EMPLOYER-BASED MANAGED CARE INITIATIVES IN RURAL AREAS: THE EXPERIENCE OF THE SOUTH DAKOTA STATE EMPLOYEES GROUP

Jon B. Christianson, Ph.D.
Rural Health Research Center
Institute for Health Services Research
School of Public Health
University of Minnesota
Minneapolis, MN 55455

J. Patrick Hart, Ph.D.
Center for Rural Health
University of North Dakota
1718 Lewis Boulevard
Grand Forks, ND 58203

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ABSTRACT

Where managed care options are being introduced in rural areas, employers frequently are at the forefront, forming health care coalitions with local providers or soliciting bids from providers. When bidding approaches are employed, local providers typically are asked to create or join provider networks that accept financial risk. This article describes and analyzes the early experience of a large rural employer — The State of South Dakota — in developing and implementing a managed care option for its employees in one community. It discusses several aspects of that experience that raise issues for other rural employers and providers, and identifies related questions of interest for health services researchers.

INTRODUCTION

Managed care is a term used to encompass a wide variety of health care arrangements, from indemnity insurance plans with second opinions for surgery to staff model HMOs. While HMOs have a long history in rural areas (Christianson, 1989), they remain unavailable in many non-metropolitan counties (Ricketts, et al., 1995). Where HMOs are present in rural America, they almost always are headquartered in metropolitan areas (Christianson, et al., 1986; Ricketts, et al., 1995) and offered as insurance options mainly to rural employees of urban-based companies. However, the recent emphasis on the use of market approaches as health care reform strategies and managed care arrangements as alternatives to traditional insurance plans has generated renewed interest in the development of managed care approaches that can be tailored to unique rural circumstances (Christianson and Moscovice, 1993).

Where change is occurring in rural areas, employers frequently are at the forefront (Wise, 1994), either by forming health care coalitions with local providers or through soliciting bids from these providers. When bidding approaches are employed, local providers typically are asked to create or join provider networks that accept some degree of financial risk. Then, employees who select health plans that incorporate these networks are given financial incentives to seek care from network providers (e.g. see Brown, 1994; Tone, 1994). The reasons cited by rural employers in actively seeking out, or helping to create, managed care options in their communities include concern over rising insurance costs and a lack of control over what they are purchasing from their local health care systems. In addition, however, these

employers recognize that there may be a limited choice of providers in their communities, and that providing incentives to use specific groups of providers can have important quality ramifications as well. Therefore, in the design and implementation of rural managed care arrangements, employers may require that providers include initiatives to improve quality and that they document those improvements (Tone, 1994).

The purpose of this article is to describe and analyze the early experience of one large rural employer — the State of South Dakota — in developing and implementing a managed care option for its employees. Data for the article were gathered from documents provided by the State of South Dakota, along with interviews conducted during a four month period in 1995, with state officials, providers, and other key stakeholders in South Dakota. The structured interview protocols addressed issues relating to the motivation for the state's efforts, the involvement of different parties in the planning and design of the managed care initiative, the factors influencing its implementation, the obstacles encountered during the first year of its operations, and modifications planned for the future.

BACKGROUND

The Environment for Managed Care

South Dakota is a predominantly rural state, with 700,000 total residents and only three cities with populations greater than 20,000 (Sioux Falls, Rapid City, and Aberdeen). The State's population grew by 1.5 percent from 1980 to 1990. Farms

and ranches cover over nine-tenths of South Dakota's land area and agriculture accounts for fourteen percent of the State's gross product, an extremely high percentage relative to other states. The State is divided north to south by the Missouri River, with the majority of the towns in the State located east of the river in the State's farming region. The capitol of South Dakota, Pierre, has a population of approximately 10,000 and is situated in the middle of the State, on the Missouri River.

There has been very little managed care activity in South Dakota. The single operational HMO, DakotaCare, was organized nine years ago under the sponsorship of the South Dakota Medical Association. As of January 1, 1995, it reported contracts with 439 primary care physicians, 443 specialists, and 64 hospitals statewide (InterStudy Competitive Edge, August, 1995). It's HMO product is an "open-ended" option with about 21,000 enrollees. (Under an open-ended product, enrollees may seek services from providers that do not contract with the HMO, but typically pay a deductible and are subject to coinsurance for those services.) DakotaCare's provider network and administrative services also are used by approximately 46,000 employees of self-insured firms.

