

**MANAGED CARE AND LOW-INCOME
POPULATIONS:**

A Case Study of Managed Care in Tennessee

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MANAGED CARE AND LOW-INCOME POPULATIONS:

A CASE STUDY OF MANAGED CARE IN TENNESSEE

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M.G., H.F., C.S.

FOREWORD

Managed care is rapidly becoming the primary vehicle for health care delivery to low-income Americans. Almost one-quarter of the Medicaid population is now enrolled in these arrangements. To gather early insights and timely information for state and federal policymakers concerning how the movement to managed care is affecting the poor and their access to care, the Henry J. Kaiser Family Foundation and The Commonwealth Fund are jointly sponsoring case studies and population surveys in California, Minnesota, New York, Oregon, and Tennessee.

In view of the growing numbers of low-income people in managed care, a better understanding of such arrangements and their impact is vital. This case study, prepared under the direction of Marsha Gold at Mathematica Policy Research, Inc. (MPR), describes the first year's experience of Tennessee's initiative, TennCare.

TennCare represents one of the most ambitious state-level efforts to restructure Medicaid and expand insurance coverage to the uninsured. Quickly developed and put in place to respond to a perceived fiscal crisis, the federal 1115 waiver request was submitted to the Health Care Financing Administration (HCFA) in June 1993. TennCare was implemented in January 1994, two months after HCFA's waiver approval.

Managed care was a central feature of the expansion plan. In 1993, some 770,000 people were covered by Medicaid. Following TennCare's implementation, enrollment rose in 1994 to over 1.1 million, adding about 400,000 who had been uninsured. Thus, the initiative achieved a major expansion in coverage. The number of managed care plans grew from a single, small plan of 35,000 enrollees to more than 12 plans, serving the vast majority of TennCare enrollees.

TennCare's first-year experience was mixed and controversial, as might be expected given the magnitude of the effort and the tight time frame. The case study shows that the rapid change caused considerable confusion for

patients, providers, and health plans. Anecdotal reports also suggest that potentially serious problems may have arisen, especially for the chronically ill. Potential problem areas include confusion over where to seek care, disruption of existing provider relationships, problems with receipt of pharmaceutical benefits including maintenance drugs, and problematic specialty referrals.

The Mathematica researchers note that the key questions are whether the short-term problems are offset by longer-term improvements and expanded access to care and whether the financial underpinnings are adequate to sustain the program.

The TennCare experience provides early insights into the issues that states will face as they move to enroll more of their low-income populations into managed care arrangements. It will be important to monitor the impact of these changes over time to assess the effects on access to care.

We wish to express our appreciation to all those who contributed to this report. In particular, we are grateful for the efforts of Marsha Gold, the project director at MPR. We are also indebted to those in the State of Tennessee who devoted time and effort, meeting with MPR's research team, sharing insights, and reviewing earlier drafts of this report.



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EXECUTIVE SUMMARY

TennCare is an ambitious undertaking to revamp Tennessee's Medicaid program substantially and rapidly and, potentially along with it, the state's health care delivery and financing system. The objectives are far-reaching: to constrain spending while quickly shifting a fairly traditional system of care delivery to managed care and to expand significantly coverage for the uninsured with a relatively small infusion of new state funding.

In its first year, TennCare's record was mixed and highly controversial. TennCare succeeded in enrolling the vast majority of its beneficiaries in managed care and in expanding coverage considerably. By the end of 1994, Medicaid monthly enrollment reached more than 1.1 million, compared with 770,000 before TennCare was implemented. However, the pace of the change created considerable confusion for patients, providers, and health plans, along with potentially serious transitional problems that could have compromised health care outcomes, particularly for those who are most vulnerable. The Tennessee experience, as described here, thus illustrates the substantial number of diverse policies needed to implement a program like TennCare successfully and highlights the key issues this restructuring generates.

From Tennessee's perspective, the key question is whether the short-term problems and costs of start up are offset by longer-term improvements and expanded access to quality care. To a great extent, this may depend on the adequacy of TennCare's financial underpinnings and on the commitment of all stakeholders to TennCare's diverse objectives and the tasks needed to achieve these.

While it is too early to draw conclusions on these issues, some early signs suggest that the scope of TennCare's objectives may be overly ambitious for the resources available, both in the expanded coverage goals and in the extent and speed of systemwide change possible. Thus, Tennessee's experience, together with that of the other states we studied, is quite relevant to understanding what it may be realistic to expect of states should Medicaid be changed to enhance state flexibility within a budget-constrained environment.

The Tennessee study is one of five state case studies Mathematica Policy Research, Inc. is conducting under a contract from the Henry J. Kaiser Family Foundation and the Commonwealth Fund. The others are California, New York, Minnesota and Oregon, each of which is restructuring its health care system for its low-income population. Our interest encompasses changes in care patterns and access, effects on the safety net, and any spillover effects on the overall health system. For each of these states, we cover the program's experience with eligibility and enrollment, plan and provider participation, and state oversight, since the design and implementation of policies in these areas is important to system performance.

This case study reviews and analyzes the first year of TennCare implementation (calendar year 1994). The case is based largely on interviews conducted in December 1994 during a four-day site visit to the state capital and several other communities, supplemented by a review of available written material and documents. The emphasis is on understanding how the movement to managed care is affecting low-income populations and their access to health care services. We focus on early insights and timely analyses that will be useful to other states and other efforts to shape the rapidly evolving development of managed care systems and health reform for these populations.

SUMMARY OF THE TENNCARE INITIATIVE

TennCare aims to revamp Tennessee's Medicaid program substantially and rapidly. It draws on the flexibility provided by section 1115 waiver authority granted to the Secretary of Health and Human Services by the Social Security Act. Waiver authority permits states to gain approval to use federal Medicaid matching funds to reconfigure services and eligibility requirements. The waiver was submitted in June 1993 and implemented in January 1994, two months after its approval.

Prior to TennCare, Tennessee had a traditional Medicaid program. Individuals who met categorical and asset criteria were eligible for Medicaid benefits in a fee-for-service environment. Use of managed care as a delivery and financing vehicle was extremely limited. TennCare has substantially expanded eligibility based on enrollment in managed care. In its first 12 months, TennCare increased monthly Medicaid enrollment from 770,000 to more than 1.1 million and transformed Tennessee's Medicaid program from one with only a single, small managed care plan with 35,000 enrollees to one with 12 approved managed care plans that serve the vast majority of enrollees. TennCare removes categorical and asset restrictions and expands eligibility beyond those previously eligible for Medicaid to both people who were uninsurable and those who were uninsured but not eligible for employer- or government-sponsored health care. There are premium subsidies for individuals and families with incomes up to 400 percent of the poverty level and cost sharing is on a sliding scale for everyone above the poverty level. TennCare covers all eligible individuals including the disabled, but excludes long-term care and Medicare crossover benefits that are covered on a traditional Medicaid basis. Selected mental health benefits and services to children in custody are also excluded initially. Tennessee decided not to offer enrollment to new eligibles in 1995 except for those who are otherwise eligible for Medicaid or are uninsurable.

The impetus for TennCare was largely fiscal. The program responded to budget pressures created by changes in federal policy concerning Medicaid disproportionate share payments (adjustments to hospitals that serve a relatively large volume of low-income patients) and growing provider resistance to taxing arrangements. Participants viewed the alternative as major reductions in eligibility or benefits for Medicaid. TennCare was deliberately developed and implemented quickly both to generate immediate savings and to limit the impact of political opposition. While stakeholders may have been formally consulted, their involvement was generally limited. The most extensive consultations were with Blue Cross Blue Shield of Tennessee (BCBS), whose participation was perceived as critical to a credible statewide approach, and with key beneficiary advocacy groups. While physician groups were outspoken in their opposition to the program, other interests appear to have given TennCare at least lukewarm support in its first year.

TennCare's first year is recognized as rocky by virtually all stakeholders, although there also was support for what many perceived to be a major accomplishment in expanding coverage, particularly given the lack of success nationally on this goal. Differences of opinion exist among Tennessee stakeholders on the magnitude of the remaining problems and the program's future potential. A new governor took office in January 1995, and changes in program oversight and leadership have been announced. There are some preliminary signs of fiscal stress though the outgoing TennCare director recently stated that "there are no issues of fiscal viability of MCOs [managed care organizations] or

the program at this point in time." Several bodies have been established to review the program, and recommendations for refinement or change are likely to be proposed over the next year.

EXPERIENCE WITH KEY POLICY COMPONENTS

The following discussion highlights eligibility and enrollment, plan and provider participation, and state administration and oversight.

Eligibility and Enrollment

TennCare's eligibility criteria are broader than virtually all other state Medicaid initiatives under section 1115 waivers. When enrollment is open, almost anyone otherwise ineligible for employment-based or publicly sponsored coverage can apply. However, premium contributions and cost sharing on a sliding scale are required for those above the poverty level. For someone using extensive services, the required financial contribution could be considerable. Take, for example, a family earning slightly less than twice the poverty level (\$12,590 annually in 1995 for a family of three). With an income of \$25,180, this family would pay 20 percent of the capitation rate, a \$250 deductible (\$500 per family), and 10 percent cost sharing, subject to an annual maximum of \$1,000 per individual and \$2,000 per family. For this amount, the family would receive a reasonably comprehensive benefit package generally similar to that previously available under Medicaid.

Enrollment varies for people eligible under traditional Medicaid rules and for those who qualify under TennCare's broader criteria. The former enroll at welfare offices as before, while the latter have a streamlined eligibility system with several points of entry. For current eligibles, the transition to TennCare-approved managed care plans was accomplished through the mail, with people indicating their top three choices. Because of this structure, calculating how many qualify under each of the two sets of criteria may be imprecise, particularly since TennCare eligibility is assessed only every 12 months.

Despite efforts by TennCare officials and advocates to develop appropriate enrollment materials, the enrollment process created considerable confusion. Contributing factors included the speed of the change, limited enrollee and provider education, and difficulty in handling the substantial volume of telephone calls. Further, because provider lists were not readily available and networks not fully formed, it was hard for individuals to determine how their care patterns would be influenced by whatever plan they selected.

About 50 percent to 60 percent of previous Medicaid eligibles selected a plan; the others were assigned. Although previous care patterns reportedly were considered, the distribution of assigned plans reflected that of the voluntary selections. Managed care organizations (MCOs) were responsible for notifying individuals of the plan in which they were enrolled and for providing membership information. Shortcomings in state and plan administrative processes apparently led to problems like delayed or multiple notifications, or assignments other than those the enrollees had requested, which were difficult to resolve speedily. There also were acknowledged marketing abuses by at least one plan, though these were identified and may now be resolved.

Plan and Provider Participation

TennCare requires enrollment in a TennCare-approved MCO. Eligibility is open to state-licensed health maintenance organizations (HMOs) and other arrangements that fall under the TennCare definition of preferred provider organizations (PPOs). (According to Tennessee state regulation, a PPO is "a managed care organization other than an HMO which is approved by the Bureau of TennCare as capable of providing medical services in the TennCare program.") Applicants are

formally required to meet a reasonably detailed set of service and pricing conditions in the contract.

TennCare pays each plan a monthly capitated rate. A single statewide rate is used with demographic adjustments based on age, sex (for those of child-bearing age), and disability. Payment rates are said to be based on prospective estimates of costs, with offsets for excluded services and anticipated managed care savings. Rates are also reduced by estimated cost sharing, savings in provider bad debt, and savings to local government, with a 10 percent withhold. Thus, the rates appear to include only about two-thirds of the estimated costs, taking the risk withhold into account.

PPOs reportedly must meet the same fiscal solvency and quality requirements as HMOs. However, procedures for implementing and overseeing these provisions did not appear to be well-developed as TennCare was implemented, and whatever information the state had in the first year for such oversight is unclear. Moreover, our discussions with the two largest plans suggest that the ability to implement, refine, and operate managed care systems was severely constrained in the first year by the speed of implementation and scope of increased enrollment associated with TennCare. In addition, what we learned leaves unclear the legal status of PPOs in case of insolvency. The degree to which the state, PPO plan, or individual provider would ultimately be accountable for any revenue and expense shortfalls appears unclear.

A total of 12 MCOs participated in TennCare in 1994 and continue to do so, including 2 statewide plans—BCBS and Access MedPlus—and 10 others serving diverse areas of the state. More than two-thirds of the total enrollees are in the statewide plans; half are now in BCBS, causing some concerns about the plan's ultimate role in the market. Executives counter that they do not want their market share to grow any larger.

The BCBS plan is a TennCare-approved PPO modeled after a PPO developed for state and other large employers. BCBS pays physicians on a discounted fee-for-service basis with utilization review. It has three years to adopt a primary care case management program and was still implementing grievance and quality systems at the end of 1994. Owing to its experience, BCBS has a well-developed electronic claims processing system and is better able than most other MCOs to pay providers on a timely basis and furnish TennCare with encounter data, which are required of all plans. Physicians must participate in the TennCare PPO to be eligible for the commercial PPO. Called a "cram-down provision," this has been extremely controversial among physicians. However, the large initial drop in physician participation has now been almost fully reversed.

Access MedPlus, by contrast, was a small, state-licensed HMO with 35,000 enrollees before TennCare was launched. Begun with foundation funds, the HMO is minority-owned, closely affiliated with community health centers, and serves mainly a Medicaid population. Its focus is on primary care physicians, who are paid a capitation rate. With TennCare, the plan decided to expand statewide and assume full risk. Although it targeted an enrollment of 100,000 to 150,000, it enrolled twice as many from the start after TennCare assignments. Access MedPlus was ill-prepared for this growth, as it had only 50 staff members, no claims processing systems, and no specialty contracting. Further, while it had established managed care systems for such tasks as credentialing and quality assurance, these were taxed by TennCare. Despite the commitment and hard work by staff to make the transition, we heard many complaints from consumers and providers about limited provider networks, delays in claims payment and other problems.

Starting from a base of limited managed care, TennCare predictably did not shift in year one to a system with fully functioning and well-developed MCOs. Many of those interviewed perceive that so far TennCare is basically much more about managed costs than managed care, with limited change in the delivery system.

Care delivery problems appear to exist, although our methods do not permit assessing their magnitude, and data constraints and timing limit empirical verification. Reported problems are related to the handling of formulary issues involving medical necessity overrides and communication of policies to both providers and pharmacists, barriers created by deductibles, disruptions in existing referral and traditional care systems, and burdensome prior approval systems. Provider and specialty availability within the TennCare plan networks also appears problematic in some areas of the state, due to general physician shortages and network design. These issues could be related as much to start up and provider confusion about managed care as to flaws in design.

TennCare officials expect some sorting out among participating plans, perhaps including changes in market share, consolidations, or even failures. They view this as an important part of the evolution of a well-functioning managed care system. In late 1994, it was still too early to tell how well MCOs manage financially within the capitation rates paid because of uncertainty about incurred but not reported obligations and year-end settlements. In addition, start-up issues complicate analysis of the first-year experience, and it may be more relevant to assess financial status later on.

State Administration and Oversight

TennCare is based on a complex financing arrangement. An important objective is to maintain federal Medicaid funds despite policy changes limiting the use of disproportionate share payments and provider taxes to generate federal matching payments. Funds for the state match essentially are drawn from a variety of sources with the objective of maintaining core state funds at no more than historical Medicaid spending levels. Other sources include state funds for indigent care programs (including the state share of various federal block grants); public hospital charity care expenses; and other state, local, and private sources.

