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ABSTRACT

This paper presents contributions at a symposium about Carolina Alternatives (CA), a North Carolina program that blends capitated financing with public sector managed care for mental health and substance abuse services for children and youth eligible for Medicaid. The symposium focused on stakeholders' perspectives and on expenditure patterns of inpatient and outpatient services. First, Dan Tweed presented "Stakeholders' Perspectives: Overview of Carolina Alternatives." Next, Dalene Stangl presented "Stakeholders' Perspectives: Area Programs, Hospitals, and Departments of Social Services." The perspectives of three groups (the 10 area programs responsible for care management, the hospitals that provide mental health and substance abuse services, and the county directors of departments of social services) regarding how CA restructured service delivery, implemented care management, and redefined interagency relations are defined. Elizabeth Farmer and Julia Gagliardi presented "Stakeholder's Perspectives: Client Satisfaction and Outcomes." Preliminary results indicated overall client satisfaction and acceptability of the outcome measures to clients and staff. The final contribution, by David Langmeyer, "Stakeholders' Perspectives: Preliminary Cost Findings," compared service costs between area programs that participated in CA and those that did not. It found CA was successful in reducing costs associated with inpatient services but this decrease was offset by a dramatic increase in non-inpatient services for participating area programs. (DB)

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Symposium:

Public-Sector Managed Care for Children's Mental Health Services: Stakeholders' Perspectives

Authors

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Introduction

Beginning in January 1994, North Carolina implemented a program that blended capitated financing with public-sector managed care for mental health and substance abuse services. The program is called Carolina Alternatives (CA), and it covers children eligible for Medicaid. This symposium is designed to outline the structure of CA and present stakeholders' perspectives on the first two years of implementation. The stakeholders to be represented include (a) the State's Division of Mental Health, Developmental Disabilities, and Substance Abuse Services (MH/DD/SAS) and its local-branches (Area Programs); (b) the state, private, and general hospitals that provide mental health and substance abuse services to children; (c) the county Social Service Departments (DSS); and (d) both the children who receive services and their parents. Initial cost findings on both inpatient and outpatient service delivery will also be presented.

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Stakeholders' Perspectives: Overview of Carolina Alternatives

Dan Tweed, Ph.D.

During the late 1980's, the Health Care Finance Administration (HCFA) was concerned that Medicaid funds were being used to hospitalize children who might be better treated in other settings. Medicaid regulations require three criteria before a hospital admission qualifies for Medicaid reimbursement: (a) the child has a mental health condition warranting care under the supervision of a physician; (b) the child can benefit from hospitalization; and (c) more appropriate services are not available in the child's community.

In North Carolina, HCFA's concerns led to the implementation of a Utilization Review (UR) program in August of 1990. The program was designed by North Carolina's Division of Medical Assistance (DMA) and implemented by a private-sector managed care company operating under contract with DMA. Designed to ensure that Medicaid regulations were being observed, the UR program incorporated two of the fundamental tools of a managed care system—a pre-certification review process designed to divert children from hospitalization when more appropriate forms of care were present, and a continued stay review process designed to ensure that children were not hospitalized longer than clinically necessary.

Only a subset of North Carolina's hospitals were initially targeted by the UR program, but this subset accounted for over 90% of Medicaid-reimbursed inpatient stays. Analyses suggested that the UR program appeared to be effective. Pre-post comparisons suggest significant reductions in the number of inpatient days provided, reductions in inpatient expenditures, and substantial savings for both North Carolina and the Federal Government.

Effective as it was, however, the program had obvious limitations. First, the program was designed as a simple UR strategy. Even though the program's mission included determining if more appropriate community-based services were present, it had no care management component. If a child was denied admission, there was no process in place to ensure that the child received an appropriate alternative service. Second, if the program was working as designed, the potential for further reductions in inpatient utilization was limited by the lack of community-based alternatives in the child's community of origin. Availability of community-based alternatives, in turn, was limited by the lack of funding to build good systems of care. What was needed was a managed care strategy capable of generating savings and converting those savings into alternative community-based services. Under the UR program, savings stayed in state and federal coffers.