Momentum for Health Care Reform

The impetus for the development of a managed care initiative in South Dakota was provided by Governor Mickelson, who was one of two governors leading the National Governors Association Committee on Health Care Reform in the early 1990s. He and his staff were unhappy with the existing State Employees Health Benefit

Program, which experienced double-digit increases in premium levels in 1990 and 1991. To restructure the Program, they contracted in January of 1993 with a consulting firm that possessed considerable experience in developing managed care initiatives for employers and in structuring provider networks. The consulting firm submitted a "position paper" to the Governor in March of 1993 which proposed that a statewide managed care network be developed that would be anchored by the state employee group. The primary emphasis of the State's contract with this network would be quality enhancement, with cost-containment expected to be a logical byproduct. According to the proposal, primary care networks would be developed throughout the state in cooperation with local physicians, and specialty services would be provided through contracts that were competitively bid.

Because the Governor wanted South Dakota to demonstrate that managed care could work in rural states (a matter of contention in the national health care reform debate at that time), he set an ambitious target of July 1, 1993, for offering a managed care plan to state employees. However, early in the implementation stage, it was agreed that the network could not be established statewide in such a short time period, but that it was feasible to implement the plan in a single community — Pierre — where a large portion of the state employees resided. (In FY 1994 there were 12,825 state employees, 2421 of whom were located in Pierre.) Meetings were held in April of 1993 with other employers in Pierre and with provider representatives to explain the new initiative and gauge receptiveness.

The selection of Pierre as the "test site" for the managed care initiative was a somewhat risky decision. Because Pierre is the capital city of South Dakota, it meant that the model would be implemented under the direct scrutiny of the legislature, with some legislators highly skeptical of the plan and of managed care in general. The acute care medical delivery system in Pierre consists of a single hospital, three predominantly primary care practices, and one specialty (orthopedics) practice. The hospital has 86 licensed acute care beds, with 26 filled on a typical day. It also operates a 105 bed nursing home and a 60 bed retirement housing facility, and is associated with four rural health clinics located 30 to 60 miles from Pierre. There are 23 active physicians on staff; among the services offered are orthopedic surgery and renal dialysis. Two of the primary care clinics in Pierre are small; the Dakota Plains Clinic has four physicians and the Pierre Clinic has one physician. The third primary care clinic, Medical Associates, Inc., has eight physicians, including two surgeons. The orthopedic clinic has two physicians.

Development of a Scaled-Down Model

The early momentum for the implementation of the proposed managed care model came to a halt when Gov. Mickelson died in an airplane crash in April, 1993, a few days after the initial meetings with Pierre employers and providers. The Lt. Governor was not active in the national health care reform arena and, when he became acting governor, he withdrew from the Committee on Health Care Reform. On the urging of staff members, however, he agreed to allow the managed care initiative to

proceed with the state employees group but expressed concern about the goal of eventually inviting private employers to participate. The implementation target date of July 1, 1993, was postponed, and several months went by with little progress being made. In November of 1993 a Request for Proposals (RFP) was sent to Pierre providers. The RFP described a "Value-Based Purchasing Model" for state employees, stating that "The basic premise underlying the concept is that improvements in the quality of care will lead to reduced health care costs" (p. 2, RFP, 1993). The implementation date was set for July 1, 1994. Pierre providers were invited to submit proposals and were told that: "Initially, a network will be developed for Pierre area employees. The network will be expanded until it covers all State employees. Pierre area providers are being given the first opportunity to propose a network for the State employees. Should Pierre area providers not submit an acceptable proposal for Pierre area employees, the State will solicit proposals from other provider groups" (p. 2, RFP, 1993).

