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Tiered Reimbursement in Minnesota Child Care Settings

A Report of the Minnesota Child Care Policy Research Partnership

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Update On Policy Changes in Minnesota

Since the completion of this report on tiered reimbursement, a number of changes and modifications were made to Minnesota's Child Care Assistance Program (CCAP) by the 2003 Minnesota Legislature. The changes were effective July 1, 2003.

The State's budget deficit required difficult decisions to reduce program expenses while maintaining core services. As a part of this process, the 2003 Minnesota Legislature made changes to the Child Care Assistance Program to control program costs, including increasing parental co-payments, freezing provider rates and eliminating the tiered reimbursement policy for accredited programs or family child care providers with educational credentials. Research for the following report was completed prior to these legislative changes. The report does not discuss the elimination of tiered reimbursement or any of the other financial and policy changes made to CCAP.

Additionally, responsibility for CCAP administration was transferred from the Minnesota Department of Education (previously the Department of Children, Families & Learning) to the Minneseota Department of Human Services.

For further information about the changes enacted by the 2003 Minnesota Legislature, please consult the Minnesota Department of Human Services Bulletin #03-68-06 (online access is available: http://www.dhs.state.mn.us/main/groups/publications/documents/pub/DHS_id_002182.hcsp).

THE MINNESOTA CHILD CARE POLICY RESEARCH PARTNERSHIP

The Minnesota Child Care Policy Research Partnership (MCCPRP) is a collaboration among Minnesota state agencies, counties, child care resource and referral agencies, and researchers. Coordinated by the Minnesota Department of Human Services, the partnership brings together researchers and policy-makers from the Minnesota Department of Employment and Economic Development (formerly the Department of Economic Security), county child care units from Anoka, Becker, Brown, and Hennepin Counties, the University of Minnesota, Child Trends, Wilder Research Center, the Minnesota Child Care Resource and Referral Network, and several national researchers. The goal of this broadly based partnership is to foster sound research on child care issues of importance to policy-makers at the state, local, and national level.

Funding for the Minnesota Child Care Policy Research Partnership is made possible by a grant from the U.S. Department of Health and Human Services, Child Care Bureau (Project Number 90YE0010) and additional support from the Minnesota Department of Human Services.

The research agenda of the Minnesota Child Care Policy Research Partnership is designed to answer critical questions about how affordability, quality and accessibility affect outcomes for families and children. A key objective is to enhance understanding of the impact on child care quality of various state policies, including the level of subsidies, tiered reimbursement, and quality regulations or standards. The broad research questions include:

- What is the quality of care in Minnesota and what supports are needed to improve and maintain quality child care?
- How do parents and children describe their experiences with child care?
- How many providers meet criteria for high quality care? Where are they located?
- When parents receive child care assistance, what types of care do they use? What types of jobs do they have? How much do they earn? How long do they keep their jobs?
- How does child care assistance influence the availability and price of child care?
- How does the quality of child care vary for different groups, including families receiving subsidies and families from various cultural groups?

Currently the Minnesota Child Care Policy Research Partnership is conducting six interrelated studies, which will be available online at: http://www.dhs.state.mn.us/main/groups/children/documents/pub/DHS_id_008779.hcsp

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EXECUTIVE SUMMARY

Tiered reimbursement is a policy strategy that has become increasingly prevalent in states to improve the quality of child care. While the specific provisions of tiered reimbursement policies vary from state to state, the basic feature is that child care providers offering high quality care (defined in a number of different ways) are eligible to receive a reimbursement rate that is higher than the maximum rate (established by the state through a market survey) for their particular type of care when they care for children receiving child care assistance.

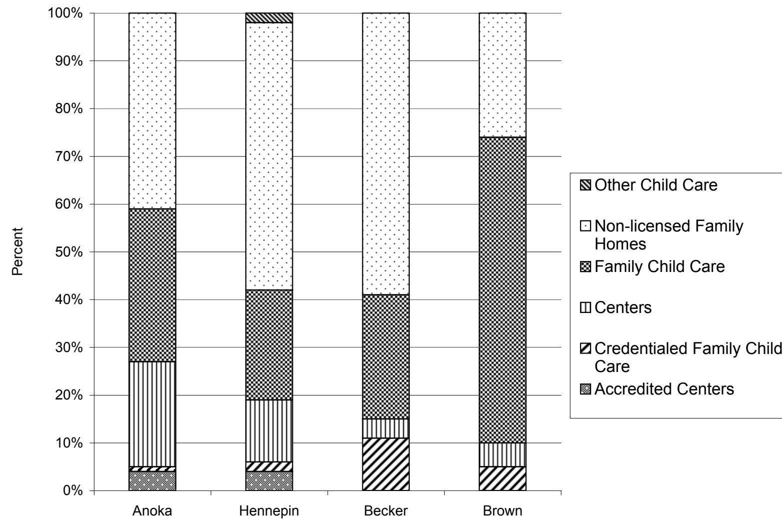
In Minnesota, child care centers and licensed family child care providers that are accredited, as well as family child care providers with state-approved educational credentials, are eligible to receive up to 10 percent above the county maximum rate for their type of care (as long as it does not exceed the rate charged to private pay families). Because Minnesota has had tiered reimbursement policies in place for over 10 years, it is an ideal setting for studying a broad array of questions asking whether, how, and for whom tiered reimbursement improves the availability of and access to higher quality child care. The Minnesota Child Care Policy Research Partnership addresses the following questions in this report:

1. How many and what proportion of licensed providers in Minnesota are accredited or have educational credentials ("credentialed") that make them eligible for tiered reimbursement?
2. How are accredited or credentialed providers distributed geographically across Minnesota?
3. To what extent do families receiving child care assistance in four study counties – Anoka, Becker, Brown, and Hennepin – use accredited or credentialed providers?