Financing pools were a key component of the year-one design. The pools were financed through a combination of explicit funds in the TennCare budget and what was anticipated as start-up savings. The pools were designed to smooth the transition to TennCare by providing flexible funds to deal with issues like protecting essential providers, compensating for adverse selection, supporting graduate medical education, and covering uncompensated care. The structure and distribution of these pooled funds was still being negotiated in late 1994 and documentation is not readily available. The most critical issue appears to be what will happen in 1995 and future years when these funds are not available, rather than what occurred in 1994.

TennCare-participating HMOs are regulated by the Department of Commerce and Insurance (DCI) which oversees financial status, marketing, and complaints, and requires plans to comply with health care delivery requirements of the Department of Health. Though DCI licensed new HMOs for TennCare, it was not heavily involved in the program's implementation. TennCare had primary oversight responsibility for PPOs in 1994. In 1995, DCI was given additional oversight responsibilities and the TennCare bureau was moved from the Department of Health to the Department of Finance and Administration.

Weaknesses and transitional problems existed in state administration and MCO oversight in year one. The speed of implementation appears to have required a primary focus on urgent administrative needs, with only limited work on more generic systems. For example, TennCare officials were embarrassed by press attention in late 1994 on the failure to bill for required premiums; there is concern for how the retroactive attention to this requirement will influence enrollment levels in 1995. On the other hand, TennCare officials appear committed to resolving problems that arise on a case-by-case basis, generally deciding in the beneficiary's favor.

TennCare's administrative structure in 1994 also raises inevitable issues of public process and procedures. Many key policies and procedures do not appear to be recorded or at least widely available and known. We also heard many conflicting reports on the facts of TennCare policies and procedures from diverse parties whose professional roles should have ensured they had detailed knowledge about the program. The TennCare rules and regulations issued in March 1994 have only limited information on the initiative's managed care features. The TennCare Standard Operating Procedures (TSOPs) issued serially to MCOs are more explicit, but these were distributed beginning only in mid-1994 and most substantive clarifications (such as marketing guidelines or responsibility for care costs) were not provided until late 1994 or 1995. Though the memoranda are retroactive to January 1, 1994, how this would affect operations or oversight is unclear. The apparent limitations in documentation of formal policies and procedures raises issues of institutional memory to the extent that only a few key people know about major issues or specific details related to policy. This is particularly significant inasmuch as two key people in TennCare's development are no longer responsible for the program, although one (the former head of TennCare) has been retained in a consulting capacity.

EARLY INSIGHTS INTO TENNCARE'S EFFECTS ON ACCESS AND THE SAFETY NET

Tennessee's demographic profile and care systems differ considerably within and across the state, as does provider supply. Thus, access and care patterns varied before TennCare and are likely to continue doing so under the program, especially in its early years. This fact, as well as the limitations in analysis due to data constraints and the short time in which TennCare has been implemented, are important to remember. Thus, a first-year analysis is most useful in understanding access and care patterns before the initiative got under way and in providing a qualitative sense of transitional effects and tensions or issues that should be monitored in the future.

Effects on Access, Care Patterns, and Special Needs Populations

Our analysis of early effects on access relies primarily on information from consumer surveys conducted by the University of Tennessee in both 1993 and 1994. These surveys confirm a drop in the proportion of uninsured after TennCare became effective. The magnitude of the change appears substantial but its precise size is somewhat uncertain for various methodological reasons.

Physicians' offices remained the dominant source of care for TennCare eligible individuals pre- and post-TennCare, though they use clinics and hospitals more than privately insured or Medicare populations. Perceived quality of care for those covered by Medicaid/TennCare remained relatively constant before and after TennCare, with a small and insignificant downward shift in perceived quality. However, the aggregate analysis obscures differences in perceptions across the subpopulations in TennCare.

Satisfaction with insurance coverage decreased from 82 percent to 61 percent, with marked differences associated with respondents' pre-TennCare coverage. As might be expected, those who had been covered by Medicaid were likely to be less satisfied with TennCare than those who were newly eligible for coverage.

About half the 1993 Medicaid recipients reported less satisfaction with TennCare than with Medicaid, 12 percent reported more satisfaction, and 37 percent reported no change. Drops in satisfaction levels could be of limited concern, at least initially, since they are consistent with research findings following implementation of any mandatory shift to managed care; research suggests that, after the initial drop, satisfaction increases over time, though not necessarily to its

previous level. However, dissatisfaction potentially could have been lessened had fewer start-up problems occurred. The impact of these problems was probably mitigated by providers' efforts to respond, especially to problems experienced by patients whom they had seen before TennCare. Start-up problems of greatest concern relate to potential disruptions in continuity of care, particularly for those vulnerable to adverse health outcomes. This issue warrants further and more rigorously empirical study using techniques and time frames not available for this project.

Satisfaction levels were higher for people who were uninsured before TennCare. Among this group, 59 percent were more satisfied with TennCare, 10 percent were less so, and the rest reported no change. Several factors may explain this last result. These include the negative publicity about TennCare, start-up problems of access, disruption to some preexisting care arrangements with safety net providers, and provider shortages unaffected by TennCare. These are substantial in some parts of Tennessee and TennCare was not designed to resolve them. However, the initiative appears to have affected supply somewhat positively by creating pressure not only to approve expanded roles for nurse practitioners and physician assistants, but also to have more of these providers.

Effects on the Safety Net

For the most part, it is too early to assess how the safety net has or will be affected by TennCare. TennCare reportedly has stepped up the level of formal physician participation in the program. However, some specialists (such as orthopedists) appear to be opting out, and there has been some disruption to informal care arrangements. Community health clinics have been stressed by TennCare. While they participate in the program, revenues are said to be lower than previously allowed and volume growth more limited. The situation for public health providers is more complex because of the diversity of services and financing they represent. Revenue streams for public health services have been disrupted by TennCare, so that these revenues could be credited toward the state match. The impact of this disruption on service delivery was less clear. The effect on hospitals has varied with their role in the program and their dependence on special payments from pool funds in 1994. Most attention has focused on issues for the Regional Medical Center, Memphis' large public hospital.

The "Med" is a public hospital that, prior to TennCare, had a payer mix of almost one-half Medicaid and one-quarter self-paying or non-paying patients. When we talked to senior staff members in 1994, they reported extensive loss of revenue with TennCare despite sponsoring one MCO and participating in two others. More recent reports indicate growing adverse effects in 1995, after TennCare stopped distributing funds from the transitional financing pools.

More time is needed to assess how safety net providers fare under TennCare, which has created opportunities but also challenges for them. Some argue that the pressure on these providers to become more efficient will be an advantage to the system over the long run.

Spillover Effects on the Health Care System

The scope of TennCare has had spillover effects on virtually all components of the Tennessee health system. On a positive note, there is little evidence that TennCare created lasting access problems for the insured as a result of the cram-down provision, though state employees needing care faced problems at first because of the initial decline in physician participation. By contrast, TennCare may have had an adverse effect on access to health care for those who remain uninsured, fewer of whom report their care to be excellent or good. To the extent that TennCare contributes

to eventual erosion of safety net provider capacity, the uninsured could be further disadvantaged though, of course, there should be fewer of them.

More broadly, TennCare appears to have dramatically transformed Tennessee from a state with relatively little managed care activity to one with features typically found in more developed markets. However, so far there has been relatively limited growth in private sector managed care, with employers said to be waiting for TennCare's effects on the health care system to stabilize. Lack of change also could reflect the fact that medical inflation dropped in Tennessee, as it did elsewhere, in 1994.

DISCUSSION

TennCare has an ambitious agenda: to constrain spending while rapidly shifting a relatively traditional system of care delivery to managed care and to expand significantly coverage for the uninsured with a relatively small infusion of new state funding. In its first year, TennCare appears to have succeeded in broadening coverage. Not surprisingly, it did not change the health system overnight and in the course of trying to do so and to expand enrollment rapidly, TennCare experienced serious transitional problems. Yet some are more satisfied with their coverage, and the system's short-term response appears to have limited at least some of the adverse effects of the transition on beneficiaries.

From the perspective of beneficiaries, the most serious long-term issue for TennCare is whether future success will be possible, given potential barriers of financing and commitment.

With respect to financing, the fact that some MCOs already may have fiscal problems and that TennCare has taken allowable steps to limit expansion of its coverage objectives (at least temporarily) are troublesome signs. However, some MCO failures are likely in any initiative of this nature and these stresses could portend a shift to a revised—and more realistic—set of objectives and schedules.

With respect to commitment, the issue relates to the broadness of support for TennCare's objectives and approach. Unlike Oregon, where the system was developed based on broad debate among interested parties, TennCare was crafted mainly by a few people and there may not be strong support for its access objectives outside the advocacy community. That the initiative was originally proposed as a block grant suggests its orientation toward providing whatever services are feasible based on budget constraints, despite the stated motivation of added flexibility to innovate. TennCare also integrates many state sources of public and private financing for health care. Thus, to the extent that its objectives exceed the resources needed to meet them, there may be little in the way of a defined minimum set of benefits implicit in the program other than what is stated in the federal Medicaid statute and 1115 waiver. However, this framework may be changing with the proposed move to block granting the Medicaid program.

Important issues to monitor over time include:

- The extent to which eligibility and enrollment systems operated more smoothly in year two, indicating administrative maturation.
- Whether TennCare has begun to operate more like a managed care system. Are provider networks more sensible? Have internal plan care delivery systems been developed? Are quality improvement systems in place?

- Whether care systems and referral patterns in traditional low-income care systems that were disrupted by TennCare have been replaced by alternative well-functioning systems.
- How systems for the disabled and those who do not receive Aid to Families with Dependent Children (AFDC) have fared in TennCare, how these populations have been treated, and whether mental health and children's services are integrated.
- How TennCare has coordinated medical and social needs for special needs populations generally and between public and private providers.
- Whether formal state policies and procedures have been further developed and MCO oversight has been strengthened.
- How the safety net and access for the remaining uninsured has been affected.
- What has happened to TennCare's initial improvements in insurance coverage? Has coverage been expanded, retained, or has it eroded? How have other access objectives and benefits been modified, if at all?

The ultimate lessons to be drawn from the TennCare experience will result from monitoring the program's response to these issues over time, identifying its final structure and managed care system form, and determining its long-term financial viability.

STUDY PURPOSES AND APPROACH

With funding from the Henry J. Kaiser Family Foundation and the Commonwealth Fund, Mathematica Policy Research, Inc. is conducting case studies of five states that are currently restructuring their health care systems for the low-income population: California, Minnesota, New York, Oregon, and Tennessee. These case studies are designed to provide information and analyses to better understand how the movement to managed care is affecting low-income individuals and their access to health care services. The focus is on early insights and timely analyses that will be useful to other states and other efforts to shape the rapidly evolving development of managed care systems and health reform for low-income populations. Marsha Gold, Sc.D., is the project director of the study. Michael Sparer, Ph.D., of the Columbia University School of Public Health, is co-investigator. This case is based on the first of two planned visits to Tennessee. The second visit will take place in 1995. The focus of the first study is low-income individuals and their access to care. We wanted to assess how care patterns changed after the initiative and the ways in which access has improved or been impeded. We also examined how the safety net for health care was affected, and we investigated the program design and implementation experience because they can influence these effects.

Information for this case study comes largely from interviews conducted in December 1994, supplemented by a review of available relevant written material and documents. During a four-day site visit, the project team interviewed individuals who offer both state and local perspectives. Statewide, we talked with policymakers and others who are attempting to influence policy from the standpoint of consumers, providers, and insurers/health plans. Local interviews focused on the views of providers affected by TennCare, participating health plans, and consumers. A variety of interests are represented, including private practicing physicians and traditional safety net providers, such as public hospitals, county health services, and community health centers. More than 22 interviews were conducted with people who were especially knowledgeable about the Nashville, Chattanooga, and Memphis markets, and with others who brought a rural or state perspective to our discussions.

Caveats: Since our site visit, the new governor has made several policy changes in TennCare, and fiscal concerns have become more prominent. We have selectively updated the case to reflect known changes. However, for the most part, the case reflects the TennCare experience as of December 1994. In addition, we were less successful in Tennessee than in other states in arranging for in-depth interviews with state officials responsible for the operational components of the program. This limited the specific detail we were able to provide, though we also drew upon other written material. We sent a draft of this case to TennCare key officials and certain other key stakeholders for review. The case has been revised on the basis of their comments and additional information we received.

INTRODUCTION

TennCare is an ambitious undertaking aimed at revamping Tennessee's Medicaid program and, potentially along with it, the state's health care financing and delivery system. This broad-reaching demonstration project was implemented in early 1994 through a federal waiver under Section 1115 of the Social Security Act. TennCare includes everyone who is eligible for Medicaid, plus those who were uninsured as of March 1, 1993. A key feature of the project is that participants must enroll in managed care arrangements.

This case study is based on a site visit to Tennessee in December 1994. The findings presented here focus on how access and care patterns for beneficiaries are being affected. The first section provides an overview of the initiative, its development, and its prospects. The second section analyzes the major components of the initiative and initial experience with implementation. It addresses eligibility and enrollment, plan and provider participation, and state oversight. A third section looks at patterns of care before TennCare was enacted and how care has been affected during this first year of implementation, as well as issues related to access, special needs populations, and safety net providers. Spillover effects on the state's health system are also discussed. A final section highlights important areas that should be monitored in this study and other policy work.

OVERVIEW OF THE INITIATIVE, ITS DEVELOPMENT, AND ITS PROSPECTS

This section provides an overview of TennCare. The goals, general design, and context for the initiative are discussed first. How TennCare was developed is then presented, followed by a description of how it is being implemented and its prospects for the future.

Goals, General Design, and Context

TennCare, a major Medicaid demonstration project, is using Section 1115 waiver authority under the Social Security Act to reconfigure Tennessee's Medicaid program rapidly and, potentially along with it, to make major changes in Tennessee's health care delivery and financing system. The initiative's goals are quite broad. It expands coverage up to 400 percent of poverty, assumes a rapid transition to managed care, and substantially revises the state funding streams for health care.

Implemented on January 1, 1994, TennCare is intended to expand coverage to roughly 500,000 additional people while restraining state spending through managed care and alternative financing strategies. Although it continues to evolve in response to longer-standing issues and concerns, TennCare was conceived and implemented in under a year. In the initial year of operation, total enrollment grew from 770,000 to more than 1.1 million. All 1994 enrollees were in managed care, a shift that generated considerable controversy nationwide and at least short-term transitional issues. Only one of the participating managed care entities with expanded enrollment had prior Medicaid experience (one small plan with 35,000 enrollees); and few had any managed care experience. Within a year, the percentage of the total population statewide in managed care organizations (MCOs) basically doubled to about half the state's population. Immediately before TennCare began, only 300,000 people (or 5.7 percent of Tennessee's total population) were in health maintenance organizations (HMOs), with another million or so in preferred provider plans operated by the Blue Cross Blue Shield Association (BCBS) (GHAA 1994).

The formal goals of TennCare are to increase access within state global budgetary limits, improve quality of care, encourage preventive care, give enrollees incentives for appropriate utilization, incorporate charity funds, encourage coverage for the uninsured, remove disincentives to work for recipients of Aid to Families with Dependent Children (AFDC), and provide continuity of coverage.