In response to the proposal, Pierre providers were asked to agree to deliver all primary and acute care services covered under the state employees medical plan, as well as services covered by worker's compensation, in return for a capitated payment. Tertiary care not included under the capitated payment would be covered under a fixed fee arrangement. It was also suggested that the Pierre providers consider establishing networks of providers that would serve state employees residing in other areas of South Dakota. The RFP circulated by the State proposed to set capitation rates equal to current expense levels, to be determined using historical expenditures for the state

employee group; in return, the contracting providers were asked to limit increases to five percent in 1994/1995 and 1995/1996. Contracting providers also would have the responsibility for collecting co-pays at the point of service and implementing no fewer than three practice guidelines and outcome measures by the start of the contract (July, 1994). In addition, they were required to measure and report patient satisfaction with care during the first year of the contract. The RFP also contained general data on enrollment of state employees by zip code, claims experience for Pierre area employees, and benefit plan design.

Along with changing the way that providers would be reimbursed, the managed care reform initiative would substantially alter the benefit choices available to state employees. The existing benefit plan design consisted of three options: a \$250 (per person) deductible plan, a \$500 deductible plan, and a \$1,000 deductible plan. Each option contained the same coinsurance arrangement, with the insurer paying 75 percent of costs in excess of the deductible and the insured employee paying 25 percent. The employee's total liability (including the deductible) was capped at \$1,000 per person for the \$250 deductible plan, \$2,000 for the \$500 deductible plan, and \$2,500 for the \$1,000 deductible plan. All three plans contained the same restrictions relating to the use of mental health and substance abuse services, home health care and preventive services. In July, 1993, the state required that employees enrolled in any of these plans comply with requirements for pre-admission certification and a continued stay review for all hospital admissions, with a \$500 penalty for noncompliance. In FY 1994, 5 percent of state employees were enrolled in the low

deductible plan, 66 percent in the \$500 deductible plan, and 29 percent in the high deductible option.

Beginning in July, 1994, the State proposed to alter its benefit plan design. Employees would be offered a choice of the \$1,000 deductible plan or the new "network plan." The network plan was designed to be attractive to state employees in that no deductible was required, there was a lower out of pocket maximum, and there were fewer services requiring a copay if network providers were used. Services received from non-network providers were covered at the same benefit level as the \$1,000 deductible plan.

CREATION OF THE PROVIDER NETWORK

Negotiations Between Pierre Providers and the State

The providers in Pierre were asked to respond individually (in the case of physicians, by practice) to the State's RFP, but chose instead to respond as a group. They hired an attorney to assist them in the contracting process, with the initial compensation for the attorney provided by the hospital. The Pierre providers also decided not to respond to the RFP as it was structured by the State. Instead, they proposed that they develop a provider network that would be governed by a committee of providers and purchaser representatives. This was not acceptable to State officials, who believed that this would leave too many decisions about network design and management in the hands of the providers.

One of the key objections of the Pierre providers to the State's proposal related to the financial risk they believed they would be assuming under the proposed capitation arrangement. The State desired that the primary care clinics and hospitals accept one capitation payment and allocate the dollars and risk associated with that payment. The providers did not wish to incur the cost and obligations associated with the formation of a legal entity that could accept such a payment, and did not believe that adequate data were available to construct an accurate capitation rate. For instance, the utilization numbers provided by the state employee group's prior insurer often differed from the data contained in provider records. Furthermore, the administrators of the clinics argued that the number of state employees that would select the network option would not be large enough to spread risk and that there was no compelling reason for their physicians to accept financial risk of this nature.

The negotiations, as they moved forward, began to focus on a targeted budget approach. Under this approach, existing reimbursement rates for providers would be frozen for one year. Ten percent of provider payments would be withheld to assure that if budget targets were exceeded because of greater than expected utilization of services, there would be sufficient funds to reimburse providers for the additional services. The State would assume the risk for expenses that were greater than 110 percent of the target. After further negotiations, the providers and the State agreed that there would be no ten percent withhold, but that a settlement would occur at the end of each year. By January of 1994, there was general agreement that separate

targets would be negotiated for the hospital and the clinics, and discussion centered on the dollars that would be available for each target.