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Carolina Alternatives

Beginning in April of 1991, North Carolina's Division of MH/DD/SAS collaborated with DMA to design a new program, Carolina Alternatives (CA), which could overcome the weakness of the UR program. During the first two years, CA was implemented in 10 of North Carolina's 41 Area Programs. This pilot period served to road test CA and set parameters needed for statewide implementation. Under CA, several things happened. First, the local Area Programs became responsible for the management of all medicaid-reimbursed services delivered to children in their service areas. This included responsibility for the utilization review process and responsibility for finding appropriate care when inpatient care was deemed inappropriate.

Second, in order to carry out the managed-care role, pilot programs were given a prospectively determined budget with which to provide or purchase appropriate forms of care. Pilot programs were expected to live within this budget and were at full risk for expenditures in excess of the budgeted amount. For the first two years of implementation, however, the pilot programs received a prospectively determined budget having two distinct components, one expressly designated for the purchase of inpatient services and the other for the purchase of outpatient services (including the full range of non-inpatient forms of care). Area programs were at full risk for the inpatient component only. Any savings accrued from diverting children to less costly community-based alternatives was kept by the Area Programs.

By contrast, the pilot programs enjoyed a two year "moratorium" on risk for outpatient expenditures. Pilot programs were reimbursed for excess outpatient expenditures, while unspent money was returned to the state. Outpatient expenditures during the moratorium period were used to determine the full capitation rate that went into effect at the end of the moratorium period. Thus, CA created a strong incentive to both divert children from inpatient services and spend money on the outpatient side. The intent behind this incentive structure was to provide a stimulus for the development of new community-based services.

Carolina Alternatives' design stimulated the development of community-based services along three lines. First, savings from reductions in the number of inpatient days purchased were used as flexible dollars to buy services which might otherwise not be covered under NC's mental health benefits structure. Alternative forms of residential treatment were included here. Second, the two year moratorium on outpatient risk created an incentive to shift the costs of caring for the needs of children with serious problems to the outpatient side, leading Area Programs to either invest in the development of new in-house capacity or to incorporate an expanding base of private contract providers. Finally, the program provided an incentive for hospitals to offer

program provided an incentive for hospitals to offer outpatient alternatives to inpatient care. Faced with fewer admissions, fewer days, and fewer dollars, hospitals were induced to enter the outpatient services market in a more aggressive manner.

With these thoughts in mind we now review how the program has been working. We approach this question in two ways. First, we share the views of several key stakeholder groups whose views can fundamentally condition the success of a program like CA: (a) the pilot programs implementing CA in quite varied circumstances; (b) the inpatient providers whose activities have been profoundly affected by CA; (c) the DSS agencies who often see the same clients, compete for the same residential capacity and often seek mental-health care for their clients; (d) the patients and their families; and (e) the state Mental health office. Second, we review expenditure patterns on inpatient and outpatient services to determine the presence of program effects on expenditures.

Stakeholders' Perspectives: Area Programs, Hospitals and Departments of Social Services

Dalene Stangl, Ph.D.

Introduction

This section presents the perspective of three groups regarding how CA restructured service delivery, implemented care management, and redefined interagency relations. Problems encountered by each group are also presented. The three groups are (a) the 10 Area Programs responsible for care management, (b) the hospitals that provide mental health and substance abuse services to children, and (c) the DSS directors for each county. Each of these groups has an important stake in the delivery of mental health and substance abuse services to children, and hence, each group provides an essential perspective to understanding the inner-workings of this public-sector managed care program.

Methods

In July 1994, six months after initial implementation of CA, mail-out questionnaires designed by two authors (DT and DS) were sent to all 41 Area Programs. These questionnaires tapped general attitudes toward managed care and familiarity with CA. In addition, the 10 participating Area Programs were sent a second questionnaire that asked about initial management experiences. These latter questionnaires helped prepare the researchers for subsequent interviews. Personnel from participating Area Programs (i.e., CA coordinators, utilization review managers, management information system personnel and finance personnel) were interviewed face-to-face, on-site, at two time points. The first interview was conducted by two of the authors (DS and DT), during

was conducted by two of the authors (DS and DT), during August/September, 1994. These interviews assessed the managed care strategy and service structure of each Area Program. The second interview occurred during February, 1996, 26 months into the program, and was conducted by one of the authors (DS). It was preceded by a single mail-out questionnaire to all 41 Area Programs that asked updated but parallel questions to the previous questionnaires.