TennCare's scope is considerably broader than virtually any other state's 1115 waiver demonstrations. Using a sliding scale for premiums and patient cost sharing for services, TennCare removes categorical and asset test restrictions on Medicaid eligibility and expands eligibility to the

uninsurables (such as those denied coverage after applying) and the uninsured. There are premium subsidies for those with incomes up to 400 percent of poverty. (These subsidies are subject to limitations reviewed later.) Enrollees are required to join 1 of 12 managed care plans, 2 of which are statewide. TennCare covers everyone who is eligible, including the disabled. However, long-term care, covered both by Medicare and Medicaid for dual eligibles, and at least initially, selected mental health benefits and special children's program services for those in custody continue as in the past. The program is operated by the TennCare bureau within the Department of Health and began operations on January 1, 1994.¹

The development of TennCare assumed that at least a rudimentary managed care infrastructure could be developed rapidly. Previous to TennCare, Tennessee's experience with managed care in both the commercial sector and in Medicaid was quite limited. Tennessee had 11 HMOs, none of which was very large. Most of the commercial managed care enrollees were in a relatively loosely structured preferred provider organization (PPO) offered by BCBS to state employees and other large employer groups. Medicaid contracted with only one managed care plan, an HMO with a Medicaid enrollment of 35,000. Tennessee has a history of generally unsuccessful legislative battles involving "anti-managed care" provider protection legislation, according to those we interviewed.

The impetus for TennCare was largely fiscal (Coughlin and Lipson 1994). Tennessee made extensive use of provider donations and taxes in conjunction with disproportionate share (DSH) payments to finance Medicaid program expansion and the required state contribution (Holahan and Liska 1995). (The DSH payment adjustment is made under the Medicaid program to hospitals that serve a relatively large volume of low-income patients.) This financing arrangement was increasingly untenable because of growing provider resistance and changes in federal policy. To balance the budget, the state needed to generate substantial savings or else make major program to cut back the program extensively. Citing an urgent fiscal crisis that would otherwise require major reductions in eligibility and provider payment, state officials developed TennCare to retain federal funds while

¹In January 1995, incoming Governor Don Sundquist announced he would move the administration of the program to the Department of Finance and Administration.

constraining state spending, sustaining current Medicaid eligibility and benefit levels, and expanding coverage. State officials aimed to do this through savings from managed care; hard-nosed contracting; and alternative financing across the Medicaid program, other state health programs, and the private sector.

Development of the Initiative

TennCare was developed consciously and implemented quickly, with limited involvement of most key stakeholders. The concept was approved in April 1993 and the 1115 waiver submitted in June 1993. The program was implemented six months later in January 1994, less than two months after the Health Care Financing Administration (HCFA) approved the waiver. The schedule was viewed as critical to generate needed immediate savings. Also, there was a desire that implementation begin and be well under way when the legislature was out of session and thus less likely to be lobbied by TennCare opponents. TennCare developers were well aware of the operational challenges of the schedule but thought they could address short-term problems as they arose (discussed later). They also believed that these problems would be offset by the longer-term gains in coverage and fiscal control they expected the initiative would achieve.

Commissioner of Finance and Administration David Manning and director of the Medicaid Bureau Manny Martins developed TennCare under the leadership of Governor Ned McWherter, who had been Speaker of the House for 18 years. Manning, a seasoned public official brought in by McWherter, came to TennCare's design with the experiences of negotiating the original state employees' PPO and handling fixed price contracts and competitive bidding. A career civil servant, Martins appears to have jointly developed TennCare with Manning. Manning would have preferred a block grant to "reduce the hassle factor" of financial negotiations with HCFA had the agency been willing to agree to these terms. In some ways, both TennCare's design and financing reflect this state administrative orientation.

Legislation with broadly permissive language authorized Tennessee's Executive Branch to design and define the program through administrative regulations. These regulations, which are the

legal authority for the TennCare waiver, were established using a streamlined rulemaking process. The legislation was adopted in April 1993 with limited debate and no public hearings. When the waiver application was submitted in June 1993, the detailed specifications were not widely known, though state officials say discussions were held with legislators and major stakeholders. Our impression is that they were limited. The most extensive consultations appear to have been with BCBS and key beneficiary advocates.

TennCare's ability to show that a credible statewide managed care network would be offered hinged on participation by BCBS. The state had considerable leverage to negotiate with BCBS, since the state employees' contract represented a large share of that organization's business. Consultation within the Tennessee bureaucracy also was relatively limited in scope. For example, neither the Department of Commerce and Insurance (DCI), charged with licensing HMOs, nor other parts of the Department of Health and the commissioner's office appears to have been extensively involved in the planning.

Weekly meetings were held with advocacy groups to identify and address issues of concern. Other participants included the Tennessee Primary Care Association, the Appalachian Regional Commission, the state's chapter of the American Association of Retired Persons (AARP), the nurse practitioners and physician assistants association, the perinatal association, and the psychological association. Major provider groups, such as the Tennessee Medical Association (TMA) and the Tennessee Hospital Association were not included, however. Further, though providers (especially physicians) were reportedly consulted, they were not influential in the process, perhaps because they continued to support a fee-for-service alternative to the program and its managed care features.

Major opposition to TennCare has come from physicians who have been outspoken, mainly through the TMA, which has been unsuccessfully battling the initiative in court. TMA argues that it supports the concept of TennCare but not the speed of its implementation. The reason for opposition appears mainly to be a reaction to the broad-based imposition of managed care, including both the level of the capitation payments and what physicians have termed the "cram-down"

provision. This feature makes physician participation in the BCBS state employees' PPO network conditional on their participation in the BCBS TennCare plan.

Our interviews led us to conclude that the physician community's views may be somewhat more mixed than they appear, with physician attitudes differing depending on their location and specialty. Some rural primary care physicians, for instance, have benefited financially from TennCare, especially if they had been seeing a substantial number of uninsured persons. Meanwhile, some specialties (like orthopedics) may still be boycotting TennCare, especially in certain areas of the state: Only 13 of the 394 licensed orthopedic surgeons had agreed to contract with Access MedPlus, the second largest managed care organization (MCO) in TennCare, as of August 1994. Of 291 licensed orthopedists in the state's seven urban counties, only eight were in Access MedPlus. Although considerably more orthopedists contract with BCBS in these seven urban counties, BCBS also had extremely few in some of the individual counties as of August 1994. In Hamilton, Sullivan, and Washington counties, where there are 73 such surgeons, only 5 participated in BCBS.²

Other interests appear to have given TennCare at least lukewarm support in its first year. Within the government, sister agencies have been reluctant to disagree publicly with this key initiative of the governor. The Tennessee Hospital Association has not opposed TennCare for two reasons. First, hospitals were to benefit from TennCare because it eliminated the provider tax. Second, the financing structure initially included additional funding through pools to facilitate the transition from DSH payments and for expenses such as graduate medical education and adverse selection that vary across providers and their plans. However, not all hospitals benefited equally from the changes TennCare introduced. Specifically, hospitals have fared differently under TennCare, depending on whether they are urban or rural, how they participate in TennCare, and whether they have traditionally relied heavily on DSH payments.

Urban hospitals historically have depended most heavily on DSH payments, and these funds have also helped some rural facilities. Still, rural hospitals have generally supported TennCare

²Data provided by Legal Services of Middle Tennessee, using information from telephone surveys by local health departments.

because they would benefit from the elimination of the DSH-associated provider taxes. Hospitals that do not participate extensively in TennCare have benefited from the elimination of provider taxes and have not incurred additional obligations. The Tennessee Primary Care Association, which represents community health centers and similar providers including the state Department of Health, did not oppose the initiative. It did, however, express concern about the dependence on too few providers with insufficient attention to the development of delivery systems. The association also aimed, not completely successfully, to address some of its members' contractual and payment concerns (see later discussion).

Key beneficiary advocates such as Gordon Bonnyman of Legal Services of Middle Tennessee and Tony Garr of the Tennessee Health Care Campaign have supported TennCare, a position that has been at odds with some national advocacy groups for low-income beneficiaries. The reasons for their support appear to be multifaceted. A key attraction for advocates is expanded coverage and its ability to enhance access. Rapid implementation is viewed as an essential part of this feature, creating an irrevocable entitlement. TennCare also has other components that are viewed as removing some of the welfare stigma traditionally associated with Medicaid. Advocates were brought into the process, which enhanced support because they were able to address particular beneficiary issues related to implementation. In addition, and perhaps most important, advocates perceive the alternative, because of fiscal and DSH issues, to be major reductions in eligibility.

Implementation and Prospects

About 1.2 million people were enrolled in TennCare in October 1994, about one-third of whom (400,000) were enrolled through the waiver expansions rather than traditional Medicaid eligibility rules (Tennessee Fiscal Review Committee 1994, p. 10).³ While the total number of enrollees is below first-year projections, the number of uninsured is higher than projected and the number of traditional Medicaid enrollees is lower. Figuring out exactly where Tennessee enrollment stands relative to its waiver application is a complicated task because it is not always clear whether cited

³We are uncertain about whether this is a monthly or cumulative figure.

numbers represent enrollment as of a particular date or whether they are cumulative for the year. The difference is important, since there historically has been significant turnover in the Medicaid population, though TennCare's structure should reduce this.

Assuming that enrollees in TennCare are appropriately classified, TennCare has expanded coverage to 400,000 people. If this is not the case, however, the expansion is lower by some order of magnitude representing the number of newly covered who, in fact, would have been covered under the traditional Tennessee Medicaid program even in the absence of TennCare. Individuals might be misclassified, for example, if enrollees prefer the easier eligibility process under the 1115 waiver and TennCare does not readily identify their eligibility for traditional Medicaid or require that they apply. They could also be misclassified because eligibility is assessed only every 12 months, and so intervening changes in status that may qualify one for traditional Medicaid are not identified.

A key issue for later study will be how enrollment levels for the newly covered fare as the state proceeds to bill for required premiums, including past due amounts. While premiums applied in year one, most bills were not sent, resulting in premium collections considerably lower than budgeted. TennCare officials say that the most recent figures show collections of \$15 million against a budgeted collection of \$30 million (Martins 1995). TennCare has now reportedly addressed this problem by sending bills that also cover past charges. This may cause individuals to drop coverage or to be dropped because of nonpayment.

TennCare's first year was rocky, and opinions differ about the magnitude of remaining problems and the program's future. TennCare is likely to undergo some changes this year, with a new governor in office in January 1995 and signs of the state's growing fiscal stress. TennCare was a major issue in the November 1994 elections, with physicians contributing substantially to the successful campaign of Governor Sundquist.

When we visited, several key issues were anticipated for 1995. These included whether to maintain the cram-down provision and whether to adopt a proposed state regulation limiting the ability of providers to restrict the number of TennCare patients on their panel. Another issue was whether (and how) the state will proceed with its plans to integrate case management services for

the chronically mentally ill into the MCO capitation rate and other special populations into TennCare.⁴ Yet other matters concerned how to strengthen and manage plan oversight and delivery of care as implementation proceeds, and whether the system will be fiscally viable in years two and later—particularly at current eligibility and benefit levels.

Since the visit, news reports and other information indicate that the cram-down provision will be retained and a proposed regulation prohibiting providers from limiting TennCare enrollees in their practice (unless the practice is closed to all new patients) has been withdrawn (Snyder and Cromer 1995a). The incorporation of services for the chronically ill into the MCO capitation rate is anticipated to occur by July 1, 1995. According to Manny Martins, "There are no issues of fiscal viability of MCOs or the program at this point in time" (Martins 1995). Governor Sundquist has announced that he intends to move TennCare to the Department of Finance and Administration so that plan oversight can be strengthened (Snyder and Cromer 1995a). Martins was replaced by Rusty Siebert, a businessman, in April 1994.⁵ David Manning has resigned to join Columbia/HCA as vice president. Staff continuity could be particularly important to TennCare because written documentation on some program aspects like financing appears to be quite limited.

More fundamental challenges are likely to face TennCare this year. On January 1, 1995, TennCare closed eligibility for uninsured individuals who are not currently enrolled or otherwise eligible for Medicaid or who are uninsurable. Some sources attribute the state's decision to freeze uninsured non-Medicaid enrollment in TennCare at the 1994 level due to inadequate program funding. The state maintains that TennCare's rules give it the option of not opening the program for new enrollment on a yearly basis and that the state decided not to open enrollment because TennCare had met its major enrollment objectives in year one. There are plans to clean eligibility files of duplications and ineligible. TennCare officials, for example, report no definitive data, but

⁴These include children in state custody and, potentially, those with developmental disabilities.

⁵Martins will remain a state employee at the University of Tennessee Medical School in Memphis and be on call to deal with issues.

sample surveys of enrollees show a rate of about 10 percent ineligible, which TennCare attributes to a deliberate plan to avoid eliminating individuals during the initial start-up period.

As discussed later, TennCare included various special financing pools in year one to address expected problems, such as adverse selection. The elimination of these payments in 1995 reportedly is threatening the fiscal viability of a few key hospitals, such as the Regional Medical Center in Memphis, colloquially referred to as "the Med" (Snyder 1995b; National Association of Public Hospitals 1995). Governor Sundquist has appointed a commission to advise him on TennCare and identify what changes may be required to respond to fiscal issues. Some reductions in program eligibility or benefits may be considered, though no legislative proposals have been submitted yet. A citizen's TennCare review commission was also being formed that, if funding could be secured, would provide independent research and analysis of TennCare. Chaired by David Goetz of the Tennessee Business Roundtable, this group includes advocates like Gordon Bonnyman, the dean of nursing at Vanderbilt, a lawyer and former state finance official, a black minister, a labor representative, and two TennCare enrollees. Thus, TennCare is likely to receive considerable attention in 1995.

KEY COMPONENTS OF THE INITIATIVE AND EXPERIENCE TO DATE

The following section discusses eligibility and enrollment, plan and provider participation, and state administration and oversight for TennCare. For each area, implementation issues, along with the experience thus far, are presented.

Eligibility and Enrollment

Two operational components are eligibility and premiums, and enrollment and marketing. We review TennCare's approach to these and the implementation experience, including the issues that it raised.

Eligibility and Premiums. Under the waiver, TennCare, initially had a maximum enrollment of 1.5 million, which the state first reduced to 1.4 million and subsequently to 1.3 million (Martins 1995). Subject to this constraint, TennCare covers three eligibility groups: (1) those eligible for Tennessee's Medicaid program under fiscal year 1993 policy; (2) persons with an existing or preexisting condition that causes them to be uninsurable; and (3) any uninsured person who is not eligible directly (or as a dependent) for an employer- or government-sponsored health plan as of March 1, 1993.⁶ This date (now moved forward to July 1, 1994) is designed to encourage employers and individuals to maintain existing coverage. Those enrolled through other than the mandatory Medicaid eligibility categories with incomes above 100 percent of the poverty level are charged a premium on a sliding scale (Appendix Table 1). At 200 percent of the poverty level, the premium is 20 percent of the capitation rate; at 400 percent, no subsidy is provided.