In brief, we find:

- Statewide, accredited child care centers and credentialed family child care providers make up a limited proportion of all licensed care – 16 percent and 14 percent respectively. Only 5 percent of school-age care programs in Minnesota are accredited.
- The supply and distribution of accredited or credentialed providers vary by county type (metropolitan, rural counties with a regional center of 20,000 people or more — referred to as mid-rural counties in this report, and rural counties without a large regional center) and by the type of provider. Overall, the supply of accredited centers is limited and restricted primarily to metropolitan counties. The supply of credentialed family child care providers is also limited but is more evenly distributed across the three county types.
- Accredited centers and family child care providers with educational credentials (such as a Child Development Associate degree or a bachelor's degree in early childhood education) make up less than 10 percent of the providers paid by the counties (see Executive Summary Exhibit 1).

Executive Summary Exhibit 1: Comparison of Providers Paid by Child Care Assistance Programs in Four Counties, Monthly Average, January-April, 2001



- Most accredited or credentialed providers caring for children receiving subsidies do not experience a large "density" of child care assistance in their programs in terms of the percentage of their capacity filled by children receiving subsidies.
  - Accredited centers in the two metropolitan counties fill less than 5 percent of their capacity with subsidized children.
  - The density of child care assistance in credentialed family child care programs in the metropolitan counties varies by county. Most credentialed family child care providers in Anoka County fill 5 to 10 percent of their capacity with subsidized children, while half of the credentialed family child care providers in Hennepin County fill 29 percent or more of their capacity with subsidized children.
  - Credentialed family child care providers in Becker County fill about a quarter of their capacity with subsidized children compared to 10 percent of capacity filled among credentialed family child care providers in Brown County.
- The percentage of subsidized children experiencing care by an accredited or credentialed provider in each county ranges from 4 percent in Brown County to 19 percent in Hennepin County. Notably, looking across all of the child care types used by subsidized children, the forms of care used vary considerably in the four study counties. For example, subsidized children in Anoka County are more likely to use center-based care than in the other counties. Subsidized children in Brown County are more likely to use licensed family child care providers than in the other counties. Thus, local variations exist not just in the use of accredited or credentialed providers but in the use of other types of providers as well.
- Basic Sliding Fee, the subsidy program for low-income families, is the child care assistance program used in counties to pay for the majority of care by accredited or credentialed providers. A smaller but still substantial proportion of accredited and credentialed care is paid for by subsidies from the state welfare program (Minnesota Family Investment Program and Transition Year care).
- Accredited centers are represented in metropolitan county subsidy systems in about the same proportion as they exist in the metropolitan counties in general. In metropolitan counties, credentialed family child care providers make up a smaller proportion of family child care providers in the subsidy system than in the counties in general. In the two mid-rural study counties, credentialed family child care providers are represented in county subsidy

systems in about the same proportion as in the counties overall. Thus, there is not a large discrepancy between the presence of accredited and credentialed providers in the subsidy system and the presence of these providers in the counties in general.

Based on the findings from this study and a review of research on quality improvement initiatives, the Minnesota Child Care Policy Research Partnership proposes three broad goals for supporting an effective tiered reimbursement system. These goals are listed below along with a series of questions to consider in the development of supportive strategies.

1. Increase the supply of accredited and credentialed providers

- What types of technical assistance, financial support, and educational resources increase the supply of accredited and credentialed providers? What additional supports are needed for providers as they work toward quality improvements? The answers to these questions can provide the basis for policies and programs aimed at creating and supporting high quality care.
- What rate differential should be used to recognize the higher costs associated with the provision of higher quality care? The only analysis completed to date suggests that a differential of at least 15 percent will encourage more centers to seek accreditation, but further research is needed to understand what resources providers need to improve quality and maintain quality improvements over time.[1]
- Does the provision of financial incentives – in addition to tiered reimbursement – to accredited and credentialed providers help support quality improvements and maintenance and encourage providers to seek additional quality credentials? Such financial supports may be especially attractive to providers, especially those serving low-income families, who cannot set rates that recognize the full cost of providing high quality care.

2. Increase awareness of tiered reimbursement policies and access to supports for quality improvements

- Are child care providers aware of tiered reimbursement policies? Agencies that administer child care assistance programs, as well as resource and referral agencies, could play an important role in ensuring that providers understand the eligibility criteria for tiered reimbursement. They can also help connect providers to resources (for example, technical assistance) that can assist them with making quality improvements.
- Are providers asked about their accreditation status and their educational credentials when registering with county subsidy programs? The agencies administering subsidies should request documentation of qualifications and should be notified as these qualifications change.[2]
- Are parents given information about the types of providers they may choose when they receive child care assistance? Parents receiving subsidies should know that providers that are accredited or who have educational credentials are eligible to receive a higher reimbursement rate from the county because they have those qualifications. Informing parents about tiered reimbursement underscores the significance of these qualifications for the quality of care that their children receive.