Thirty-five hospital administrators responsible for negotiating service contracts with the Area Programs were interviewed over the telephone at two points in time. The first interview was in July/August, 1994, and the second interview was during July/August, 1995. The first of these interviews was conducted by the author (DS) and the second by a research assistant trained by the author (DS).

Finally 100 DSS directors were interviewed over the telephone during July, 1995. These interviews were conducted by a research assistant. Copies of interviews and/or questionnaires may be obtained from the author (DS).

Results

Area Programs

Modeling the structure of CA as a wheel, Medicaid and the State Office of MH/DD/SAS are the hub and the Area Programs are the spokes. The Area Programs carry the weight of the program in that they are responsible for implementation and are at-risk for excess expenditures above and beyond the capitation amount. They have expended a great deal of time, thought, energy, and patience in designing, implementing, and adapting to an evolving process. Most results presented here will be from the 26-month interviews conducted and questionnaires collected in February of 1996.

Service Delivery: All 10 Area Programs reported that CA resulted in decreases in the average length of time until children received first treatment. Estimates ranged from decreases of 1 to 30 days, with 5 days representing the median decrease. Of the 10 Area Programs, 9 reported increases in in-house direct care staff and/or treatment slots, in residential treatment slots, and in case management staff. All 10 Area Programs developed and maintained an extensive network of private contract providers. The number of contracts with individual care providers ranged from 10 to 78 (median = 32), and with group providers, ranged from 10 to 33 (median = 12).

Admission rates to hospitals from the 10 Area Programs decreased, and the average length of hospital stays were reduced to less than 30 days, with 9 of 10 Area Programs reporting average lengths-of-stay less than 14 days. Formal grievances from the hospitals were minimal with most Area

grievances from the hospitals were minimal with most Area Programs experiencing no grievances that were unresolved at the local level.

Care Management: Area Programs were asked to report how extensive efforts to manage inpatient care were during the first two years of the program. On a scale of 1 to 7, (1 = Not at all Intense, 4 = Moderately Intense, and 7 = Extremely Intense), eight Area Programs rated their efforts as 5 or higher, with 4 rating their efforts as extremely intense. The 2 remaining Area Programs rated their efforts at level 3. On the outpatient side, Area Programs anticipate that efforts to manage outpatient care will have to be equally intensive with the onset of outpatient capitation.

After two full years of implementation, only 3 of the 10 Area Programs felt they were still at moderate risk of deficit spending for inpatient care. The remaining 7 reported very little or no risk of deficit spending for inpatient care. The opposite was true for deficit spending on the outpatient side. Here 7 Area Programs reported being at moderate to substantial risk of deficit spending. The other 3 programs reported little to some risk of deficit spending.

The most common barriers to managing inpatient care reported by the Area Programs was the lack of community-based alternative services. This barrier was reported by 8 of 10 Area Programs. Other barriers reported by at least 3 Area Programs were lack of experience with the managed care process and lack of clarity from the state.

The two most commonly reported barriers to managing outpatient care were poor communication with service providers and fluctuating expectations as the Area Programs move from outpatient growth to containment. Until January, 1996, Area Programs were provided full reimbursement for outpatient services. Now outpatient services are also reimbursed on a capitated basis. Hence, the first two years of CA resulted in outpatient service expansion, while January, 1996 marked the beginning of service containment. Area Programs reported nervousness about their abilities to maintain service provision at the same levels as the first two years of the program. Other barriers reported by at least 3 Area Programs included lack of sufficient community-based services, conflicting philosophies with service providers, and lack of clarity from the state.

Interagency Relations: As gatekeepers to service delivery and payments, Area Programs are the principle decision makers, and this may present a source of conflict for other agencies. Competent communication and negotiation skills are crucial. Questions pertaining to Area Programs' relationships with Department of Social Service, Juvenile Justice, and Education showed that while most relationships have some problems and some fluctuated frequently, 40% of the relationships remained the same, and 50% improved since the beginning of CA.

Other Results: Nine of 10 Area Programs described

Other Results: Nine of 10 Area Programs described dissatisfaction with their management information systems in at least one of the following areas: claims management, patient tracking, utilization review, and patient scheduling. All Area Programs attained savings from inpatient capitation reimbursements during the first two years of CA. Area Programs estimated that 22 to 58% of that savings was spent on administering the program.