In May of 1994, the hospital withdrew from negotiations, deciding not to contract with the State as part of the Pierre provider network. It expressed concern that historical costs, trended forward at a five percent rate as proposed by the State, would not be sufficient to buffer the hospital from Medicare and Medicaid cost-shifting, and argued that a seven percent trend factor was needed. Also, the hospital's lawyer cited a state law that, he argued, precluded the State from entering into managed care arrangements with providers. (The hospital continues to explore integration options with its medical staff that would allow the hospital and clinics to contract jointly with the State and with managed care plans in the future.)

By this time, the clinics had decided that each clinic would negotiate its own target for primary care. When the hospital withdrew from the negotiations, the clinics hired a consulting firm to represent them. The main issue addressed in discussions between the State and representatives from this consulting firm was how the primary care targets would be determined. The requirement that the primary care physicians serve as gatekeepers was not viewed as a major issue by the clinics.

In prior discussions with the clinics, the State had proposed that claims history data be trended forward to set the targets prospectively. The clinics' consultants suggested an alternative approach in which payments would be adjusted after enrollment to reflect the mix of individuals actually enrolled in the network plan. The State argued that it was not clear, a priori, whether the clinics would benefit or be hurt

by this adjustment process. Ultimately, the clinics agreed to accept the State's proposal and contract with the State as part of its "network plan" for State employees. They viewed the contract as providing them with the potential to deliver the care for State employees locally, in Pierre, through the use of primary care physician gatekeepers.

Payments to the primary care clinics were determined through a series of steps. First, the experience of the Pierre hospital and physicians in serving State employees over the previous two years was documented using claims records. Based on this analysis, a per member per month dollar rate for care provided to State employees by Pierre providers was determined. This figure then was inflated at five percent per year from the 1992/1993 base to arrive at an expenditure target per member per month that applied to each provider. The formula generated an expected savings for the State, as the five percent trend rate was less than the actual expenditure inflation rates for the prior two years. The contracts with the primary care physicians specified that each practice would be responsible for any expenditures in excess of the target up to a maximum of ten percent above the target; the State was at risk for all expenditures exceeding 110 percent of the target. If expenditures were less than the target, the practice could retain the savings until 90 percent of the target was reached. All savings beyond this amount would revert to the State, with a reconciliation occuring annually. One of the clinics, which employed both specialists and primary care physicians, had separate specialty and primary care targets.

Formation of a Specialty Care Network

Once contracts were signed with the primary care physicians in Pierre, the next step for the State was to establish a statewide network of hospitals and specialists. An RFP expressing the State's desire to contract with a specialty care network to serve state employees was distributed in the mid-summer of 1994, with a target implementation date of October 1, 1994. Fifteen organizations indicated that they intended to respond to the RFP, with nine ultimately submitting proposals. Of these nine, the State regarded four as viable bids. The State chose to contract with DakotaCare, a for-profit managed care plan developed by the state medical society, primarily because of its existing statewide hospital and specialty care network. Its physician network contained about 98 percent of all the specialists and primary care physicians in South Dakota, while its hospital network contained all of the hospitals in the State. (The local hospital in Pierre participated in the DakotaCare network.)

The participating physicians in the DakotaCare network were paid using a relative value scale. They received the equivalent of ninety-three percent of billed charges for primary care and eighty-five percent for specialty care. Hospitals were paid at ninety-five percent of billed charges and their contracts included limits on the rate at which they were allowed to increase their charges in any given year.

DakotaCare's specialty and hospital network was offered to Pierre employees beginning in November, 1994 and extended to all state employees on January 1, 1995. In the first year of the specialty network, there were different referral arrangements for Pierre employees who enrolled with a contracting primary care clinic.

In order to receive full plan coverage, enrollees were required to have a referral from a primary care physician when accessing specialist physicians and facilities. However, female employees could self-refer to OB/GYN physicians for one examination per year and self-referral was allowed to selected nonphysician professionals (e.g., optometrists), as described below. DakotaCare received a flat fee per employee to provide administrative services, including issuing identification cards, conducting preadmission certification and concurrent review, doing discharge planning and case management, and providing profiles of practice patterns to participating physicians. The DakotaCare contract also included home health care, durable medical equipment, and mental health/substance abuse treatment, but did not cover vision care, chiropractors, or medication management (with some exceptions).