3. Increase availability of information for parents about the characteristics of high quality care

- Do parents know that program accreditation and providers' education credentials are associated with child care quality and that high quality care is, in turn, linked to children's cognitive, language and social development? It is important to provide families with information about the characteristics of high quality care that they can use when selecting care for their children. While accreditation status and providers' education level do not guarantee the quality level of a program, they are helpful indicators. In general, improving parents' awareness about child care programs and the components of quality can help make them better consumers.

INTRODUCTION

Since the passage of the 1996 federal welfare reform law (the Personal Responsibility and Work Opportunity Reconciliation Act), the availability of federal funds for state child care assistance programs has increased substantially. As a result, states have seen dramatic growth in the number of children receiving child care subsidies.[3] Yet as more children from low-income families use child care, there remains a concern about the quality of child care available for all children. Studies have documented numerous health and safety violations in licensed child care settings.[4] Further, ratings of observed child care quality indicate that the majority of child care centers and family child care homes examined across various studies provides care that ranges from fair to poor.[5]

In a context of increased need for child care (particularly because of the work requirements put into place with federal welfare reform in 1996) and concerns about the availability and accessibility of high quality care, research also documents the connection between child care quality and children's developmental outcomes. Recent reviews of the child care literature conclude that child care quality is related to children's social, emotional, language and cognitive functioning.[6] Given this link between high quality child care and the development of the skills and behaviors children need as they enter school, the creation of policies and programs to improve the quality of child care has become a priority for many states and communities.

States can address child care quality issues using state and federal funds (including a requirement that states spend 4 percent of their Child Care and Development Fund dollars on activities to increase the quality of child care) and incorporating a variety of different strategies. The focus of this report is on one of these policy strategies—**tiered reimbursement**—that has become increasingly prevalent in states. While the specific provisions of tiered reimbursement policies vary from state to state, the basic feature is that child care providers who offer high quality care (defined in a number of different ways) are eligible to receive a reimbursement rate that is higher than the maximum reimbursement rate established by the state for their particular type of care when they care for children receiving child care subsidies. The policy is based on the premise that higher quality care is more expensive to provide and thus more expensive for families. Theoretically, the policy offers a financial incentive to providers to improve the quality of their care and, through increased compensation, maintain the provision of high quality care over time. For families receiving child care assistance, the policy is intended to make higher quality care more affordable. To date however, little is known about the extent to which tiered reimbursement policies achieve these objectives. This study was designed to begin addressing these gaps in our knowledge.

As of April 2003, 34 states have tiered reimbursement policies.[7] In Minnesota, child care centers and family child care providers that are accredited, as well as family child care providers with state-approved educational credentials, are eligible to receive up to 10 percent above the maximum reimbursement rate for their type of care. Because Minnesota has had tiered reimbursement policies in place since 1989, it is an ideal setting for studying a broad array of questions asking whether, how, and for whom tiered reimbursement strategies improve the affordability of high quality child care.

In this descriptive profile, the first phase of a three-year study, we address three primary questions:

1. How many providers in Minnesota are accredited or have educational credentials ("credentialed") that make them eligible for tiered reimbursement?
2. How are accredited and credentialed providers distributed geographically across Minnesota?
3. To what extent do children receiving child care assistance use accredited or credentialed providers?

Before turning to these questions, we begin by providing background information on child care in Minnesota and on tiered reimbursement policies in general. We then provide details about the study methodology and focus on each of the study questions in turn. We conclude by describing the implications of the study for Minnesota and for understanding tiered reimbursement policies in other states. We note that separate analyses examining the location of accredited and credentialed providers with respect to factors such as neighborhood poverty and proximity to education and training opportunities will be available in a forthcoming report.

CHILD CARE POLICY IN MINNESOTA

The Child Care Assistance Program (CCAP) in Minnesota consists of three subsidy programs: Minnesota Family Investment Program (MFIP) Child Care, serving families receiving cash assistance through MFIP, Transition Year (TY) Child Care serving families for a year after their MFIP case closes; and Basic Sliding Fee (BSF) Child Care, serving low-income working families. All families must have annual gross incomes up to 75 percent of the state median income to be eligible for child care assistance. The state sets policies for CCAP, but the programs are county-administered, giving counties flexibility in the structure of their services. Counties receive funding as necessary to serve all families who are eligible for MFIP and TY child care. In contrast, waiting lists for BSF assistance exist in a number of counties. Counties contribute local funds to the Basic Sliding Fee program. Counties may also contribute local funds, beyond their required county match, for direct services in the Basic Sliding Fee program. Counties receive an administrative allowance for all three subsidy programs. Since this allowance does not cover all of the administrative expenses, counties also contribute additional local funds.

In Minnesota, accredited child care centers and family child care providers that are accredited or hold state-approved early childhood development credentials (see below for a description of the credentials) and who serve families under the MFIP, TY or BSF child care programs are eligible to be paid up to 10 percent above the maximum rate established by the state for the particular type of care provided. This higher rate under the subsidy program may not exceed the rate the provider charges non-subsidized families. All providers can request reimbursement from the Department of Children, Families & Learning (CFL) for 50 percent of the fee charged by the accrediting organization (those approved by the commissioner of CFL to complete the preparation and review process involved in achieving accreditation. Limited tuition aid is also available for child care practitioners seeking some educational credentials.