The final question asked of Area Programs was: "If CA ended today, how would you evaluate what it has done for children's mental health in your area?" The responses resonated a common chorus. Area Programs reported that CA has developed greater continuity of care for children by the improving quality and quantity of services and requiring accountability for the entire spectrum of care. Access to services has improved, with more children being served in each Area Program. Mental health centers are working pro-actively with communities to develop a wide spectrum of services. Communication has improved so that now information is passed with the child across episodes and providers. Accountability has increased, both in terms of fiscal responsibility as well as service provision. CA has provided better coordination and communication between all stakeholders in the process.

Hospitals

Hospitals are an important stakeholder in CA. As service delivery is restructured and less costly outpatient services substituted for inpatient ones, hospitals stand to lose the most. Because only about 30% of children eligible for Medicaid reside in the vicinity of participating Area Programs, the full impact of CA on hospitals has yet to be seen, but change is evident. As of July, 1995, 74% of the 35 hospitals serving children with mental health and substance abuse problems had signed a CA contract with at least one Area Program. The results provided below are from the July, 1995 interviews with administrators from these hospitals.

Service Delivery: Fourteen percent of hospitals reported plans to decrease inpatient capacity, and 80% of those planning a decrease, attribute their action to CA. Forty percent report plans to increase their outpatient capacity, and of those planning an increase, 43% attribute the change to CA.

Care Management: As of July, 1995, hospitals had signed a total of 61 contracts with the 10 Area Programs. Each hospital rated each Area Program with whom they had a contract on several dimensions of care management. Hospitals were asked whether Area Programs exercised too little, about right, or too much control on the hospitalization process. Sixty percent of the ratings fell in the about right category, and 27% fell in the too much category, down from 44% in 1994.

Hospitals also rated Area Programs on their ability to manage inpatient care. Seventy-five percent of the ratings fell in categories ranging from satisfactory to very well. When asked to compare the utilization review of the Area Programs to that of the private company providing the review prior to CA, 35% reported that the Area Programs were more responsive to the needs of children; 22% reported the Area Program and private company were about equally responsive; 22% reported Area programs were asked about responsiveness, and 22% did not know. Similar percentages were reported when the same question was asked with respect to the needs of the hospital rather than needs of the children.

Other results: Finally hospitals were asked to rate the impact of CA on the children they served. Forty-three percent reported that CA had a favorable or extremely favorable impact; 26% reported negligible, and 23% reported unfavorable.

Departments of Social Service

In most Area Programs, the transition of DSS into CA has not been smooth. Notions of medical necessity and treatment versus placement have been slowly accepted by DSS departments. Area Programs worry that the advances made with DSS departments during the growth in the uncapped outpatient services period will be lost as more stringent efforts at managing outpatient services are necessary under the second phase of CA. Results presented here are from telephone interviews conducted in July, 1995.

Service Delivery: DSS directors were asked the following question: As a consequence of CA, do you think that the mental health service options available to children eligible for Medicaid (1) Improved very much, (2) Improved, (3) Remained the same, (4) Deteriorated, (5) Deteriorated very much or (6) Don't know? Ten percent of the DSS departments in CA participating counties reported some level of deterioration, while 53% reported some level of improvement. The remaining 36% fell in the remained the same or don't know categories.

Care Management: DSS directors were asked the following question: Under CA, your local mental health agency serves as the single entry point for children needing mental health services; given your experience with the local mental health agency, how effective do you think they have been in this role? Of CA participating counties, 68% responded that Area Programs had been moderately or very effective in their role. Of the nonparticipating counties, who will eventually participate, 85% expect the Area Programs will be moderately or very effective in their managed care role.

Interagency Relations: Directors were asked to describe problems they encountered in their relationship with the Area Programs. The most frequent problem mentioned by

Area Programs. The most frequent problem mentioned by DSS was too slow or infrequent contact between agencies. This was true regardless of whether or not the county was currently participating in CA. Of the participating counties (n = 31), 23% reported this problem, while 36% of nonparticipating counties (n = 69) reported this problem. No other problem was reported by more than 10% of the participating counties. Among the nonparticipating counties, more than 10% reported problems with Area Programs in the areas of untrained staff, understaffing, misunderstood DSS functions, and inability to serve children with special needs. These percentages ranged from 12% to 17% of the nonparticipating counties.