To ensure that TennCare stays within its enrollment cap, the waiver specifies freezing new enrollment in various groups as the cap is neared. At 85 percent of the cap, new enrollment of those with incomes above 200 percent of the poverty level is frozen. At 90 percent of the cap, it is frozen for those whose income exceeds 100 percent of the poverty level. At 95 percent of the cap, new enrollment is frozen for those eligible because they are uninsurable (Coughlin and Lipson 1994). Under the waiver, the definition of medically needy is expanded from a month's coverage to a full year's coverage for people who meet the spend-down limits in any given month.

TennCare generally retains the same Medicaid benefit package used previously, but removes the existing monthly limit of 7 prescription drugs and the lower level of payment for hospital inpatient services for those who stay more than 14 days. The package includes cost sharing on a sliding scale for those above the poverty level who are not traditionally eligible for Medicaid. For this group and for people whose income is up to 200 percent of the poverty level, there is an individual deductible of \$250 and a family deductible of \$500, as well as copayments of up to 10 percent. Out-of-pocket expenses are limited to \$1,000 for individuals and \$2,000 for families. Those whose

⁶The uninsurable group must meet the same criteria as those previously eligible for the state's high-risk pool program. Enrollment in this program was limited because the premiums were high.

income is above 200 percent of the poverty level pay more and can trade off lower premiums for more cost sharing. At 400 percent of the poverty level, the premium is not subsidized.

Enrollment and Marketing. As of the time of our site visit, people eligible under traditional Medicaid rules were enrolled at the welfare offices, as they had been before TennCare. Others could apply using a streamlined process through a broader array of sites, and outreach was conducted by community health agencies. At the inception of the program, a mailing was sent to people receiving food stamps to encourage enrollment. In mid-1994, the governor announced a marketing drive. Some enrollments also occur at the point of service when uninsured individuals seek care from providers like community health centers.

Eligibility for TennCare is reassessed annually, so unless the state becomes aware that someone no longer meets the eligibility categories, people should, in theory, be eligible for an entire year. Those losing coverage under traditional Medicaid are allowed a 30-day period to apply for TennCare and receive a letter informing them of this. We are not clear about how eligibility for the two programs was coordinated, especially since a person's status could change during the course of the year. Those enrolling through TennCare's expanded eligibility rules might experience a change in status that would allow them to be eligible under traditional Medicaid rules. However, this might not be detected and reflected in the statistics.

Current Medicaid enrollees were first notified of TennCare by mail in October 1993. Sent with little advance information or education, the mailing included a ballot that people were to use to choose MCOs, as well as marketing material from each of the plans serving their area. The materials did not include provider lists. Instead, recipients were encouraged to consult their physician and pharmacist about plan affiliations, although networks were not fully formed at that time. They were to choose up to three MCOs; those who did not were basically assigned to a plan. TennCare staff members indicated that, when Medicaid beneficiaries did not select an MCO, an initial attempt was made to match them by computer, based on the primary care provider they saw most often. However, since information on this issue was limited and networks were not in place, it is unclear how many enrollees were successfully matched to MCOs with this method.

The fallback approach, which appears to apply to most MCO assignments, allocated enrollees who did not choose MCOs themselves in proportion to the distribution of those who did so. After selection, enrollees had 45 days to change their MCO assignment. Concerned about potential confusion, TennCare reopened enrollment for specific MCOs for a few weeks in December. About 50 percent to 60 percent of individuals voluntarily chose a plan in year one. The state viewed this figure as phenomenally better than its expected rate of 15 percent, which was based on previous responses from the Medicaid population to its mailings. However, in the context of health care delivery system choice, this percentage is considerably lower than optimal.

The MCOs are responsible for notifying individuals as to which plan they are enrolled in and for sending them an enrollment card and membership packet. MCOs requiring people to select a primary care physician implement these policies at this point. While TennCare sends MCOs updates and changes in eligibility each business day, MCOs report a substantial lag before they are notified, particularly for those eligible under the new rules. TennCare reportedly holds these organizations responsible for care as of the application date and adjusts payments for retroactive changes in enrollment or eligibility.

Implementation Experience and Issues. There is broad consensus that confusion plagued the initial enrollment period, a fact perhaps unavoidable given the scale of change and pace of implementation. Massive numbers of telephone calls were reported by the state, MCOs, and providers. On just one day shortly after TennCare began (January 3, 1994), state officials reportedly received 50,000 dropped. TennCare responded by enlisting and training large numbers of state employees (not just TennCare or health department staff) for telephone duty from January until May 1994. Calls, taken from 7 a.m. to 10 p.m., were initially directed to a central 800 number. Separate 800 numbers now exist for general TennCare calls or problems and for providers. Additionally, there is a third number for the Tennessee consumer advocacy line that is run by the Tennessee Health Care Campaign, an advocacy group that has a contract with the state to monitor and address complaints, especially from vulnerable individuals.

Large volumes of calls for general information were reported elsewhere too. Access MedPlus, the only MCO under the old program and the only preexisting MCO with a 24-hour phone, reported that its telephone log grew from 2,000 to 60,000 calls per day over the first month. In east Tennessee, a health department staffer assigned to work out TennCare problems reported thousands of calls each month and general confusion at the start. A rural primary care provider said it had to hire staff and install phone lines to handle calls from confused individuals terrified of losing Medicaid coverage. Many illiterate Medicaid recipients reportedly could not understand the written materials, despite the considerable efforts by advocacy groups working with the state to make the material clear. These efforts were aimed at minimizing the comprehension problem to the extent possible, while still relying on a mail enrollment strategy.

Two factors heightened the general confusion. First, there was no readily available information on the providers in each MCO. Second, the rapid implementation of TennCare generated problems because, as previously noted, many MCOs had not yet fully formed their networks. Thus, enrollees had difficulty identifying which of the available health plans included their current providers. These problems were compounded because MCO provider lists were not always accurate even if they were available. For example, we heard reports—said to be undisputed—that the lists for the BCBS plan, which were outdated, included doctors who were dead or no longer in practiced in the state. In addition, TennCare eliminated the previous practice of mailing Medicaid enrollment cards monthly, which confused those with continuing eligibility.

We heard numerous reports from a variety of sources about the problems with enrollment. For example, one MCO was unable to get cards to new members by January 1, either because it was not notified of its initial enrollment until December 29 or because it could not read the tape previously provided. State officials indicate that some individuals were uncertain about where to seek care because of long delays in processing forms. These problems were accentuated because it was the MCO's responsibility to notify individuals of their plan.

Additionally, many people reportedly did not get any of their three choices or encountered extensive problems in retaining their existing providers. Application forms were not in duplicate,

leaving some people without a record of their requests. TennCare says that MCO capacity limits caused mismatches, though some others say that this is only a partial explanation. Further, there were reports that people were notified of their enrollment by more than one health plan. Some family members apparently were initially assigned to different MCOs. This situation was especially likely if one member was eligible for Supplemental Security Income (SSI) under Medicaid.⁷ (SSI eligibles are processed through a separate entity, the Social Security Administration, which made it harder to match their provider and MCO with those assigned to other family members.) Until notified by the plan, those assigned to a plan they did not select would not know where to seek care. Member handbooks for certain plans were not approved and available for distribution until well after the program began. (One was not even coming out until mid- to late-1994.) Newborns reportedly were not covered immediately at birth under parental policies, resulting in delayed eligibility. These issues left enrollees uncertain about where they should seek care and how they were covered. The problems also contributed to out-of-plan use.

Health plans expressed concern about being held liable for care over which they had no control. For example, we heard reports of receiving retroactive additions to or deletions from eligibility lists, which left MCOs financially liable for care after the fact. TennCare officials indicate that health plans are responsible contractually for all care received in or out of network until enrollees have been notified of their assignment to another MCO. Others say MCO responsibility to provide care to enrollees works differently, potentially providing economic windfalls to plans. This is also said to create problems for enrollees and providers because uninformed individuals seek care from pre-TennCare providers. We also heard reports of mistaken telephone numbers and frequent changes in such information as family size and income (which affects cost sharing). Some plans reported extensive enrollee turnover despite the 12-month policy for eligibility review. TennCare officials do not agree that this occurred.

⁷Supplemental Security Income is a federal income support program for low-income disabled, aged, and blind persons. Eligibility is determined by an individual's current status and is not dependent upon previous work and/or contributions.

The form of our study precludes assessing the magnitude of these problems and especially the extent to which they have been resolved. We heard mixed reports about this last issue. While TennCare officials are reasonably confident that the major enrollment problems are behind them, others disagree. A key outcome to monitor will be the experience as plans and individuals are notified about changes made during the second open enrollment period, which took place in the fall of 1994, with an effective date of January 1, 1995. David Manning indicates that, from what he knows, "this change went exceedingly well with very few problems for either MCOs or recipients" (Manning 1995).

There were also acknowledged marketing abuses in 1994, including enrollment of ineligible incarcerated individuals and those residing outside the state, questionable MCO assignments, and selective marketing. These issues appear to be associated with one plan and may now be resolved, though the press continues to report them (Snyder 1995c). Problems also arose because TennCare allowed MCOs to use various inducements such as life insurance to encourage enrollment. These are no longer allowed. On January 17, 1995, TennCare released Marketing Guidelines (indicated as retroactively effective to January 1, 1994).

Plan and Provider Participation

This includes both the plans eligible for and agreeing to participate, the contractual requirements imposed, and the provider networks in participating plans. We review TennCare's approach to these and the implementation experience, including the issues that it raised.

Plan Eligibility and Participation. TennCare-eligible MCOs include state-licensed HMOs under the authority of the DCI and other organizations designated as PPOs by TennCare. TennCare rules and regulations define a PPO as "a managed care organization other than an HMO which is approved by the Bureau of TennCare as capable of providing medical services in the TennCare program (Tennessee Department of Health, March 1994, p. 5)." Participating HMOs are required to agree to an 18-month noncancellable contract. It does not appear that any formal written request for proposal (RFP) was prepared for contracting. Rather, applicants were to meet service and

pricing conditions in the contract. PPOs reportedly were to meet the same fiscal solvency and quality requirements as HMOs.

However, the procedures for assessing their fiscal and quality status are not clear—nor is it likely that they were well-developed when these decisions were made. TennCare staff members indicate that both quality improvement plans and expansions in network service areas are needed prior to approval of the TennCare medical director. TennCare officials said that 20 plans originally applied and 12 were accepted. (At least 2 of the 20 withdrew because of the 18-month condition.) One plan with a reportedly poor reputation in another state was rejected or discouraged from participating, but in general plans were not selected competitively. Plans willing to meet the state's terms and price were accepted.

MCOs under TennCare were approved for specific service areas defined in terms of the 12 community health agencies (CHAs) established by state legislation in 1989 to coordinate services for the medically indigent. TennCare deliberately sought to offer a second statewide plan (Access MedPlus) in addition to BCBS. TennCare officials indicated that service area approvals and capacity constraints were established by reviewing staffing ratios and output from software that codes addresses by geographic location (geocoding). Some MCOs say they were discouraged from service areas broader than those approved for reasons they did not understand. We were told that, statewide, 44 percent of the enrollees at about the time of our visit were in the BCBS plan, and 26 percent were in Access MedPlus. Compared to these two plans with 300,000 to 600,000 enrollees, all other MCOs had fewer than 80,000 TennCare enrollees, and four had fewer than 20,000.⁸

About 100,000 enrollees are reported to have switched plans during open enrollment. As a result of these changes, BCBS and HealthNet gained market share and Access MedPlus lost market share. With these changes, BCBS had about one-half the total TennCare enrollment (49%) and Access MedPlus had just under one-fourth of total enrollment (24%) (Appendix Table 2).

⁸These percentages for BCBS and Access MedPlus are different from those shown in Appendix Table A-2, which reflects the influence of open enrollment season changes.

DCI licenses 17 HMOs in Tennessee, many of which are part of national organizations whose presence in Tennessee is unclear as they do not report state-specific enrollments. Of these 17 HMOs, 8 are TennCare contractors, though 1 or 2 participate in TennCare as PPOs, not HMOs. Of the TennCare HMOs, four were formed in response to TennCare, two by academic medical centers (Vanderbilt University and the University of Tennessee) as a defensive move and two others (Memphis Managed Care and Phoenix). The two other TennCare HMOs—Access MedPlus and John Deere—existed before the initiative was launched and served, respectively, a Medicaid and a commercial enrollee population. Two existing HMOs participate in TennCare as PPOs (Prudential and HealthNet/Total Care).⁹ Other TennCare PPOs in addition to these and BCBS of Tennessee are Omnicare, Preferred Health Partnership, and TennSource.

Contractual Requirements and Payments. The standard contract with MCOs includes requirements related to network capacity, care to be provided, quality assurance and grievance systems, and administrative and other issues (Exhibit 1). These requirements are not used for fee-for-service providers and are typically viewed as an important benefit of managed care. PPOs are allowed three years before they must implement a primary care case management system. They are paid on a capitated basis, but their regulatory status with respect to financial risk is uncertain and we heard different interpretations on this issue by state officials. In the commercial market, PPOs are not allowed to bear risk, and there is a State of Tennessee attorney general opinion to this effect (Office of the Attorney General 1995).

Under TennCare, some PPOs have dealt with this constraint by holding providers at risk. However, it is unclear who would ultimately be accountable in fact—the state, the PPO, or the provider—should the capitation payments made to an MCO fall short. David Manning indicates that, "each party is to uphold its contract. Contracts between MCOs and providers provide for a shortfall.

⁹We were unclear whether Prudential operated under HMO authority or as a PPO. Plans sometimes vary in their name by product, making tracking difficult.

Exhibit 1
Some Contractual Requirements for TennCare Health Plans

Provision of covered services	<ul style="list-style-type: none"> • Demonstrate capacity to provide covered health care services throughout community where offered • Provide covered services to extent practical within the geographic parameters of designated community service area • Demonstrate capability and intent to provide case management services through MCO organizational structure or by primary care providers as case managers
Provider panel	<ul style="list-style-type: none"> • Ensure that all enrollees have a PCP either through selection or assignment by MCO • Assure availability of providers who provide covered services not offered by providers located within a particular community service network
Record keeping	<ul style="list-style-type: none"> • Maintain current medical records for each TennCare enrollee consistent with medical and professional practice standards
Quality assurance	<ul style="list-style-type: none"> • Maintain an internal quality monitoring system; designate an active quality monitoring (QM) committee that includes the MCO's medical director, health plan providers, and a representative of TennCare's Office of the Medical Director, and that meets at least on a quarterly basis • The QM committee is responsible for performing QM functions within the organization. Areas of responsibility include: <ul style="list-style-type: none"> - reviewing quality of clinical care and non-clinical aspects of services against clinical and delivery standards - specifying quality of care studies to be undertaken and timetable for them - providing feedback to health professionals and staff about performance and patient results - writing procedures and protocols for remedial and corrective actions
Complaints and grievances	<ul style="list-style-type: none"> • Provide readable TennCare-approved materials to enrollees that inform them of their rights • Develop internal grievance procedures approved by TennCare and hire a grievance coordinator: appoint service site contact persons to direct grievances to plan's grievance coordinator • Ensure availability of grievance forms at each site
Member information and education	<ul style="list-style-type: none"> • Provide a full written explanation of plan to enrollees that includes their effective date of enrollment, a description of provided services, grievance procedures, provider list, emergency service procedures, and next open enrollment period
Financial solvency	<ul style="list-style-type: none"> • Submit to TennCare annual audited financial statements that summarize MCO financial activities as well as income statements, balance sheets, and statements of changes in cash flow
Encounter data	<ul style="list-style-type: none"> • Report individual encounter/claims data in a format specified by TennCare and electronically transmit to TennCare on a specified basis

Source: Tennessee Department of Health, Bureau of TennCare.