The accrediting organizations recognized for child care centers include:

- National Association for the Education of Young Children (NAEYC)
- Child Welfare League of American
- National Early Childhood Program Accreditation
- National School-Age Care Alliance
- National Head Start Association Program of Excellence

Minnesota-approved educational credentials and accreditation for family child care providers include:

- The Child Development Associate (CDA)
- The Minnesota Competency-Based Training and Assessment Program
- A diploma in Child Development from a Minnesota State Technical College
- A baccalaureate degree in early childhood education from an accredited college
- National Association for Family Child Care Accreditation

The CFL commissioner may approve other early childhood development credentials not listed above. The counties must request documentation of provider credentials or accreditation before authorizing payment.

In Minnesota, family child care providers may care for any number of related children plus the children from one unrelated family without being licensed.[8] Legally non-licensed providers who have one of the above credentials are eligible to receive the county maximum reimbursement rate for licensed family child care providers (instead of 90 percent of this rate).[9] Thus, they also are eligible to receive the tiered reimbursement rate.[10]

TIERED REIMBURSEMENT POLICIES

Policy Rationale

We turn now to a broader look at tiered reimbursement policies. As noted above, tiered (or differential) reimbursement policies function as a financial incentive for child care providers by recognizing the higher cost of providing higher quality care. Providers meeting a specified quality standard are paid, for each subsidized child in their care, a rate above the rate they would be eligible for had they not met the quality standard. Quality standards are typically defined by criteria such as program accreditation by a national accrediting body (such as NAEYC), ratings of quality by state assessors, or special training and educational requirements for providers.

Research shows that the quality standards or indicators used in tiered reimbursement policies generally correlate with the actual quality of care provided in a child care setting. A child care provider's education and training is consistently associated with observational measures of caregiving quality.[11] Accreditation is also associated with higher quality care, though the correlation is modest. For example, a recent study of child care centers in three California communities found that nearly 30 percent of NAEYC-accredited centers were rated as mediocre in overall quality in 2000.[12] However, while the quality standards used in tiered reimbursement systems are not perfect proxies for quality, providers holding the approved quality standards are more likely than other providers to offer higher quality care.

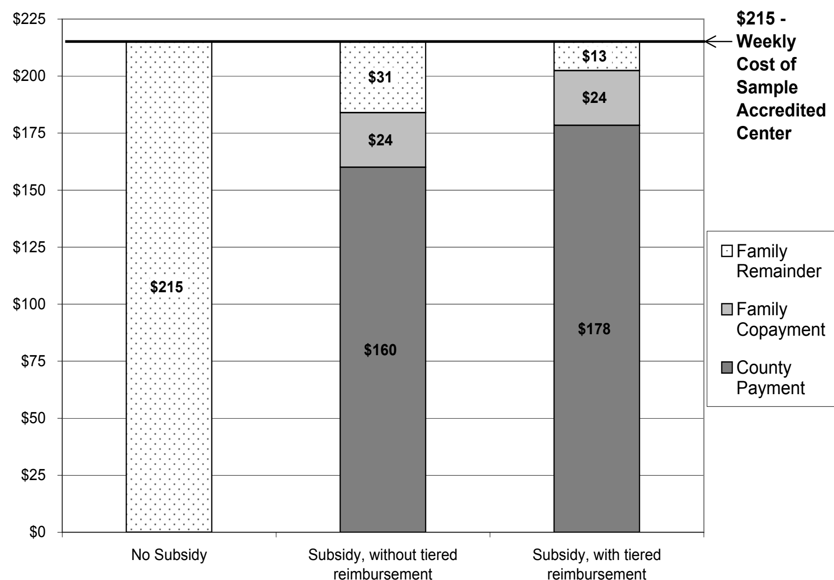
From the perspective of child care providers who have not already met the quality standard, the additional compensation offered by tiered reimbursement may encourage providers to work toward achieving accreditation or an educational credential. For those providers who have met the quality standard, the additional compensation may help them cover the costs associated with providing higher quality care. And, in some cases, tiered reimbursement may increase the likelihood that providers will care for children receiving subsidies. For example, since tiered reimbursement may lower the difference between a provider's rate and the county maximum reimbursement rate, it decreases the potential loss to the provider if a subsidized family cannot cover the difference. The provider is assured at least a portion of their rate, and the family receiving child care assistance can use a provider offering higher quality care.

However, an important stipulation in most states' tiered reimbursement policies — including Minnesota's — is that child care providers cannot receive more from the state or county per subsidized child than they would receive for an unsubsidized child. For example, if the maximum reimbursement rate for a preschooler at child care centers in a particular locality is $75 per week and an accredited center charges $80 per week for preschoolers, the center would be eligible to receive only up to $80 per week for each subsidized preschooler in their care. So, even if state policy allows accredited centers to receive 20 percent above the maximum reimbursement rate — which in this example would allow the center to receive up to $90 per week instead of $75 — the center is not eligible for the full tiered rate since it does not charge private-paying families this rate. Thus, in most states tiered reimbursement does not result in additional income for providers.