Conclusions

CA has had its share of hurdles. These hurdles are reflected in the three perspectives presented here. The coming years will be no different, and tensions are likely to be exacerbated by capitated reimbursement for outpatient services and by implementation in the remaining 31 Area Programs. Area Programs will have a tough managed-care role as they tighten control on outpatient services. Interagency relations will continue to have ups and downs. Hospitals will continue to lose demand for inpatient services and need to substitute outpatient services. Area programs, DSS departments, and mental health and substance abuse service providers must continue to be flexible and creative as they are forced to adapt the service system to new financing approaches. Hopefully in the mission to improve both efficiency and effectiveness of treatment, CA will continue to increase access and delivery of a broad spectrum of community-based services.

Stakeholders' Perspectives: Client Satisfaction and Outcomes

Elizabeth M.Z. Farmer, Ph.D. & Julia S. Gagliardi

Children and families who use the public mental-health system are the most important stakeholders in CA. They are the ones for whom CA was created and the ones with the most to gain or lose depending on the success of the program. A set of measures was developed and pilot tested to explore both client satisfaction and to assess child outcomes.

Method

A team of individuals—composed of representatives from the state Division of MH/DD/SAS, Area Programs, Family advocacy groups (Families Can and AMI), and Duke University—developed the measures. The group focused their efforts on developing measures that met several core requirements. The measures must assess satisfaction and outcomes (process measures were already under discussion elsewhere), should be simple to both

administer and interpret, had to tap "real world" dimensions, and should be useful to a variety of stakeholders (e.g., the local Area Mental Health Programs, the State, legislative committees). The committee recognized that the initial measures would be the first step in an ongoing process of development.

The child outcome measures included assessment of problems and functioning in six domains (i.e., (a) school/work/vocational training; (b) family/residential; (c) peer relations; (d) behavior; (e) substance use; and (f) involvement with the legal system). It also included a checklist of treatment foci and the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, Bickman, & Kurtz, 1991).

The satisfaction measures were designed to gather information at key points in a child's treatment process (i.e., at first contact with the center, at initial treatment planning, and at annual update of the treatment plan or planned termination of treatment). Each of these forms focused on issues that were of particular relevance at the given stage of treatment. In addition, a measure was designed to assess the satisfaction of families who dropped out of treatment.

Pilot data on the satisfaction measures were collected in nine Area Programs that were participating in CA. Data collection continued for one month and included all children and parents/guardians who met the criteria for the questionnaires (e.g., all clients who had a first contact, clients who had annual updates of treatment plans). Questionnaires were given to both a parent/guardian who accompanied the child and to the child (for children who were at least ten years old).

Questionnaires were completed while the family was still in the clinic and were returned in an envelope or to a "drop box" to insure confidentiality. Satisfaction of clients who dropped out of service were collected via telephone interviews with the parent/guardian.

Results

A total of 275 forms were included in the analysis. Of these, 115 were "first contact" forms, 68 reported on satisfaction at "initial treatment planning," 53 reflected views at annual review or planned termination, and 39 were completed by parents/guardians of children who had recently dropped out of treatment. Available data suggests a completion rate of approximately 79%, though this rate varied considerably across programs.

The following results highlight areas of particular satisfaction, as well as areas that showed room for improvement. At first contact, 99% of respondents expressed adequate satisfaction with their experience (i.e., 75% were very satisfied and 24% were somewhat satisfied).

Eighty-one percent reported that they were seen at the Area Program within two weeks of first calling to make an appointment, and 91% felt that this response time was satisfactory. Sixty-eight percent reported that they experienced no barriers or difficulties in obtaining services. Of those who did report difficulties, the most commonly reported problems were lack of transportation, lack of information, and concerns about costs. Other questionnaires continued to show an overall high level of satisfaction with services. Areas of particularly high satisfaction included communication (e.g., "staff members listened to what you said," "staff understood the needs of your child and family"), and efficacy of treatment (e.g., "treatment helped you deal more effectively with problems"). Areas that showed a need for improvement included parental participation in treatment planning and removing barriers to care to prevent families from dropping out of treatment.