The contracts provide for withholds on the part of all managed care organizations (HMOs and PPOs) in their provider agreements. The managed care organization itself is held responsible by withholding from its administrative fees the same percentage that it withholds from providers. The administrative fees are refunded only to the extent that the MCO refunds the provider withholds" (Manning 1995).

PPOs are restricted to 10 percent administrative cost and 5 percent profit to be shared with providers; however, it is unclear how this would be enforced, as it did not appear to us that TennCare or DCI had current financial data from PPOs.¹⁰ According to Manny Martins, "PPO administrative expense is limited to 10 percent since they do not assume risk. The HMOs, because they are at full risk, are not limited as to administrative expense" (Martins 1995). HMOs file financial reports to DCI that are publicly disclosed.

TennCare pays all MCOs on a monthly capitation basis. Capitation rates are determined by the state based on prior experience. Offsets are made for service not included under capitation and for anticipated savings from managed care. Further, state payments are reduced to reflect the contribution to expenses from patients (cost sharing), bad debt (provider savings), and local government contributions (local savings).¹¹ A 5 percent annual inflation rate is assumed; 10 percent of the capitation rate is withheld, reportedly to be paid in the next monthly payment cycle if TennCare's quality assurance standards are met (Tennessee Fiscal Review Committee 1994). For example, monthly per capita rates under TennCare average \$136.75, varying from \$50.60 for a child age 1 to 13, to \$315.74 for a non-Medicare-eligible aged, blind, or disabled person. Deductions averaging \$35.65 are made to account for local government contributions, charity, and

¹⁰TennCare officials indicate that PPOs are required to file the same information as HMOs. However, the effective data for implementing this requirement possibly were deferred or response was delayed.

¹¹Capitation rates reflect historical Medicaid program spending for eligible services combined with an estimate of costs for those newly eligible based on state employees' experience (Coughlin and Lipson 1994). Rates exclude such expenses as administration, noncapitated services like long-term care, DSH payments, and payments for capital and medical education. Rates, which are discounted 15 percent to reflect anticipated savings from managed care, are further offset by an average of 25 percent for charity care, local government contributions, and patient cost sharing.

coinsurance/deductibles (26 percent of the total). The amount deducted for each plan is proportional to that plan's capitation rate relative to others, once demographic and other characteristics are included. Thus, TennCare capitation rates paid in advance appear to include only about two-thirds of the estimated expense, taking the risk withhold into account. TennCare uses a single statewide rate, with adjustments based on demographics (age, sex for those of child-bearing age, and disability). This approach may be modified in the future.

Provider Networks. By contract, MCOs must provide a full range of services and ensure the availability of services for TennCare enrollees equal to those available to others in the market. MCOs are to rely on providers outside the community for services not commonly available locally. Within this, they must meet the time, distance, and volume requirements set by TennCare. As noted, these are assessed using provider ratios and geocoding software. The percentage of providers participating in TennCare is reportedly higher than was the case before TennCare, when fewer than 40 percent were said to participate in the Medicaid program. MCOs vary in their form of provider payments. For example, BCBS uses a fee schedule, and Access MedPlus capitates primary care providers for their services.

The only formal written requirement was the MCO's contract with designated perinatal centers for the care of high-risk pregnant women and their babies. MCOs may have been informally encouraged to use selected specialists as primary care gatekeepers for specific special needs populations (such as hematologists from the state program for hemophiliacs). Most MCOs appear to contract with community health centers or county health departments that offer the full range of care. Condition 8 of the waiver requires that plans either offer contracts to federally qualified health centers (FQHCs) or have sufficient providers in the network to cover the area. The Tennessee Primary Care Association reported that members have contracts with MCOs and are variably paid on a capitation or fee-for-service basis, depending on the plan. Advocates claim that requirements to use cost-adjusted (for adverse selection) capitation rates for FQHCs have not been enforced, but TennCare officials dispute the applicability of the requirement (Manning 1995).

While Access MedPlus rates are regarded as adequate, rates from some other plans are viewed as insufficient. (Among these are BCBS and Vanderbilt University, which pay, respectively, on a fee-for-service and capitated basis.) Over time, MCOs have increased their use of county-based primary care providers under contract. Five MCOs pay fee for service for preventive services offered through county departments, though counties have to request this, and agreements must be negotiated between both parties.

Implementation Experience and Issues. Starting from a base of limited managed care, TennCare predictably did not shift in year one to a system with fully functioning and well-developed MCOs. While we do not have information from all MCOs, their structural limitations appear to be widespread. Many of the providers and other stakeholders we interviewed commented that TennCare, at least so far, is basically much more about managed costs than managed care, with limited change in the delivery system.

In theory, all TennCare enrollees can choose from at least two MCOs, with urban enrollees having more choices than their rural counterparts. However, MCOs do not appear to have adequate networks in all their service areas. This is particularly an issue when there is only one alternative plan—a feature common in rural locales. There are other network-related problems as well. In some counties, for example, there are no contracted providers (sometimes because there are overall shortages and sometimes not) or contract gaps for particular specialty services like orthopedics. Further, some networks are poorly designed. In certain cases, hospital and physician contracts are inconsistent. For example, MCOs in some areas have contracts for surgeons but not for anesthesiologists in the contracted hospital. These problems seem more widespread in rural communities, though they also occur in urban areas. TennCare officials report that looking only at contracted specialists could be misleading, as the TennCare requirement is to provide these medically necessary specialist services.

Some TennCare MCOs appear to lack many features typically associated with well-structured managed care plans, and there generally is limited education about working within an MCO for both providers and enrollees. BCBS, which has three years to adopt a primary care case management

system, is just now designing some pilot programs. Further, grievance systems and quality committees for TennCare are in early implementation stages. Our discussion with staff at the BCBS plan suggests that this MCO still has a system geared mostly to paying discounted fee-for-service rates with utilization review, rather than actively managing care for populations of enrollees. However, unlike most other MCOs, BCBS had an existing electronic claims-processing system and was thus better able than some other MCOs to pay providers on a timely basis and to supply TennCare with encounter data.

Access MedPlus was initiated with foundation funds and relies heavily on community health centers. The plan remains minority-owned and closely affiliated with the low-income community. In contrast to BCBS, Access MedPlus appears to have functioned in some ways very much like a small HMO prior to TennCare, with an enrollment of 35,000. It sought accreditation from the National Committee for Quality Assurance (NCQA) and said it received a one-year provisional accreditation before TennCare. For example, according to the senior staff, Access MedPlus credentialed all providers before TennCare became effective, reviewing the qualifications in the application, malpractice and drug history, board certification, hospital privileges, and experience in the Medicaid program. Access MedPlus also made an initial site visit and conducted an annual medical record review. However, unlike traditional HMOs, its provider contracting and payment relied heavily on state systems for services other than primary care.

With TennCare starting, Access MedPlus decided to expand statewide, targeting growth at 100,000 to 150,000 enrollees. It changed its name to appear before BCBS on the alphabetically ordered enrollment form. After voluntary selections were allocated, Access MedPlus reached its enrollment goal. Following involuntary assignments, plan enrollment reached 275,000 at the start of TennCare and grew to 330,000 in the first year. (Its enrollment has since declined.)

Access MedPlus was ill-prepared for this growth, starting with 50 staff and no claims-processing system or specialty contracting. For example, its annual credentialing burden grew from 200 physicians to 1,900, forcing it to accredit physicians provisionally for the first time. (Access MedPlus

now reports that all primary care physicians and most specialists and ancillary providers are fully credentialed.)

We heard reports of staff working around-the-clock to address problems and build systems. Also reported was a spirit of commitment, with children of staff sleeping in the office and an optimism about ultimate success. In addition, we heard that staff members were excited about broadening existing programs for prevention and prenatal care. They were enthusiastic about new contracts to case manage HIV, transplant, and other seriously ill cases, and expanding outreach and education activities for enrollees and providers.

However, we also heard many complaints from consumers and providers. They faulted limitations in Access MedPlus' provider networks and care systems and delays in claims payment. Delayed payments were a particular concern for those who were not capitated: The claims payment system was not operational until mid-1994. Access MedPlus acknowledges these problems. When providers complained, the organization responded by sending checks subject to later reconciliation against bills when systems were more developed. Unfortunately, though this response was well-meant, providers found it created confusion because their administrative systems were geared to tracking incurred revenues and expenses for specific services and patients.

Problems with the delivery of care in at least some of TennCare's MCOs also appear to exist, though our methods do not allow us to assess their magnitude, and empirical evidence to confirm them is lacking because of data constraints and timing. Nor can we evaluate the extent to which the problems are due less to system design than to the results of start up and initial provider confusion related to both inexperience with managed care and limited education.

Pharmaceutical issues seem to be a special concern, though TennCare officials state that "all of the MCOs have well-developed policies and procedures for handling formulary issues, including medical necessity overrides." We heard reports of MCOs with formulary policies that apparently do

not entail well-developed or functioning systems to allow for and have physicians approve exceptions when patients experience adverse effects from a medication shift.¹²

Additionally, the program clarified coverage of prescription medications and formularies in February 1995 (Tennessee Department of Health, Bureau of TennCare 1995h). This lag suggests that provision of pharmaceuticals was a problematic area, at least in 1994. We also heard that MCOs did not inform their network physicians of the content of their formulary. Thus, beneficiaries were going to network doctors as required, but receiving prescriptions that the network pharmacies refused to fill because the drugs were not on the MCO formulary.

In some instances, doctors may have been resentful of the program, the MCO, and the patient, and simply refused to make any effort to conform with the formulary. Pharmacies could have little financial incentive to help the patient by asking the doctor to substitute a covered drug or obtain prior approval from the MCO. Some MCOs were said to require beneficiaries with having a cost-sharing obligation to prepay the full purchase amount of the drug and file for reimbursement, even after the enrollee had satisfied his or her deductible obligation. This could be a serious barrier for HIV+ and cancer patients, and others needing very expensive drugs.

To address these concerns, advocates negotiated a policy that required MCOs to cover a three-day supply of any drug prescribed by their participating physician, when the pharmacy could not obtain from the doctor immediate authorization to substitute another approved product. This policy was to ensure that the patient did not have to go without medications until the MCO and its various providers reconciled their differences. However, advocates say the policy has not been enforced and problems persist. We were told about prior approval systems that were perceived as burdensome and as not accounting for continuing care requirements of chronically ill individuals. Disruptions in traditional referral and care systems that had previously been pieced together using public and private providers (without replacing these systems with alternative arrangements) have

¹²For example, we were told of a patient with hypertension whose provider worked hard to find a drug to stabilize the patient, yet was forced to use another less effective drug.

also been reported. The stories we heard illustrate problems that arise when a managed care system is not yet fully functional.¹³

TennCare officials expect some sorting out from participating plans, with potential changes in market share consolidations or even failures. They welcome this as an important part of the evolution of a well-functioning managed care system. During the most recent open enrollment period, about 100,000 people shifted, resulting in major gains for BCBS and HealthNet and major losses for Access MedPlus. There have been a few changes in plan ownership. At the time of our visit in December 1994, it was unclear whether Access MedPlus would or should remain statewide, given the serious erosion of its network in east Tennessee. However, a TennCare official indicated in April 1995, "Access MedPlus has a complete network in all areas of east Tennessee, including Knoxville, which meets the HCFA guidelines" (Martins 1995).

It is too soon to tell how well MCOs can manage financially within the capitation rates paid. At year end, there was uncertainty about the level of additional state payments from various pools discussed. The extent of incurred-but-not-reported (IBNR) claims also was uncertain. These claims could be higher than usual given the confusion associated with initial implementation. On the other hand, this confusion may have reduced short-term fiscal pressures as enrollees sought care from their previous providers, many of whom absorbed these expenses as part of the transition. Many MCOs reported fiscal shortfalls that they anticipated would be offset with financing they expected to receive from the year-end distribution of funds from pools. These expectations appear to be fueled, at least in part, by supposed oral agreements between MCOs, providers, and state officials.

It is difficult to draw conclusions about the adequacy of TennCare's capitation rates as these translate into provider payments.¹⁴ One pre-implementation study of the actuarial soundness of the

¹³For example, one provider noted that an infant discharged from the intensive care unit needed a home feeder pump in order to eat. The pump never arrived, and the baby had to be readmitted. When the infant was discharged the second time, the feeder pump was provided. But the person delivering it worked on-call with a pet store and could not teach the family how to use it.

¹⁴Medicaid rates in Tennessee before TennCare (1993) were 93 percent of Medicare rates, which compares to a national average of 73 percent (PPRC 1994). In Tennessee, as elsewhere, rates are likely to be substantially below private market rates. Though analysis of this issue is complicated by differences in bundling policies across payers. For example, one interviewee suggested that

rates is said to have found that rates were not sound and assumed too much savings from managed care (National Association of Public Hospitals 1994). TMA staff members state that information obtained through discovery in the association's court case opposing TennCare shows that the rates are unsound (for example, by assuming only partial year coverage). Some view TennCare's MCO strategy as a key part of lowering what are regarded as excessive provider payments. BCBS appears to have lowered rates, on average, from historical Medicaid levels, at least at the start of the program and particularly for specialists. Hard evidence for this is lacking, however.¹⁵ Access MedPlus is viewed as generous in its primary care capitation rates. We assess later what we know about the initial effects of TennCare's rates on traditional safety net providers.

State Administration and Oversight

Operational components include the administrative structure, financing, and oversight of MCOs. We review Tennessee's approach to each of these components and the implementation experience, including the issues that it raised.

Administrative Structure. TennCare appears to be administered, at least formally, with about the same level of state resources used before the waiver (State of Tennessee 1993). The TennCare bureau was located in the Department of Health in 1994. The six operational components of the organization cover business, finance, and research; policy and intergovernmental relations; information services; member, provider, and contractor services; medical director; and long-term care. The waiver application shows no change in total administrative staff pre- and post-TennCare, but that the staff of about 200 was to be reorganized, the distribution of contracted services changed, and management information systems (MIS) modified. We were unable to interview key bureau staff in depth. Thus, we cannot assess, except in broadest terms and from external sources,

Medicaid primary care rates before TennCare were not below commercial rates once differences in bundling were accounted for.

¹⁵Rates were later raised for primary care physicians, perhaps due to state pressure.

the administrative changes required by TennCare, how they were implemented, and what staff learned from that experience.

TennCare also draws on other state programs for administration and oversight. The Bureau of Health Services, which operates traditional public health and county-based prevention and primary care services through the 95 health departments in Tennessee, has a minimal role in TennCare. It date-stamps eligibility forms, which is important, for example, to hospitals in obtaining retroactive coverage, and it supplies localities with enrollment forms. The bureau has tried to expand primary care services selectively, facilitate contractual arrangements with MCOs, and help localities solve problems. In terms of oversight, the functions of the DCI, which licenses HMOs, are described below. The Bureau of Manpower and Facilities, a sister agency in the Department of Health, is responsible for quality assurance and the utilization of management services for HMOs, although TennCare's medical director and Division of Quality Improvement are primarily responsible for TennCare MCO quality oversight.