However, tiered reimbursement may increase the affordability of high quality providers for subsidized families. Whether or not a provider is affordable for a subsidized family depends in part on the amount of the family's required copayment (determined by income and family size) and any additional payment the family must make to the provider to cover the provider's fees. Providers with high fees (that is, fees that are substantially above the maximum rate plus the rate differential) may still be prohibitively expensive for subsidized families. More information is needed about the cost of accredited and credentialed providers relative to other providers, though previous research suggests that higher quality care is related to higher costs.[13]

It is useful to examine a real-life scenario to understand how tiered reimbursement affects child care payments. In Exhibit 1, for example, we are interested in determining a family's costs and the county's costs for child care for a preschooler from a family of four with an annual **gross** income of $31,000. The child is enrolled in an accredited center in Hennepin County that charges $215 per week for a preschooler. The maximum weekly reimbursement rate for a center in Hennepin County is $184 per week.[14] Thus, the **tiered rate** for an accredited center is $202. The parent fee or copayment for the child (based on a family size of four and gross income of $31,000) is approximately $24 per week. Therefore, the county would pay the center $178 per week (that is, $202 minus $24), and the family would pay the center $37 per week (the copayment plus the remaining $13) or approximately $160 per month. The subsidy plus the tiered reimbursement rate have made the accredited center more affordable for the family than it would have been (that is, without any subsidy, an annual cost of the center amounting to $11,180, or about 36 percent of the family's gross income). Without tiered reimbursement but still receiving a subsidy, the family would pay approximately $238 per month ($2,860 annually), or 9 percent of their annual gross income. With tiered reimbursement, the family is required to pay approximately $1,924 annually, or 6 percent of their annual gross income.

Exhibit 1: County and Family Payment Responsibilities Under Three Scenarios for a Preschooler, from a Family of Four, with an Annual Gross Income of $31,000 in Hennepin County



In some cases, a provider may have a fee that is below the tiered reimbursement rate. For example, assume the preschooler in the family from the previous example (a family of four in Hennepin County with an annual gross income of $31,000) is cared for by a family child care provider who charges $120 per week. This provider obtained her Child Development Associate credential in 2001, making her eligible for a rate that is 10 percent above the county's maximum reimbursement rate. As in the previous example, the family still pays the provider a $24 copayment each week. Even though this provider is theoretically eligible for as much as $124.50 a week from the county for the care of the preschooler (the maximum reimbursement rate of $148.50 minus the family's $24 copayment), the provider will receive $96 each week from the county (her weekly fee of $120 minus the $24 copayment). In contrast to the previous example, tiered reimbursement did not reduce the cost to the family of using the credentialed provider, since the provider's fees were below the county's maximum reimbursement rate.

Policy Features

Nationally, the structure of tiered reimbursement policies varies along four primary dimensions: the number of levels of quality that are recognized, the rate differential that is offered for each quality level, the types of providers that are eligible for tiered reimbursement and the availability of support structures for providers seeking to make quality improvements.

Levels of Quality

States differ in the number of levels of quality they recognize in their payment system. The majority of states with tiered reimbursement use licensing as their lowest level and accreditation as their highest level of quality.[15] While most states have two levels of quality, some have three or as many as five different levels. For example, the District of Columbia, Oklahoma and South Carolina have three tiers of standards, while North Carolina and New Mexico have five levels.

Beyond licensing and accreditation, states might also include a level above licensing but below accreditation. This level might stipulate child-adult ratios and staff qualifications that are above those required by licensing. Similarly, a state might identify a quality level above accreditation. With these additional quality levels, the burden is on the state — typically the licensing agency — to define, implement, and enforce it. Research by the United States General Accounting Office has documented that most state and/or county licensing staff are already overburdened with large caseloads.[16] Thus, the use of quality levels between licensing and accreditation or above accreditation may not be feasible options to add to a payment system.[17]

The term **rated license** is used to describe licensing systems that have incorporated different levels of quality into the licensing process. For example, North Carolina implemented a Five Star child care licensing system in September 2000 where licensors assign one to five stars to licensed child care centers and family child care homes. Providers must be licensed at the one-star level, but they can voluntarily choose to become licensed at higher levels. The number of stars a setting receives is based on its performance in three domains: program standards (which, for those providers attempting to receive a three-star rating or above, includes scores on an observational measure of the child care environment); average level of education of the teachers and director; and, the history of compliance with child care regulations.[18] Because the funds providers receive when they care for subsidized children are linked to the star rating, North Carolina's rated license is also a tiered reimbursement system.

Using accreditation as one quality level may be particularly attractive to states since the designation and monitoring of accreditation status is conducted by private organizations.[19] States must decide which accrediting bodies they will recognize in their quality standards. As of April, 2003, virtually all states that recognize accreditation as one level of quality accept NAEYC accreditation (which is available only for child care centers).[20] A number of other accrediting bodies exist, however, including the National Early Childhood Program Accreditation (NECPA), the National Accreditation Commission for Early Care and Education Programs (NACECEP), and the Council on Accreditation of Services for Children and Families (COA). Accreditation for school-age care is available from the National School-Age Care Alliance (NSACA), while family child care providers can seek accreditation through the National Association of Family Child Care (NAFCC). Some states (for example, Maryland) have created their own accreditation systems to reflect their priorities for quality early childhood programming.