The RFP for the specialty and hospital network contained provisions related to quality assurance and the measurement of quality of care. DakotaCare faced possible financial penalties if certain standards in this respect were not met. For instance, standards were established concerning waiting times and "abandonment rates" on customer telephone calls. Also, DakotaCare agreed to develop and implement five clinical practice guidelines to be in place by the end of December, 1995. To assist in addressing these and related issues, DakotaCare established a "State Network Committee" consisting of provider representatives, DakotaCare staff, and State officials.

DakotaCare views the state employee contract as advantageous for several reasons. First, there is the direct revenue generated by the contract. Second, adding

coverage of the state employee group gives DakotaCare greater leverage in its contract negotiations with providers. Third, the state employee contract increases the credibility of DakotaCare with private sector employers in the State and will enhance its ability to contract with these employers.

Contracts With Other Service Providers

In addition to the specialty care and hospital network, the State created several other service networks for the state employee group. Pharmaceuticals were "carved out" of the specialty network contract so that the State could negotiate with firms that specialized in managing the pharmaceutical benefit. It contracted through Blue Shield of South Dakota with a national firm for pharmaceutical management for Pierre network enrollees. The State also issued a separate RFP for chiropractic services. It contracted with a chiropractic network to provide all services covered in the benefit package in return for a fixed monthly fee per enrollee. In order to be awarded the contract with the State, the network added chiropractors and recredentialed its existing chiropractors. As these different network contracts were being negotiated, a group of dentists approached the State to discuss contracting for state employees. However, dental coverage under the state employees health plan is limited and the State was unable to reach an agreement with the dentists.

The development of these provider networks to serve state employees raised issues for some optometrists and mental health providers in South Dakota. The optometrists were concerned that primary care physicians would refer only to

ophthalmologists in the network, while the mental health professionals also were concerned that their referrals would be curtailed. The State entered into direct contracts with some of these providers in Pierre. The providers agreed to discount their fees by ten percent and not to increase their fees by more than five percent in the second year of the program. State employees were allowed to self-refer to optometrists and mental health providers, effective on January 1, 1994.

EARLY EXPERIENCE

At the time that the State employees located in Pierre were given the choice to enroll in the network or the regular deductible plan, they were told that there would be no specialty care network at the beginning of the year, but that one would be put in place at some point during the year. Until that network was in place, enrollees in the network plan could see any specialist, or be admitted to any hospital, without paying anything extra, as long as they had a referral from a contracting primary care physician. If they did not have a referral, they would be required to pay a deductible and a portion of costs above the deductible up to a yearly maximum (as described above). Later, after the network was in place, they would be subject to cost-sharing if they used a non-network provider, with or without a referral. Even with the promise of a change in access to specialty care during the benefit year, 74 percent of the state employee group residing in Pierre enrolled in the network plan. This exceeded the State's initial target of achieving a 60 percent enrollment in the network plan during the first open enrollment period.

It appears that one of the major reasons that a large proportion of State employees chose the network plan was that out-of-pocket costs were substantially less than the other option, which featured a \$1,000 deductible and a 25 percent coinsurance rate, making health care expenditures for network plan enrollees much more predictable. During the first year of the plan, enrollees were surveyed to determine their satisfaction with various aspects of their experience. The State supplied each of the contracting clinics in Pierre with sample instruments that they could use to survey state enrollees that designated the clinic as their source of primary care. The State also conducted a survey of a sample of network enrollees during the fall of 1994. General results from this survey have been shared, but not physician-specific results. The summary question on the survey asks "Overall, how would you evaluate the quality of care and the services you received?" On a 5 point scale, with 5 indicating "very good," the average responses for patients at the three Pierre clinics were 3.8, 4.4, and 4.5.

