centers for Medicare and Medicaid Services. (n.d.). 1998 State estimates (state of residence) Medicaid per enrollee personal health care. Retrieved October 29, 2002, from

http://www.cms.hhs.gov/statistics/nhe/state-estimates-reside nce/medicaid-per-capita10.asp

r-28. Walton, M. (1986). The Deming management method. New York: Putnam.

r-29. Zuckerman, A. M. (2000). Leveraging strategic planning for improved financial performance. Healthcare Financial Management, 54(12), 54-59.

r-30. Zuckerman, A. M. (2002). Improve your competitive strategy: A guide for the healthcare executive. Chicago: Health Administration Press.

r-31. Zuckerman, A. M. (1998). Healthcare strategic planning: Approaches for the 21 st century. Chicago: Health Administration Press.

#### **Author Information**

Randy L. Byington, Ed. D. Department of Allied Health Sciences, East Tennessee State University

K. Shane Keene, M.B.A. Department of Allied Health Sciences, East Tennessee State University

Douglas Masini, Ed.D.

Department of Allied Health Sciences, East Tennessee State University