Rate Differentials

Second, states vary in the rate differential offered for each level of quality. A rate differen tial may be a set percentage above the state/county reimbursement rate, an increase in the dollar amount paid per day for a child, or a higher percentile of the market rate (e.g., offering accredited providers payment at the 90th percentile of the market rate rather than the 75th percentile).[21] Setting the rate differential is a key policy decision. In order to increase the number of providers meeting quality standards, the rate must be large enough to recognize the increased costs providers incur as they work toward achieving the standards. One study suggests that the rate differential should be at least 15 percent above the maximum reimbursement rate in order to encourage a higher number of centers to apply for NAEYC accreditation.[22] An analysis by the Children's Defense Fund (CDF) concluded that the differential offered in many states is too small to have the intended impact or that the differential may be added to an already low maximum rate (for example, one that is not based on a recent market rate survey).[23]

As noted above, it is important to consider, regardless of the rate differential offered, whether the payment to the provider can exceed what is charged to private-pay families. A CDF analysis hypothesizes that many providers, especially those serving low-income families who do not qualify for child care assistance, may have difficulty accessing tiered rates since they do not want to set rates that are out-of-reach for the families in their communities.[24] Five states — Florida, Maine, North Carolina, Oklahoma, and Colorado (at county option) — allow the total payment (the maximum reimbursement rate plus the rate differential) to exceed the private-pay rate.[25] However, while this strategy allows providers to actually receive additional income when caring for subsidized children (compared to non-subsidized children), no data have been collected to document whether it is more effective at encouraging providers to achieve quality standards or to care for children receiving subsidies.

Provider Eligibility

Third, states differ in their decisions about which types of providers are eligible for tiered reimbursement. Some states may offer tiered rates only to child care centers, while other states may extend tiered rates to family child care providers. Those states that do extend tiered rates to family child care providers generally make these available only to licensed providers. Minnesota is unique in offering tiered rates to legally non-licensed providers who meet the training and education credentials, though in the data we present below, no legally non-licensed registered providers receive the 10 percent differential in the four study counties.

Support for Quality Improvements

Some states contribute to the cost of becoming accredited or offer other support for quality improvements in combination with tiered reimbursement. States vary in whether they have these formal or informal mechanisms in place to support providers who are interested in improving their programs to meet higher quality standards. States may provide funds from both state and federal sources to support training and education programs for providers, loans for facility improvements, and grants to pay for accreditation fees. Minnesota offers a number of supports for providers including the Teacher Education and Compensation Helps (T.E.A.C.H.) program[26] (operating currently as a pilot program in Minnesota), assistance with accreditation costs, scholarship programs for CDAs, and a facility loan program called First Children's Finance (operated by the Development Corporation for Children).

Policy Effectiveness

Very little is known about the effectiveness of tiered reimbursement policies in improving both the quality of child care and access to high quality child care among children receiving child care assistance.

As described above, one recent study investigated whether applications by child care centers for NAEYC accreditation increased in response to tiered reimbursement policies.[27] Time-series analyses were conducted to estimate the effects of tiered reimbursement on accreditation applications in 10 states (Florida, Kentucky, Mississippi, Nebraska, New Jersey, New Mexico, Ohio, Oklahoma, Utah, and Wisconsin) from January 1, 1995 to October 31, 1999. Statistically significant effects on applications were found in 6 of the 10 states.

For the small states in the analysis, the increase in centers applying for accreditation ranged from almost 11 additional centers per year in New Mexico to almost 26 additional centers per year in Oklahoma (which had averaged 11 applications per year prior to the adoption of tiered reimbursement). More substantial results were found for the larger states, with applications increasing by 114 centers per year in New Jersey and 86 centers per year in Florida (which included applications to other accrediting bodies). However, the authors point out that nationally, only 40 percent of NAEYC applicants go on to achieve accreditation, so the state results they present need to be adjusted accordingly. Also, only a small proportion of centers will be affected by tiered reimbursement. For example, even in New Jersey where there was a predicted increase of 46 accredited centers per year (after adjusting for those not achieving accreditation), this represents less than 2 percent of all the centers in the state.

The authors conclude by suggesting that higher rate differentials have greater impacts. The six states with a statistically significant effect of tiered reimbursement had adopted an average differential of 15.8 percent above regular rates, while the remaining four states had adopted an average differential of 9.2 percent above regular rates. They caution that policies rewarding accreditation will likely be attractive only to centers that are already good (and thus closer to meeting accreditation standards), while centers that have trouble meeting basic licensing requirements will not be interested in pursuing accreditation. They note that other initiatives (for example, a privately supported accreditation facilitation project) can also affect the number of centers seeking accreditation.

In summary, although many questions remain about the effectiveness of tiered reimbursement in improving the quality of care available, broadening families' access to higher quality care, and increasing the willingness of providers to serve subsidized children, tiered reimbursement is viewed as a promising policy strategy.