In the initial conceptualization of the program, as described above, there was an emphasis on the implementation by providers of initiatives to improve quality of care, including treatment guidelines. The Pierre primary care clinics were asked to work with DakotaCare in the development of guidelines. Guideline development was included as a performance requirement in the DakotaCare first-year contract, with one-third of DakotaCare's administrative fee at risk if satisfactory progress in guideline development was not achieved. However, development of these guidelines was delayed until December, 1995, without penalty to DakotaCare.

PROGRAM MODIFICATIONS

The proportion of Pierre state employees enrolled in the network plan remained at about 74 percent in the second contract year, beginning on July 1, 1995. During the second year, a major modification of provider network arrangements occurred with the Pierre primary care clinics incorporated under the DakotaCare contract. DakotaCare negotiated a capitated payment arrangement with the clinics, but the clinics received payment directly from the State. As a result of this arrangement, the State no longer contracts directly with any providers. It is DakotaCare's responsibility to contract with provider networks throughout the state to serve state employees. Existing State contracts with optometrists, mental health providers, and chiropractors were subsumed under the DakotaCare contract.

In addition to the changes in provider network arrangements, there were also changes in the benefit coverage during the second program year. Most of the changes in coverage for state employees residing in Pierre were not major. For example, employees enrolling in the network option were required to obtain referrals to access specialty care within the DakotaCare network. Referrals to non-network providers, even if made by a network primary care physician, were subject to deductible and coinsurance requirements. State employees residing outside of the Pierre service area experienced more substantial changes in their benefit coverages. All of their indemnity options (corresponding to different deductible levels) were converted to Preferred Provider Organization (PPO) plans. If DakotaCare providers were used, the State paid

75 percent of the cost above the deductible, as compared to 65 percent if non-DakotaCare providers were used. The out-of-pocket limit per person per plan year was also set at a lower amount if DakotaCare providers were used.

Along with these changes, there were several alterations in benefit coverage that applied to all state employees, regardless of residence. These included an extension of the "pharmacy network" to all state employees on July 1, 1995. If the employee uses this network, a nominal copayment is required for each prescription. If a non-network pharmacist is used, the same copayment is required of the employee, but reimbursement by the health plan is limited to the amount that would have been paid to a network pharmacist. Second, employees are required to use DakotaCare's "managed care line" for review and pre-approval of services obtained from nonpreferred providers. (DakotaCare providers are required to arrange for any in-network authorizations needed.) Third, DakotaCare implemented a maternity program for state employees. When a state employee calls during the first trimester of pregnancy, she receives information about the program, along with a visit schedule. She is then contacted on a regular basis to make sure this schedule is followed. If the pregnancy is judged to be "high risk," the patient enters an intensive case management program. Women who follow all of the guidelines during pregnancy are given the choice of receiving a fifty dollar savings bond or a car seat after their newborn is enrolled in the health plan. Finally, a "Centers of Excellence" transplant network was introduced. Employees receive better coverage when they use providers in this network, subject to pre-authorization approvals and existing benefits limitations.

ISSUES RAISED AND LESSONS LEARNED

Over a period of two years, one of the major employers in South Dakota completed the transition from a traditional indemnity, largely unmanaged, health insurance plan to a managed care plan covering the entire state. When given the choice between a managed care option, featuring some restrictions on care-seeking behavior, but lower costs and better coverage, and a traditional indemnity plan, state employees in Pierre overwhelmingly chose the managed care option and reported high degrees of satisfaction with their choice.

What implications does their experience have for other rural employers and employees, and for rural providers? The strength of the case-study approach used in this article is that it can provide a richness of detail and, hopefully, depth of understanding that it is not possible to obtain in an analysis of secondary datasets. But, the generalizability of this knowledge to other circumstances depends on a variety of considerations such as the similarity, or dissimilarity, of community, employer, and population characteristics. Even so, there would appear to be elements of the experience of this employee group that are of interest for other rural communities. The discussion in this section highlights these aspects of the South Dakota experience and suggests issues concerning the transition of rural employers to managed care that deserve future research attention.