Pilot testing of the outcome measure included 28 clinicians or case managers who completed the assessment on 41 active cases. Results indicated that the forms were acceptable to staff members, covered domains that they considered to be important, and could be completed in less than ten minutes.

The involvement of representatives from a variety of perspectives and organizations in the development of the satisfaction and outcome measures increased interest in the measures and willingness to implement them. Pilot testing showed that the satisfaction and outcome measures were acceptable to clients and staff members, could be completed quickly with reasonable return rates, and gathered information that was of interest and use to the intended stakeholders.

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Stakeholders' Perspectives: Preliminary Cost Findings

David Langmeyer, Ph.D.

This portion of the symposium presents a comparison of service costs between Area Programs that participated in CA and those that did not. Comparisons within each group across time are also presented.

Method

During the first two years of CA, the 10 participating Area Programs were paid a capitated rate for inpatient services and a fee-for-service rate for non-inpatient services, while the 31 non-participating Area Programs were paid a fee-for-service rate for both inpatient and non-inpatient services. Hence, all costs presented here were calculated based on fee-for-service rates. For this report, costs represent the Medicaid rate paid for services. It is the cost to Medicaid payers (Federal, State and County) on a fee-for-service basis.

Information about the costs under CA was gathered from the North Carolina Medicaid paid claims files for all Area Programs in 1992 and the non-participating Area Programs in 1994. For participating Area Programs, 1994 and 1995 information came from reimbursement reports of the North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services.

It is known that there is under reporting on the paid claims files. Not all services, particularly non-inpatient services, are reported. This underestimates the cost of non-inpatient services for both non-participating and participating programs in 1992, as well as for non-participating programs in 1994. The result is that cost increases for participating programs is exaggerated.

Results

From 1992 (before capitation) to 1994 (first year of capitation), total value of services for participating Area Programs went up by 72% (see [Table 1](#)). Non-participating Area Programs operating under fee-for-service increased total value of service by under 4%.

Some of the increase was due to an increased number of eligible children under 18. For CA participating Area Programs, there was a 26% increase in eligible months between 1992 and 1994. For non-participating Area Programs, this increase was 22%. Combining total value of service and number of eligibles, the cost per eligible month increased for participating Area Programs from 1992 to 1994 and decreased for non-participating Area Programs in the same period of time. Participating Area Programs increased cost per eligible month by 36% and non-participating Area Programs decreased cost per eligible month by 5%.

In general, CA was very successful in reducing costs associated with inpatient services. From 1992 to 1994, the cost per person served in inpatient settings dropped by 45% from \$14,976 per person to \$8,249. Non-participating Area Programs started at about the same level as participating Area Programs in 1992 and increased slightly in 1994 (+2%).

Offsetting the decrease in inpatient service was a dramatic

increase in non-inpatient service for participating Area Programs. Value per person served in non-inpatient settings rose from \$785 to \$2,552, a 225% increase. There was also a sharp increase in non-participating Area Programs' value per person served from \$603 to \$1,466 (+143%).

The decrease in inpatient services and increase in non-inpatient services about balanced out. The total value per person served for participating Area Programs in 1992 was \$3,203. This went up very slightly in 1994 (\$3,280). The non-participating Area Programs were comparable (-4.3%) in 1992 (1994 was not available at time of the report).

Aside from increasing the amount of service provided, another feature of CA was to increase availability of services. Evidence supporting this accomplishment is provided by the fact that in 1994, participating Area Programs served 7.5% of eligible children compared to non-participating Area Programs serving 4.8% of eligible children.

The reduction in inpatient services was expected, and in fact, was the basis of undertaking CA in the first place, but the dramatic increase in non-inpatient services needs to be explored. One aspect of the increase is in the mix of services which were provided. In 1994, over 60% of the non-inpatient service dollars went for "High Risk Intervention." This service barely existed (as a billable service) in the 1992 paid claims files. A new service accounted for the increase in total value of non-inpatient services. Non-participating Area Programs seem to be following the same pattern as CA programs in the growth of non-inpatient services, but with a lag of a few months. The month-to-month paid claims for non-inpatient events in non-participating Area Programs grew rapidly from July 1994 until March 1995 (1.5 million to 3 million). It is likely that the differences in non-inpatient billing between participating and non-participating Area Programs will decrease when 1995 and 1996 information becomes available.

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