STUDY OBJECTIVES, METHODOLOGY, AND CONTEXT

The study of tiered reimbursement in Minnesota aims to answer basic questions about the effectiveness of tiered reimbursement policies. The full study is designed to address issues of availability and access to high quality providers by families using subsidies, the experiences of providers eligible for and/or receiving tiered reimbursement, and the actual quality of care provided for children receiving subsidies.

In this first phase of the larger study, we ask three broad questions about tiered reimbursement in Minnesota.

1. How many providers in Minnesota are accredited or have educational credentials ("credentialed") that make them eligible for tiered reimbursement?
2. How are accredited and credentialed providers distributed geographically across Minnesota?
3. To what extent do children receiving child care assistance use accredited or credentialed providers?

A forthcoming report will use mapping techniques to examine the distribution of accredited and credentialed providers with respect to factors such as neighborhood poverty and proximity to education and training opportunities. Other reports from this study will focus on the attitudes and experiences of providers in the subsidy system, observations of child care quality, and an assessment of the supports that are necessary to increase the effectiveness of tiered reimbursement policies and other policies aimed at improving child care quality. Data will be collected through a variety of methods, including a survey of providers, on-site observations of quality, and case studies of child care centers and family child care providers who are and are not participating in the subsidy system.

Methods

The data gathered for the analyses for this first phase of work on tiered reimbursement came from two sources: the statewide child care resource and referral database (Carefinder®) and child care assistance data from the four study counties (Anoka, Becker, Brown, and Hennepin). Details about each of these data sources and the analyses that were conducted are described below. It is important to note that the statewide data provide details about the providers that are **eligible** for tiered reimbursement. This does not mean that they actually care for children receiving subsidies. The county child care assistance data, in contrast, provide details about the eligible providers who actually care for subsidized children.

Documenting the Supply of Providers Eligible for Tiered Reimbursement

Carefinder® was the child care resource and referral software and data system used by the Minnesota Child Care Resource and Referral Network until June 2002.[28] Providers completed a survey that collects details about their program, schedules, capacity, accreditation status, and their education and training. For this analysis, we extracted a file of all licensed child care providers in the state at the end of December 2000. The file contained 15,655 providers, which included 13,607 family child care providers, 854 child care centers, 596 preschools, and 596 school-age child care programs. The Carefinder® database did not include legally unlicensed providers.

From this list, we identified the subset of accredited and credentialed providers (that is, those eligible for tiered reimbursement). Child care centers and school age programs were selected if they reported they were accredited. Family child care providers were selected if they reported they were accredited or if they had one or more of the education and training credentials noted above.

The provider's address, zip code, and county of residence were included on each record so that the location could be assigned geo-coded point locations. The geo-coded data will be examined in a separate report. Providers were also assigned to a county type – metropolitan, mid-rural, or rural – on the basis of their county of residence. Metropolitan counties are those containing and surrounding the Minneapolis and St. Paul metropolitan area. Counties outside of the metropolitan area were classified into two categories. Mid-rural counties are rural counties that have at least one regional center or city, while rural counties have no regional center or city.

Descriptive statistics were calculated to examine the distribution of accredited and credentialed providers across the state and across county types.

Documenting the Use of Accredited and Credentialed Providers by Subsidized Children

Child care assistance records were collected from the four study counties for the months of January to April 2001. For Anoka, Becker, and Brown Counties, we received records of payments to providers who qualified for tiered reimbursement and cared for children receiving child care assistance.[29] In Hennepin County, we used records of providers who were authorized to care for children receiving child care assistance rather than payment records.[30] We were able to determine from the records whether the child care assistance was through the Basic Sliding Fee (BSF) program, the Transition Year program (TY), or the Minnesota Family Investment Program (MFIP) child care programs. We also received statistics from the counties for the total number of children served by each program for the four months.

From the county payment and authorization records, we tabulated the number of children being served each month by each accredited or credentialed provider and calculated an average for the four months. In addition, the county provider data were merged with Carefinder® records to obtain information about the providers' capacity. We were unable to match all of the providers in county records with Carefinder® records. We were able to match capacity data as follows for each study county:

Anoka – 27 of 30 providers (90 percent)
Becker – 15 of 15 providers (100 percent)
Brown – 6 of 6 providers (100 percent)
Hennepin – 152 of 178 providers (85 percent).

Using the capacity data, we then calculated the average proportion of the providers' capacity being filled by a child using child care assistance. We did this by dividing the average number of children on child care assistance served by the provider during the study months by the provider's reported capacity. For simplicity, we can discuss this figure as the *density* of child care assistance in a particular program or the degree of reliance a provider has on county payments. Providers with a smaller density of children receiving subsidies are less reliant on county payments. In contrast, providers with a large density of children on subsidies are more reliant on county payments. In future research, we plan to identify the characteristics of providers who are more or less likely to serve subsidized children and thus have different levels of reliance on county payments.

It is important to note that the density figures may underestimate the proportion of subsidized children cared for by an accredited or credentialed provider since it accounts only for payments made to a provider by a single county. For example, a credentialed family child care provider living in Hennepin County with a capacity of eight children may care for two children from Hennepin County and two children from Dakota County. Our data would only capture the capacity filled by the children from Hennepin County (25 percent of capacity) rather than the combined impact from Hennepin and Dakota Counties (50 percent of capacity). Thus, while these data are a helpful indicator of how many subsidized children providers are serving, they should be interpreted with caution.