Financing. TennCare involves a complex financing arrangement, which was not the direct focus of our study. However, we discuss it here because it is important to TennCare to the extent that it defines available resources. An important objective of TennCare's developers was to retain federal funds from Medicaid despite changes in policy on DSH payments and provider taxes. Tennessee had used these provisions extensively in recent years to support program expansion. To do this, TennCare relies on a complex approach for generating the required state matching funds. Nonfederal contributions to the costs of TennCare come from a variety of sources. According to information provided to the Tennessee Fiscal Review Committee on November 23, 1993, at the time of waiver approval, TennCare's total expenses for fiscal year 1994/95 were projected to be \$3.7 billion, \$2.2 billion of which would be funded by federal Medicaid contributions, \$1.1 billion by the state, and \$0.4 billion by the charity offset used in establishing the capitation rate.¹⁶ State funding, in turn, was to be derived from a number of public and private sources. These included:

¹⁶We present data for fiscal year 1994/95, since the financing in the previous year (fiscal year 1993/95) reflects an equal blend of pre-TennCare and TennCare experience and is thus more difficult to interpret.

- Core state funds, \$395 million. This represents historical Medicaid spending by the state in FY1993/94 after an offset for the amount contributed by the hospital tax.
- Other state funding, \$160 million. This represents funds used elsewhere in state government to fund indigent health care and that are applied to the state match. It includes the state portion of block grants for maternal and child health, community mental health, substance abuse, and selected other public health services.
- Certified public expenditures, \$127 million. This is calculated on the basis of an estimate of the expenditures for charity care in public hospitals that HCFA permits to be attributed for purposes of the state match.
- Patient care revenue, \$101 million. This is an estimate of the premiums to be collected under TennCare.
- Nursing home tax, \$84 million.
- Local government expenditures, \$53 million. This is an estimate of the local government funding to private hospitals for indigent care.

These estimates leave a shortfall of \$171 million in state funds, which is said to be funded both by state general tax revenue and the 2 percent general premium tax on MCOs.

The \$3.7 billion spending in TennCare in fiscal year 1994/95 includes \$986 million for long-term care, administration, and Medicare payments outside the scope of the waiver. The remainder (about \$2.7 billion) reflects state capitation payments to MCOs, discounts applied in setting the capitation rates that are counted in the budget for purposes of meeting state match requirements—that is, charity care, patient cost sharing, local government funds—and various financing pools negotiated with HCFA (Coughlin and Lipson 1994). The purpose of the pools is to smooth the transition to TennCare by addressing known limitations.

Because these pools involve substantial negotiations with HCFA and were still being developed during our visit, it is hard to pin down their form. The source of pooled funds in year one appears to be a combination of explicit funds established in the TennCare budget and other funds potentially available because of start-up savings. The budget-designated fund is termed “an essential providers fund” with \$185 million that in theory is to support payments to essential providers, a reserve to pay providers with adverse selection, and a primary care provider pool. The other pools are to come from an unallocated fund financed with any savings that would accrue if TennCare's workload does not reach the estimated enrollment cap. This second financing source can cover graduate medical

education and uncompensated care provided to TennCare eligibles in the first 30 days, with a priority first on payments to essential providers.

It is not totally clear from the information we were able to obtain what payments have been made and what amount of funding, if any, will be available in future years. TennCare's first year equally straddles two state fiscal years. In the first (fiscal year 1993/94), \$81 million in pool payments were apparently made, \$22 million for medical education and \$58 million for those eligible but not enrolled. Ten providers (all hospitals) received payments for medical education, and 16 from the pool for those eligible but not enrolled (the 10 hospitals plus 6 others, 5 of which are mental health providers and 1 of which is a child health provider). We have data only for the first four months of fiscal year 1994/95 (July-October 1994). Over this period, an additional \$47 million was spent (for a total of \$128 million), generally for the same providers except that payments were not made during that time to mental health providers. At the time of our visit, mechanisms for additional payments were being developed, including payments to essential providers and for adverse selection. Reports by the press indicate that a total of \$217 was paid from the unallocated fund pool in 1994, but both pools are now said to be depleted (Smith 1995a).

Oversight of MCOs, Including Fiscal Solvency and Quality. TennCare-participating HMOs are regulated by DCI, whose standards are based on the 1985 version of the National Association of Insurance Commissioners (NAIC) Model HMO Act. New HMOs are required to meet certain deposit and capital requirements. They must also submit organizational documents, including information on contracts with participating providers, a financial statement and plan, information on the service area and complaint procedure, and marketing material. Additionally, applicants must demonstrate to the Department of Health their ability to deliver health services "efficiently, effectively, and economically," submitting information on delivery systems, quality improvement and utilization management programs, policies and procedures for members and physicians, credentialing systems, physician payment methods and the medical director's job description, work schedule, and qualifications. Thus, DCI oversees financial issues and marketing, and the health department oversees the quality assurance and utilization management functions. DCI requires biannual HMO

surveys and a letter from the survey team prior to initial license. DCI in theory receives complaints, referring some to the health department when appropriate. However, complaints about TennCare have tended to be directed elsewhere, especially when they involve issues other than those typically under the aegis of DCI.

DCI was not heavily involved in the implementation of TennCare, though it licensed new HMOs formed in response to the program. The department did not review currently licensed HMOs again, even if their service area was to be expanded considerably and their provider network altered substantially. As one state official said, "No one expected already licensed HMOs to have problems." DCI appears to have played a role in identifying and addressing marketing problems, such as incentives like life insurance used by one of the plans. Further, although DCI was involved in developing marketing guidelines, it was not required to approve marketing plans in year one. (Based on an opinion from the state attorney general, it appears that DCI will do this in 1995.) The department has also been involved in monitoring HMO fiscal solvency. It is aware of a few plans with problems, at least one of which has since been acquired by a new owner. While the department has an employee on site at one problematic plan, the person's role is unclear. DCI perceives that IBNR issues preclude the ability to assess the financial status of plans accurately at this time.

DCI has no authority over PPOs, and its regulatory role with BCBS is based on the general insurance licensure authority.¹⁷ Thus, TennCare has had primary responsibility for PPO oversight.¹⁸ For the most part, we are not clear about how these functions are carried out. While in theory PPOs are to meet MCO requirements, and financial reporting is said to be required, our impression is that these obligations were not met in 1994. The grievance and complaint system procedures are not consistently well-defined according to plan advocates, so the information available at the state level varies with how the MCO interpreted these requirements. The Tennessee Health Care Campaign, which operates a state-funded hot line, is developing a standard grievance form and set of policies and procedures.

¹⁷This was changed in 1995.

¹⁸We are uncertain about the authority of the Department of Health with respect to these plans.

To facilitate monitoring, TennCare awarded a contract to HealthFirst to carry out the external quality review organization function. The award was made on a sole source basis reportedly because of time constraints. HealthFirst was previously Virginia Computer Corporation, a Medicaid claims processing specialist that still retains claims-processing responsibility in Tennessee for long-term care and other services not capitated under TennCare. Health First's qualifications for assessing quality in TennCare MCOs are not perceived to be strong. It has merged with First Mental Health Services, a mental health utilization review and quality assurance organization. State officials say Health First audited plans in 1994, assisted in refining quality improvement committees, and addressed encounter data issues. However, it is unclear what has been accomplished, in part because of data constraints.

There have apparently been auditing visits to TennCare MCOs by state staff. The state comptroller of the treasury, who is selected by the legislature, is the state auditor; the comptroller's staff serves as a source of research analysis for the legislature. State comptroller staff members also audit DCI and accompany the internal teams auditing MCOs. In addition, they provide the legislature with analyses of financial and quality criteria in TennCare MCOs. Each MCO has reportedly been visited by a team at least once, though some visits may have occurred early in the implementation of TennCare.

News reports indicate that MCO oversight under TennCare is being enhanced (Snyder and Cromer 1995). Governor Sundquist created the position of deputy commissioner in DCI to "ensure greater oversight and financial accountability" for TennCare plans. All MCOs, not just HMOs, will be required to file financial reports with DCI. In addition, the governor said that an independent review of TennCare would be conducted by the state controller's office and an outside firm. The legislature recently reauthorized the select TennCare Oversight Committee, though its staffing is quite limited. A policy advisory committee involving senior administrative and legislative staff is to meet regularly on TennCare, and a TennCare Roundtable will be formed to gain the views of health care providers, patients, and other interested parties.

Implementation Experience and Issues. Though our ability to analyze state administration and MCO oversight in TennCare is constrained because of limited interviews with state officials, it appears clear that there are weaknesses and at least transitional issues in this area. This finding is not unexpected.

The implementation time frame appears to have required a focus on urgent administrative needs, with only limited work on more generic administrative and oversight systems. These include, for example, collecting premiums or implementing MCO contractual requirements and monitoring PPOs for adherence to these requirements. TennCare officials appear to be committed to resolving problems on a case-by-case basis, generally deciding in the beneficiary's favor. For example, TennCare reportedly resolved specific problems raised by the Bureau of Health or particular beneficiary complaints that came to the attention of policymakers.

In part because it was so rapidly implemented, TennCare systems did not necessarily prevent problems but dealt with them as they arose. For example, TennCare officials apparently spent considerable time reviewing and computerizing provider lists for specific MCO networks to assess their capacity. They did so, however, after errors were found in the original lists from plans like BCBS and possible network issues developed with specialists in Access MedPlus. They were also involved in addressing issues related to allegations of marketing abuse by one TennCare MCO. This approach is limited by the potential effects and costs of problems that might have been avoided by a more developed administration structure. Case-by-case solutions to problems can also create inequities for people and problems judged to be of lower priority.

TennCare's administrative structure in year one raises inevitable issues of public process and procedures. Many key policies and procedures do not appear to be recorded or at least widely available and known. We heard many conflicting views about TennCare policies and procedures from diverse parties whose professional roles should have ensured detailed programmatic knowledge. The TennCare bureau issued program rules and regulations on March 17, 1994, with limited detail on the managed care features of TennCare. More details are included in the Department of Health's TennCare Standard Operating Procedures (TSOPs) that are issued serially

to MCOs, but the TennCare Bureau only began to issue these memoranda in mid-1994. Few substantive clarifications were provided until late 1994 or later, in 1995. These memoranda are retroactively effective to January 1, 1994, but the impact of this retroactive date is unclear.

There has been relatively little opportunity for formal public comment. Case-by-case attention to concerns inevitably raises issues of equity across the population, especially when some individuals may be better positioned than others to get the attention of state officials. In our interviews, we did not hear many complaints about actual abuses of state authority. We heard a few complaints from MCOs that are concerned about perceived state channeling of enrollees with specific needs to their plan, at times retroactively. On a more pragmatic level, the apparent absence of extensive documentation of formal policies and procedures raises serious concerns about institutional memory and performance to the extent that only a few key people whose tenure is uncertain know about these issues or details.

EARLY INSIGHTS

Tennessee's significant geographic and demographic diversity influence the potential effects of TennCare throughout the state. Urban and rural areas differ, as do the eastern and western regions of the state. Roughly 2 million of Tennessee's 4.9 million residents live in counties associated with four urban centers: Memphis, Nashville, Knoxville, and Chattanooga (Appendix Table 3). Overall, 39 percent of the population resides outside of urban areas, a proportion considerably above the United States average of 25 percent. We were told that east Tennessee is heavily white and Republican, middle Tennessee more racially and politically mixed, and west Tennessee more predominantly black and Democratic. But there also is considerable variation within areas. We were also told that race historically has played—and continues to play—an important role in care patterns. Census data show more complex differences across areas of the state but confirm the demographic patterns overall.

These patterns indicate that a substantial share of TennCare enrollees (58 percent) reside outside the four counties that include Tennessee's major urban centers. This is important to keep in mind as provider availability and care patterns differ substantially between urban and rural areas, as well as across the state's various regions. For example, there are 723 residents per physician in the four urban counties, but more than three times as many (2,547) in the other areas (Appendix Table 4). Additionally, there is an oversupply of physicians and hospital beds in parts of Memphis-Shelby County, but gross lack of access in minority inner-city census tracts, and severe shortages elsewhere in west Tennessee. Proprietary hospitals are numerous in middle Tennessee, but are not generally found in west Tennessee. Urban public hospitals are crucial parts of the system in Nashville and Memphis, but nowhere else. The culture of the medical profession (and physicians' attitudes towards serving the poor or uninsured) varies markedly among different communities, even within the same general region.

Effects on Care Patterns, Access, and Special Needs Populations

In Tennessee, as in most states, good information on the care patterns of individuals is not routinely available. Nor are there readily available data on how these patterns vary by important characteristics like income, race, or insurance status. Thus, our assessment of what the data show about how care patterns and access changed under TennCare is necessarily incomplete, and, to an extent, qualitative. However, our analysis benefits from consumer surveys of Tennesseans conducted in September 1993 and August 1994 by Fox and Lyons at the University of Tennessee. Our case study has drawn heavily on their findings.

The study, which was designed and conducted by the Center for Business and Economic Research at the University of Tennessee under contract to the Tennessee Department of Finance and Administration, consisted of two rounds of randomized telephone surveys of 5,000 Tennessee households in September 1993 and August 1994. The survey included questions about health insurance status, perception of quality of care received, satisfaction with insurance coverage, and care-seeking behaviors both for the survey respondent and other members of the respondent's

household, including children. The overall survey response rate in both years was about 60 percent. The response rate for the lowest-income category of state residents (those with an annual household income of less than \$10,000) was appreciably lower than that for higher-income categories; the survey team weighted responses in the lowest-income category accordingly.¹⁹

Although estimates of the number of uninsured people in Tennessee before TennCare vary, the University of Tennessee's 1993 survey results suggest that about 450,000 Tennesseans, or 9 percent of the state's population, were uninsured prior to the initiative. The variation in these figures may result from a combination of contributing factors. Among these are the inability to distinguish well between those on Medicaid and the uninsured, the survey's underrepresentation of low-income individuals (despite adjustments), small numbers of interviewees, or other methodological problems.

In 1993, the vast majority of uninsured survey respondents (83 percent) reported they lacked coverage because they could not afford it; the remaining 17 percent said they either had not "gotten around" to getting coverage (7 percent) or thought they did not need it (6 percent). As for quality of care, the uninsured survey respondents and those on Medicaid were more likely to rate their care as fair or poor and less likely to rate it as excellent, compared with respondents who had private insurance or Medicare (Appendix Table 5). About 40 percent of uninsured respondents and individuals on Medicaid rated their care as fair or poor, compared with about 25 percent of respondents with private insurance or Medicare coverage. However, there was much less disparity in the perceived quality of care received by respondents' children regardless of insurance category. Approximately 70 percent of parents in all three categories (Medicaid, uninsured, and privately insured) reported that their children receive excellent or good medical care.