 Large employed groups in rural areas are often public or quasi-public, such as state or county employees or school district employees. This means the conversion of benefit options to managed care is likely to involve political, as well as technical, considerations. The experience of the South Dakota state employee group provides ample evidence of this. Early momentum for the managed care initiative was provided by the Governor, who led the effort to generate community support and understanding. When he died, the initiative was scaled-down in part to reflect the diminished political support for its implementation. In addition, various provider groups lobbied lawmakers concerning aspects of the proposed initiative. The need to respond to these issues diverted staff resources from the more technical aspects of implementation. The transition to managed care occurred in a "fish bowl" with almost every aspect closely scrutinized and subject to public debate.

- Even relatively small rural physician practices may be receptive to participation in managed care networks and the assumption of some financial risk. Primary care physicians in Pierre perceived that a relatively large proportion of State employees and dependents sought medical care from specialists in larger towns. The proposed managed care network was acceptable to them in part because it had the potential to reduce this "leakage" of patients. In addition, to facilitate their participation, their network contracts limited their risk exposure and rewarded them for the effective "management" of care.
- While there are steps that can be taken to facilitate the participation of rural 3. providers in employer-initiated managed care networks, the process of negotiating contracts with individual physician groups or hospitals is likely to tax the abilities and resources of most employers. After initiating the development of a primary care managed care network in Pierre, administrators of the State Program contracted with an existing organization for specialty and hospital care and, in the second year, for administration of most components of the plan overall. This strategy reduced staff burden associated with the renegotiation of individual contracts with multiple provider organizations and allowed the State to take advantage of the "purchasing power" of an organization that serves multiple employers. However, it could reduce the control that the State can exercise over contractual relationships with specific provider groups. And, unless other viable options are available, it could lock the State into a long-term contractual relationship with limited ability to use a competitively bid RFP process to discipline future increases in expenditures.
- The existence of statewide and national "specialty service" (e.g., chiropractic, pharmaceutical, mental health/chemical dependency) networks provides rural employers with opportunities to introduce elements of managed care into their employee benefit plans without a major expenditure of administrative resources. The South Dakota Employee Benefits Plan attracted numerous bidders when it issued RFPs for these services. The bidding organizations were responsive to requests by the State to modify their provider networks and to integrate their services with those of other providers holding contracts with the State.

- While facilitating the formation of provider networks and negotiating risk-sharing arrangements with rural providers are achievable short-run goals for rural employers, the development of cooperative, quality enhancing initiatives requires a longer period of time. The requirement to develop a small number of practice guidelines was a part of the RFP used by the South Dakota State Employees Benefits Plan in contracting with providers. However, these guidelines were not developed during the first contract year, and implementation was postponed until the second year. It may be necessary to establish the financial feasibility of the managed care arrangements for rural providers before progress can be made regarding fundamental issues relating to the delivery of care.
- Attempts by rural employers to facilitate provider network formation for the purpose of negotiating contracts are likely to raise antitrust concerns for rural providers. In Pierre, providers were hesitant to negotiate jointly with the State. As a result, individual contracts were signed with each primary care practice. Until the antitrust status of networks that contain all, or most, of the providers in a rural community is clarified, this could pose problems for employers seeking to implement managed care initiatives in other rural communities as well.

In addition to identifying potentially generalizable issues for rural providers and employers, case studies such as this one can play an important role in raising questions that deserve the attention of health services researchers. There are several potentially fruitful areas of research that emerge from the State of South Dakota's experience, including:

- 1. What are the factors that influence the decision of rural consumers to enroll, or not enroll, in a managed care plan?
- 2. Does the inclusion of a managed care plan as an employee benefit option reduce health care expenditures for rural employers and employees?
- 3. Is "leakage" of rural patients to urban areas reduced when they enroll in managed care plans?
- 4. How satisfied are rural consumers with their experience as enrollees in managed care plans?

- 5. Do specialty managed care networks that "carve out" specific services from benefit plans save money for rural employers? What effect do "carve outs" have on access to services on the part of rural employees?
- 6. Can managed care plans facilitate cooperative, quality-enhancing activities on the part of participating network providers? What can employers do to bring about such activities?

The development of new and varied managed care options in rural areas in the future will provide research "laboratories" for addressing questions such as these.

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