The University of Tennessee's August 1994 survey indicates about a 3 percent drop (from 9.0 percent to 5.9 percent) in the proportion of uninsured Tennesseans after the TennCare program's start-up nine months earlier. This decrease translates into roughly 150,000 additional people with

¹⁹However, bias may still be present even after adjustment to the extent that the low-income people responding to the survey differ from those not responding. In addition, those in the low-income population are the least likely to have telephones. Thus, the experience of individuals without telephones may not be fully reflected in the survey results.

coverage—a substantial number, but lower than the proportion of insurance growth generally attributed to TennCare. This lower estimate may be a result of overlap in the survey respondent categories, causing statistics for the Medicaid and uninsured populations to blur. The survey shows that of the 1.1 million people in TennCare in 1994, about 742,000 were previously on Medicaid, another 265,000 were previously uninsured, and another 103,000 had some insurance coverage, although they were Medicaid-eligible. As in 1993, the inability to afford insurance coverage was still the major reason for lack of coverage reported by uninsured respondents in 1994 (79 percent). However, there was a small (perhaps statistically insignificant) increase in the percentage reporting other reasons for not having insurance.

In terms of perceived quality of care, 1994 levels for publicly insured survey respondents appear similar to those in 1993. Assessments of care provided to their children also appear so, despite the switch from traditional Medicaid to TennCare. There was a small insignificant downward shift in perceptions of quality. However, this aggregate level balance masks different effects for subpopulations covered by TennCare. In addition, quality appears to have eroded somewhat for the remaining uninsured (Appendix Table 5). This pattern is consistent with survey data that show use of similar sources of initial care before and after TennCare.²⁰

In terms of satisfaction with insurance coverage, a higher proportion of 1993 traditional Medicaid eligibles than 1994 TennCare eligibles were satisfied with their coverage (82 percent versus 61 percent). This pattern differs from the small increases in satisfaction from 1993 to 1994 reported by respondents with other types of coverage. As one might expect, satisfaction levels of individuals eligible for TennCare in 1994 varied according to whether respondents had been uninsured or on Medicaid in 1993. For instance, previous Medicaid beneficiaries reported lower satisfaction than the

²⁰While those on Medicaid/TennCare were less likely to report a physician's office as their source of initial care than the insured and Medicare populations, the care source used by respondents in each insurance category remained relatively steady across the two years for both adults and children. Among Medicaid and the uninsured, about two-thirds use a physician's office, which compares to about 85 percent of the insured and those receiving Medicare. Among adults, the remainder of those on Medicaid/TennCare and those uninsured use clinics and TennCare about evenly. Children are about two times more likely to use clinics than hospitals as their source of care. One could speculate that this reflects greater availability of clinic services for children and contributes to the higher levels of perceived quality reported for children.

previously uninsured. About half of the 1993 Medicaid beneficiaries said they were less satisfied with TennCare than Medicaid, 12 percent said TennCare was better, and 37 percent said they were about as satisfied with TennCare as they had been with Medicaid. By contrast, 59 percent of those without insurance coverage in 1993 were more satisfied with TennCare than with no coverage at all, 31 percent said that they were about as satisfied with TennCare as they were with no coverage, and 10 percent reported that they were less satisfied than when they were uninsured. Negative publicity about TennCare possibly contributed to these perceptions.

These results raise two questions. First, was it inevitable that half the Medicaid population perceived itself as worse off after TennCare, and is this a start-up or permanent effect? Second, why did no more than 59 percent of the uninsured report increased satisfaction, since research studies show that a lack of insurance is a major influence on use and costs of care as well as access overall? Further experience is needed to answer these questions, but current information gives us some insight into these issues.

As for the prior Medicaid population, initial erosions in satisfaction are consistent with research showing that satisfaction initially tends to drop with any form of mandatory shift to managed care and that it rises over time, though not necessarily to its former level (Davies 1986; McCall 1985 and 1987; Hurley 1991). The 1994 TennCare survey results for former Medicaid enrollees may therefore be of limited initial concern, particularly since quality of care continued to be perceived as excellent or good for 57 percent of adults and 67 percent of children, figures relatively similar to the year before.²¹ However, it is likely that the drop in satisfaction could have been lessened had the previously described start-up problems not occurred.

Of particular concern are any disruptions in the continuity of care as a result of the TennCare transition for those particularly vulnerable to adverse health outcomes. The methods we use preclude an assessment of the magnitude or severity of any problems, since they favor anecdotes.

²¹Among adults however, the percentage reporting poor quality care increased from 11 percent to 16 percent, basically as a result of a shift downward among those previously perceiving care to be fair.

However, the information we heard suggests that TennCare's impact on vulnerable populations needs further study, especially as it relates to the first-year transitional effects of TennCare.

The most vulnerable populations in TennCare include high-risk populations like the chronically ill and pregnant women. At least one MCO provider reported that visit rates for such enrollees are below those anticipated. We heard the following reports of problems related to the disruption of care:

- Individual high-risk children had existing, but specialized, providers who were not approved to serve as their primary care physicians.
- Stabilized patients were "de-stabilized" by a required shift in drug treatment as a result of plan formularies.
- There was an alleged three-month delay in scheduling an appointment for a woman with a chronic history of heart disease.
- People without phones at home waited for an hour on hold to reach their health plan while using public phones, sometimes outdoors.
- Phone systems were staffed by individuals inexperienced with the Medicaid population.

Home health services, such as those for home-bound individuals or people discharged from an acute setting, appear to be a particular point of vulnerability. We did not hear many specific comments about pregnant women, but logic suggests that they could be especially vulnerable to short-term disruptions in care. For example, erosion in timeliness and scope of prenatal care in early pregnancy could show up as poorer birth outcomes recorded nine months into 1994, while historical provider arrangements for those close to delivery could be interrupted.²² TennCare officials may have aimed to minimize some of these effects through TSOPs on continuity of prenatal providers, but these were not released until late 1994.

Fortunately, the provider response as TennCare was implemented offsets some of these concerns. We heard from a number of different providers that they had, at least initially, continued

²²We were told on our visit about a contract TennCare established in late 1994 with Dr. Joseph McLaughlin, Ph.D., to monitor access to prenatal care statewide. Under the contract, Dr. McLaughlin works with the state's five regional perinatal centers to monitor the adequacy of maternity services, and to provide needed services directly to pregnant enrollees and bill the costs of their care back to the enrollee's MCO.

to treat their existing patients when they sought care from them even if they were not associated with the MCO because they recognized the problems that occurred with implementation. As one advocate told us, "Most people have been able to get care because the health care delivery system is operating on auto-pilot. . . and this has been very important for continuity." However, an unintended consequence of this situation could be reduced pressure on MCO budgets in year one at the expense of the provider community.

Perhaps most surprising is why more of the previously uninsured do not perceive their care to be better after enrollment in TennCare and why 10 percent perceive it to be worse, as found in the University of Tennessee's survey. Provider shortages unaffected by TennCare appear to be one possible explanation (Tennessee Department of Health, April 1994). Transition problems similar to those affecting former Medicaid eligibles are likely to be a second. That TennCare disrupted care for some of the uninsured formerly served by direct grant programs or informal arrangements with private providers and did not replace these (at least initially) or improve upon them appears to be a third.

TennCare has positively affected provider supply by creating pressure leading to legislative approval of expanded roles for nurse practitioners and physician assistants, a proposal that had languished for many years in the legislature. TennCare also appears to have generated demand for services, leading county health departments or teaching hospitals to add nurse practitioners to the extent they were able or if, as academic medical centers, they preferred this approach. However, TennCare has few provisions that address longstanding provider supply issues, and it is unclear that it was or should have been designed to do so.

Among the 80 rational service areas designated for primary care by the state, 41 (with 45 counties) are designated physician shortage areas. Shortages are also found in parts of some metropolitan areas. Thirty-two of 38 rational obstetrical service areas are designated as having no or inadequate obstetrical services. In the long term, the only way TennCare really is likely to affect physician supply is through the increased revenue base it has the potential to create. However, there is no strong evidence that revenues will be sufficient to correct longstanding market distribution

problems. In addition, the January 1995 elimination of pool funds that supported graduate medical education is said to have reduced the number of resident training slots though potentially creating an opportunity to restructure residency training.

Effects on the Safety Net

Without more formal and broad-based analysis, it is hard to assess TennCare's effect on safety net providers as well as on existing informal arrangements. Without such information, we must rely on the comments made to the team. Obviously, some traditional providers may have a vested interest in the old system, which could color their vision. As shown by the University of Tennessee survey, primary care physicians are the main providers of care to Medicaid enrollees and the uninsured. But clinics and hospitals also play a more dominant role with these groups than they do with the privately insured or the Medicare population.

It is difficult to interpret the effect of TennCare on private physician care for low-income populations. We were told that TennCare considerably enhanced the level of formal physician participation from a reported previous low level of about 35 percent in the former Medicaid program. We were also told that non-participating specialists had also opted out of the Medicaid program. However, while both effects are likely to have occurred, they may overstate the improvement in access to physician services. Some primary care providers reported that there were informal networks of specialists for low-income populations before TennCare, which disappeared when the program began. These informal arrangements sometimes involved providers who would cross racial lines to furnish care, even though they generally did not participate in Medicaid. For example, a white physician might not participate in Medicaid but might agree to see Medicaid beneficiaries referred by a safety net provider, attracting minority patients otherwise unusual for the practice. On the other hand, one could speculate that because primary care physicians, especially in rural areas, benefited from TennCare, the program potentially could enhance access to these doctors but was less likely to do so for specialists.

Community clinics and public health providers appear to have been stressed by TennCare, though most community health centers are affiliated with MCOs. It is still too soon to tell how they will fare. The Tennessee Primary Care Association told us during the course of our visit that there are 16,330 community health centers in Tennessee and 48 FQHCs serving 140,000 people, 15 percent of whom live in rural areas—primarily in the eastern part of the state. The association is beginning to collect systematic data on how they have been affected by TennCare. The spot reports suggest that while market share under TennCare has stayed about the same for its members, their share of uncompensated care seems no lower. One center in a highly competitive urban market reported that it had not grown as much as anticipated. Center administrators are now concerned about its long-term viability under a TennCare model where bargaining power depends on size.

The adequacy of payment to community health centers varies across MCOs. Access MedPlus is regarded by these centers as a better partner than BCBS, for example, despite payment delays. This is partly because of their higher primary care capitation rates. Thus, if the role of Access MedPlus in TennCare diminishes, community health centers and similar primary care providers may be hurt by that change. A major issue for community health centers is the alleged failure of TennCare to follow through on its agreement to use cost-related capitation, particularly in relation to adverse selection. This condition (whose applicability the state disputes) was negotiated as an alternative to the association's rejected initial request for a three-year transition period from cost to risk-based payment.

This issue is particularly important because many community health centers were paid on a cost-related basis as FQHCs before TennCare became effective. There reportedly have been monthly meetings with HCFA and TennCare to address this concern, a sticky point being the lack of data to document adverse costs. The association is conducting a six-month study to address this issue using cost reports.

Another fiscal concern stressing community health centers involves cost sharing for those with incomes above the poverty level. One center reported that it cannot break even on this group because the center absorbs the \$250 deductible to ensure that the patients will fill the prescriptions

they need. However, TennCare officials point out that even though costs need to be considered, rates still need to be mutually negotiated rather than set in a market-driven process.

The situation with public health providers is more complex. There are 95 public health departments in the state. In the six metropolitan counties, services are contracted. Nashville and Chattanooga deliver only traditional public health services, whereas Memphis is a major primary care provider. Services vary across the 89 rural counties. Thirty-eight counties provide direct primary care services and work with physicians on referral services; these counties are affiliated with MCOs as primary care providers. Others that serve only as an entry point provide traditional services. Health departments can be paid fee for service for basic preventive services like immunization, sexually transmitted disease (STD) screening, and family planning, but they must negotiate agreements with health plans. Health departments have developed contracts with five MCOs that now serve as a major revenue source. (Community health centers want such arrangements but have not yet succeeded in negotiating them.)

TennCare's effect on local public health services is both direct and indirect. Directly, the program has disrupted their revenue streams (potentially for better or worse) while increasing the burden on them to respond to consumer complaints and problems. In effect local health departments are asked to participate in a new mechanism of delivery. They also have been indirectly affected because the state funds for many of their programs have been shifted to TennCare to provide the state match. We are not clear about how this has influenced their service delivery. Statewide, the arrangement—at least in the first year—was that health departments reportedly billed against these funds and were able to retain all services. However, counties lost the use of discretionary funds because they can bill only for services and thus cannot accumulate savings that allow them to mount special initiatives, renovate, or conduct other activities. However, we spoke with one urban county where services were reduced. This county also reported difficulty in obtaining payment from MCOs for services given, such as home health care. County providers also reported delays in service approval and, not surprisingly, required shifts in referral patterns to reflect MCO contractual arrangements. While the county providers have done their best to address problems in year one,

they are extremely worried about their ability to do so next year, since they see continuing problems as well as erosion both of funding and of providers.

Hospitals were historically an important part of the safety net, though we also heard the usual criticisms that dependence on emergency room services came at the cost of continuity of care. Emergency room use is reportedly down as a result of TennCare—partly because many urban hospitals have set up parallel clinics that are able to qualify as TennCare providers. Some cite this action as a major improvement in access generated by TennCare; others argue it has resulted in little real change.

TennCare's effect on hospitals has varied with their participation in the program and with the additional contributions they have received from pools. Hence, the effect varies by hospital type.²³ Among participants, the 11 high-volume hospitals reportedly receiving "essential community hospital" funds have done very well. However, rural hospitals have reportedly fared more poorly and are less able to cost shift because they are more dependent on TennCare revenue. No rural hospitals have closed, however, and some perceive that there is political support for these facilities. Academic medical centers reportedly have lost market share and have been adversely affected by TennCare. Vanderbilt says it is losing money on the HMO it set up and staffed with providers that include nurse practitioners. The university argues that it has been adversely affected by the deliberate (and largely retroactive) assignment of sick people to the plan, although TennCare officials disagree. Providers at the ambulatory care clinic at Erlanger Hospital in Chattanooga indicated that with county funds and cost shifting, they have always been able to furnish appropriate care to the indigent. They add, however, that TennCare has greatly stressed their administrative systems and hampered their ability to deliver care. Problems with MCO approval of home health services, in particular, are a concern. We perceive that because of Tennessee's lack of experience in managed care, most providers are not staffed or oriented to meet the administrative requirements associated with utilization review.

²³About 40 percent of Tennessee hospitals are nonprofit, 24 percent are public, and 36 percent are investor-owned. However, we were told that public hospitals do not receive significant taxpayer support and therefore operate similar to other nonprofit hospitals. The two exceptions are public hospitals in Memphis and Nashville.

This leads to frustration that is further accentuated by the poor design and incomplete development of many of these systems by MCOs.

The most serious are probably those issues for "the Med" in Memphis. This facility is a public hospital that prior to TennCare had a payer mix of 45 percent Medicaid and 24 percent self-paying or non-paying patients. Supported partly through a contribution voted on annually by Shelby County, the Med is a major provider of care to the Medicaid population in Memphis and in the rural western parts of the state, as well as the large rural areas in bordering Arkansas and Mississippi. In response to TennCare, the Med began its own HMO and contracted with other MCOs in the area. As a safety net provider, Med staffers reported seeing patients from rural areas in which the patient's MCO had no provider network. They received no payments for these services, although TennCare officials indicate the program should expand the hospital's opportunity to be paid. Med staff members also perceived a disruption of their existing care patterns. They reported a 10 percent reduction in volume of service, along with a loss of 50 percent of Medicaid revenue. We were told during our visit that a later distribution of pool funds was likely to offset the Med's revenue shortfall. However, while this may have occurred, press reports indicate that pool funds to the Med and others were cut off as of January 1995. In March 1995, the Med announced that it would be making significant changes in response to a loss of about \$42 million in state funding (National Association of Public Hospitals 1995). According to press accounts, the Med has since eliminated more than 200 full-time jobs and several services, including its cardiology intensive care unit.

While these changes are stressful, some associated with TennCare argue that they are to the long-run advantage of the system, as they will require safety net providers to become more efficient or to be replaced. From this perspective, the concept of a short-term subsidy to adjust to the market is viewed as appropriate and better than long-term support.

Spillover Effects on the Health System as a Whole

The effects of TennCare have spilled over on to the health care system, and this is likely to continue. On a positive note, there is little evidence that TennCare created long-term access

problems for the insured as a result of the cram-down provision, though state employees needing care faced problems initially. BCBS saw a drop in its provider network of about 2,200 in the first months of 1994. Nonetheless, by December 1994, the network was back up to at least 87 percent of its original size at about 5,700. The University of Tennessee survey suggests that at least on the most global level, the privately insured population was not adversely selected by TennCare.

In contrast, TennCare may have had an adverse effect on access to health care for those who remain uninsured. The University of Tennessee survey shows that uninsured adults were more likely in 1994 than 1993 to have reported care as poor (13 percent versus 25 percent for adults and 4 percent versus 16 percent for children). Only 43 percent of adults reported care to be excellent or good in 1994, compared with 57 percent in 1993. For children, the comparable drop was from 72 percent to 61 percent. Fox (1994) speculates that this could result from additional attention generated by TennCare to issues of access. However, it also could reflect a real erosion of access, especially to the extent that TennCare drew the attention of providers to those enrolled in TennCare. To the extent that TennCare results in long-term erosion of safety net provider capacity, the uninsured could be further disadvantaged though, of course, and more positively, their number may also be reduced.

More broadly, what is remarkable about TennCare is that its scope appears to have dramatically transformed Tennessee from a state with very little managed care activity to one with features typically only found in more developed markets. Almost overnight, Tennessee went from being a state with little managed care to a state with a penetration rate equal to that of many more experienced states—a fact that appears to be having expected spillover effects. We heard reports of MCOs or hospitals buying up physician practices, at least one of which was in a rural area. A major objective for the hospitals, we were told, is to position themselves aggressively in order to control the development of managed care. This has generated controversy with the physicians who are, to an extent, poorly prepared to make the transition to a managed care environment. The strength of physician resistance to TennCare is said in part to reflect fear that TennCare could be a benchmark for employers and purchasers by serving as a bargaining tool. Managed care is thus

threatening the historical dominance of providers in Tennessee. However, so far only limited growth has occurred in private-sector managed care. Employers reportedly are waiting until TennCare stabilizes before instituting further system change. They are also less immediately pressured to act because of a drop in the current rate of medical inflation. However, TennCare has both prompted the formation of more MCOs and expanded the availability of private-sector products. Thus, it is expected that managed care penetration will grow systemwide.

DISCUSSION AND KEY ISSUES

The objectives of TennCare are very ambitious: to constrain spending while rapidly shifting a relatively traditional system of care delivery to managed care and to expand the coverage of many of the uninsured with a relatively small infusion of new state funding. In its first year, TennCare appears to have succeeded in expanding coverage. Not surprisingly, it did not change the health system overnight. In the course of trying to do so and rapidly expanding enrollment, the program increased rates of insurance coverage but also experienced serious transitional problems. There is at least the potential that health care outcomes for some individuals, especially the most vulnerable, have been seriously compromised. On the other hand, others are more satisfied with their coverage, and the short-term response of the system appears to have limited at least some of the adverse effects of the transition on beneficiaries.

From the perspective of beneficiaries, the most serious long-term issue for TennCare is whether long-run success will be possible. Financing and commitment appear to be the two most serious barriers to success. It should become clearer within the next year whether TennCare is adequately financed to achieve its objectives as MCOs learn of their IBNR obligations, providers identify how viable they can be once the transitional pool payments end, and public entities identify how their revenues will ultimately be affected by TennCare's financial arrangements. The fact that some MCOs already may have fiscal problems and that TennCare has already taken allowable steps to limit

expansion of its coverage objectives, at least temporarily, are troublesome signs. However, some MCO failures are likely in any initiative of this nature and these stresses could portend a shift to a revised set of objectives and schedules that are more realistic because they allow greater time to implement changes.

The issue of commitment is related to the broadness of support for TennCare's objectives and approach. Unlike Oregon, in which the development of system reform was based on broad debate among interested parties, TennCare was created by a few people and may have little in the way of strong support for its access objectives outside the advocacy community. That the initiative was originally proposed as a block grant suggests its orientation toward providing whatever services are feasible based on a budget constraint despite the stated motivation of added flexibility to innovate. TennCare integrates many state sources of public and private financing for health care. Thus, to the extent that its objectives exceed its resources, there may be little in the way of a defined minimum implicit in the program other than what is defined by the federal Medicaid statute and waiver provisions. For these reasons, TennCare is a useful illustration of one experience in implementing a system that is fairly close to what could evolve from pending federal initiatives to reform Medicaid and increase state flexibility.

It is important to examine a number of issues in our second round of interviews. These include:

- Extent to which eligibility and enrollment systems operated more smoothly in year two, indicating administrative maturation.
- Extent to which the change in governors at the beginning of year two affects the TennCare program—in particular, how has the program altered its relationship with physicians?
- Whether TennCare began to operate more like a managed care system: Are provider networks more sensible? Have internal plan care delivery systems been developed? Are quality improvement systems in place?
- Whether care systems and referral patterns in traditional low-income care systems that were disrupted by TennCare have been replaced by alternative well-functioning systems.
- How specifically the systems for the disabled and those who do not receive AFDC systems have fared in TennCare, how they have been treated, whether mental health and children's services are integrated, and what the experience has been.

- How TennCare has coordinated medical and social needs for special needs populations and between public and private providers.
- Extent to which enrollment turnover continues to be a problem and the reasons for this.
- Whether formal state policies and procedures were more developed and MCO oversight was strengthened.
- How MCOs fared in year two: which survived, how viable are they, whether the effects of any shakeout have been positive or negative in terms of ultimate beneficiary access.
- How safety net providers have fared and whether there are implications for beneficiaries.
- How have rural care systems evolved as TennCare experience continues? Have hospitals closed?
- What has happened to improvements in insurance coverage from TennCare in 1995; whether they were expanded, retained, or eroded; how other access objectives and benefits have been modified if at all.
- What the effects of implementing premium requirements were.
- What more we know about the financial viability of TennCare and its implications.

In sum, many lessons from TennCare will only become apparent after greater experience and study. At the same time, the early experience already provides valuable insights on implementing managed care programs for low-income people.

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TABLE A-1

DEDUCTIBLES, OUT-OF-POCKET EXPENDITURES, AND
PREMIUMS: INDIVIDUAL AND FOR FAMILY OF FOUR*

	Percent of Poverty Level	Deductible	Maximum Out-of-Pocket Expenditures	Monthly Premium
Individual	Up to 100 %	0	0	0
	101 - 199	\$250	\$1,000	\$3-19
	200 - 299	250	1,000	55-82
	300 - 399	250	1,000	95-109
	400 and over	250	1,000	137
Family of Four	Up to 100 %	0	0	0
	101 - 199	\$500	\$2,000	\$7-48
	200 - 299	500	2,000	136-204
	300 - 399	500	2,000	238-273
	400 and over	500	2,000	342

* Low deductible option as cited in Tennessee's waiver application.

Source: Bureau of TennCare, 1994.

TABLE A-2

TENNCARE ENROLLMENT BY PLAN AND
GEOGRAPHIC AREA, JANUARY 1995

Community Health Agency and Plan	ENROLLMENT	
	Number	Percent
State Totals	1,263,406	100%
Access MedPlus	306,814	24
Blue Cross Blue Shield	617,695	49
HealthNet	78,970	6
John Deere	18,513	1
OmniCare	69,060	5
PHP	64,220	5
Phoenix	36,458	3
Prudential	8,344	1
TennSource	4,267	0
TLC Family Health Care Plan	38,055	3
Total HealthPlus	6,955	1
Vanderbilt Health Plan	14,055	1
Davidson (Nashville)	127,322	100
Access MedPlus	23,573	19
Blue Cross Blue Shield	53,665	41
HealthNet	14,395	11
OmniCare	12,894	10
Phoenix	8,740	7
Vanderbilt Health Plan	14,055	11
Hamilton (Chattanooga)	62,954	100
Access MedPlus	24,971	40
Blue Cross Blue Shield	23,853	38
John Deere	3,850	6
PHP	1,621	3
Phoenix	8,659	14
Knox (Knoxville)	70,723	100
Access MedPlus	6,942	10
Blue Cross Blue Shield	41,378	59
John Deere	1,088	2
PHP	8,767	12
Phoenix	1,326	2
TennSource	4,267	6
Total HealthPlus	6,955	10
Shelby (Memphis)	263,457	100
Access MedPlus	109,601	42
Blue Cross Blue Shield	46,528	18
OmniCare	56,166	21
Phoenix	4,763	2
Prudential	8,344	3
TLC Family Health Care Plan	38,055	14

Community Health Agency and Plan	ENROLLMENT	
	Number	Percent
Southeast CHA	68,217	100
Access MedPlus	17,883	26
Blue Cross Blue Shield	42,097	62
John Deere	4,258	6
PHP	2,370	3
Phoenix	1,609	2
First Tennessee CHA	110,106	100
Access MedPlus	15,697	14
Blue Cross Blue Shield	85,416	78
John Deere	4,761	4
PHP	3,049	3
Phoenix	1,183	1
South Central CHA	67,414	100
Access MedPlus	10,932	16
Blue Cross Blue Shield	31,166	46
HealthNet	22,591	34
Phoenix	2,725	4
Upper Cumberland CHA	71,109	100
Access MedPlus	8,765	16
Blue Cross Blue Shield	47,956	46
HealthNet	12,761	34
Phoenix	1,627	4
Southwest CHA	89,415	100
Access MedPlus	29,844	33
Blue Cross Blue Shield	59,571	67
Mid-Cumberland CHA	109,959	100
Access MedPlus	16,124	15
Blue Cross Blue Shield	60,829	55
HealthNet	29,223	27
Phoenix	3,783	3
East Tennessee CHA	166,265	100
Access MedPlus	24,040	15
Blue Cross Blue Shield	87,213	52
John Deere	4,556	3
PHP	48,413	29
Phoenix	2,043	1
Northwest CHA	56,484	100
Access MedPlus	18,460	33
Blue Cross Blue Shield	38,024	67

Source: Unpublished data, Bureau of TennCare, April 1995.

Note: Changes in plan enrollment as a result of the open season became effective in January 1995. About 100,000 people changed plans and shifts occurred in the distribution of enrollment across plans. The changes should be reflected in the differences in enrollment between December 1994 and January 1, 1995. The figures provided by the TennCare bureau, however, were similar for both months. The reasons are unclear. The numbers suggest that the figures provided by state officials better reflect 1995 than 1994 experience.

TABLE A-3
 PROFILE OF TENNESSEE REGIONS
 (Selected Statistics, Health Department Region)

Characteristics	State	East	Central	Middle	West	Memphis/ Shelby	Nashville/ Davidsonville	Knoxville/ Knox	Chattanooga/ Hamilton	Jackson/ Madison	Sullivan
Total population (millions)	4.88	0.84	0.51	0.90	0.45	0.83	0.51	0.34	0.29	0.08	0.14
Sociodemographics (1990) ^a											
Percent minority	17%	3%	3%	10%	18%	45%	25%	10%	20%	32%	3%
Percent poor (1989)	16%	17%	18%	12%	19%	18%	13%	14%	13%	17%	14%
Percent < 18	25%	24%	25%	27%	26%	28%	23%	23%	24%	27%	23%
Percent 65+	13%	14%	14%	11%	16%	10%	12%	13%	13%	14%	14%
Percent Medicaid	12%	14%	13%	9%	16%	14%	11%	11%	11%	15%	10%
Health (1986-90) ^b											
Percent births with adequate care	66%	67%	59%	67%	63%	63%	76%	76%	75%	58%	51%
Infant mortality rate	10.9	9.8	8.6	9.2	11.7	15	11	9.3	10.1	11.4	8.0
Infant mortality rank (1-10)	--	5	2	3	9	10	7	4	6	8	1

Source: ^aTennessee Department of Health, *Count-Down to Progress: A County Data Book*, September 1992.

^bTennessee Department of Health, *Health Access Plan Update*, April 1994. These health statistics are based on the Kessner index, which considers care received, when it was received, and gestational age.

TABLE A-4
 SELECTED HEALTH SYSTEM FEATURES
 BY COMMUNITY HEALTH AGENCY REGION

CHA Region	TennCare Enrollees ^a			Providers
	Total	Percentage of Population	Enrollees as Percentage of Population ≤ 200 Percent of Poverty	Population/Primary Care Physician ^b
State	1,210,063	24.8%	69.0%	1,266
Urban				
All	508,292	26.0	80.0	723
Davidson (Nashville)	14,752	23.8	83.7	548
Hamilton (Chattanooga)	59,756	20.9	66.7	892
Knox (Knoxville)	67,007	20.0	62.8	780
Shelby (Memphis)	259,777	31.0	88.3	804
Rural				
All	701,771	24.8	62.8	2,547
East Tennessee	157,997	28.5	69.6	2,939
Northwest	53,830	22.9	56.2	2,819
Southwest	85,399	28.7	64.7	2,787
Mid-Cumberland	103,280	16.9	60.4	3,139
South Central	63,962	22.2	57.7	2,230
Upper Cumberland	67,385	26.7	60.4	2,392
Southeast	64,522	25.4	63.0	2,981
First Tennessee	105,396	24.8	63.0	1,671

Sources: ^aAnalyses by East Tennessee Community Health Agency (unpublished), December 8, 1994.
^bTennessee Department of Health, *Health Access Plan Update*, April 1994.

TABLE A-5

HEAD OF HOUSEHOLD PERCEPTIONS OF THE
 QUALITY OF MEDICAL CARE, BEFORE AND AFTER
 TENNCARE, BY PAYER STATUS (IN PERCENT)

Perception of Care	Head of Household									
	All		Medicaid/ TennCare		Uninsured		Insured		Medicare	
	1993	1994	1993	1994	1993	1994	1993	1994	1993	1994
For themselves										
Excellent	21	26	17	17	14	11	23	28	24	26
Good	49	45	41	40	43	32	51	47	51	47
Fair	24	22	31	27	30	32	23	21	20	21
Poor	5	7	11	16	13	25	4	4	5	6
Total	100	100	100	100	100	100	100	100	100	100
For their children										
Excellent	30	32	20	22	27	14	23	35		
Good	48	47	47	45	45	47	51	48		
Fair	18	17	25	23	24	23	23	15		
Poor	4	4	8	10	4	16	4	2		
Total	100	100	100	100	100	100	100	100		

Source: Fox and Lyons. "A Survey to Determine Insurance Status of Tennessee Residents." Prepared for Tennessee Department of Finance and Administration. Knoxville, TN: University of Tennessee, August 25, 1994.