Context—the Four Study Counties

As noted above, four counties in Minnesota that are broadly representative of the state as a whole were purposefully selected and agreed to participate in the study. Here we provide a brief description of the demographic and geographic characteristics of the four counties.[31]

Anoka County

Anoka County is a suburban county located in the Minneapolis/St. Paul metropolitan area (classified as a metropolitan county in this study) with a population of 298,084 people (with 72,123 children ages birth to 14, or 24 percent of the county population). The county has undergone dramatic growth in the past 10 years with a 22 percent increase in population between 1990 and 2000. Just over 6 percent of the county is comprised of people from racial and ethnic minority groups, including Black (1.6 percent), American Indian (0.7 percent), Asian (1.7 percent) and Hispanic (1.7). About 4 percent of families with children under age 18 have incomes below poverty.

Becker County

Becker County is located in north central Minnesota and has a population of 30,000 people (with 6,398 children ages birth to 14, or 21 percent of the county population). It is classified in this study as a mid-rural county since it has one regional center, Detroit Lakes. The population of the county grew by about 8 percent between 1990 and 2000. Over 11 percent of the county is composed of people from racial and ethnic minority groups, primarily American Indian (8 percent). Fourteen percent of families with children under age 18 have incomes below poverty.

Brown County

Brown County is located in south central Minnesota and has a population of 26,911 (with 5,358 children ages birth to 14, or 20 percent of the county population). It is classified in this study as a mid-rural county since it has one regional center, New Ulm. The population of the county remained virtually unchanged from 1990 to 2000. About 2 percent of the county is composed of people from racial and ethnic minority groups, and just over 7 percent of families with children under age 18 have incomes below poverty.

Hennepin County

Hennepin County is a metropolitan county that includes the state's largest urban area, Minneapolis. The population in 2000 was 1,116,200, which is an 8 percent increase from 1990. Twenty percent of the county population (224,150) is children ages birth to 14. One in five people in the county is from a racial and ethnic minority group, including Black (9 percent), American Indian (1 percent), Asian (5 percent), and Hispanic (4 percent). Eight percent of families with children under age 18 have incomes below poverty.

FINDINGS

Availability of Accredited and Credentialed Providers in Minnesota

In this section, we present the results from our analysis of Carefinder® records to determine the availability of providers eligible to receive tiered reimbursement (by virtue of their accreditation status and, for family child care providers, their educational credentials) across Minnesota. We present the results separately for center-based care (which includes child care centers, preschools, and Head Start), family child care, and school-age care. Appendix A contains the complete list of accredited and credentialed providers by county.

Accredited Center-based Care

Across Minnesota in December 2000, there were 1,450 center-based providers (including child care centers and preschools). Of these, 237 or 16.3 percent are accredited and thus eligible to receive tiered reimbursement. Sixty-six percent were accredited by NAEYC (verified with NAEYC records), 3 percent are Head Start Programs of Excellence, and 3 percent were specialized providers in Hennepin County. The remaining 28 percent of centers self-reported that they were accredited, but their accreditation status could not be verified with NAEYC's online directory or records from other accrediting bodies. However, because the NAEYC and Carefinder® data were not accessed concurrently (NAEYC's online records were accessed in April 2001, and the Carefinder® data on accreditation status was correct as of December 2000) we decided to include those programs with un-verified accreditation, since changes may have occurred in the 4-month interim. Therefore, our findings may slightly overestimate the actual number of accredited center-based programs in Minnesota as of December 2000.

Table 1 details the total number of center-based settings (broken out by child care centers as well as preschools and Head Start programs), the total number of accredited center-based providers, and the percent of accredited center-based providers in the state and by county classification.

Table 1 shows that almost two-thirds of center-based settings (63 percent) – regardless of their accreditation status – are located in the 7 metropolitan counties. An even higher proportion of the accredited centers in the state – 81 percent – are located in the metropolitan counties.

Overall, 21 percent of the center-based settings in the metropolitan counties are accredited, making them eligible for tiered reimbursement.

The number and proportion of accredited center-based providers are decidedly lower in mid-rural and rural counties. Only 10 percent of center-based providers in mid-rural counties and only 4 percent of center-based providers in rural counties are accredited and eligible for tiered reimbursement (TR).

Table 1: Number and Percent of Center-based Providers in Minnesota Eligible for Tiered Reimbursement, Statewide and by County Type, December 2000

	Number of Child Care Centers	Number of Preschools and Head Start Programs	Total Number of Center-based Providers	Number of Accredited Center-based Providers	Center-based Providers That Are Accredited
Statewide	856	596	1452	237	16.30%
Metropolitan Counties (7)	589	326	915	193	21.10%
Mid-rural Counties (44)	199	198	397	38	9.60%
Rural Counties (36)	68	72	140	6	4.30%

Next, to better understand the distribution of accredited providers in the state, we examine the "median county" for each county type. This means that we arrange the quantities of interest (for example, the number of accredited providers in a county) from smallest to largest and report on the middle value (that is, the 50th percentile). We use the median, rather than the mean, to prevent "outliers" from positively biasing the result.

Table 2 shows the values for the median county, by county type. In the median metropolitan county, 17 percent of center-based providers are eligible for tiered reimbursement. In contrast, in the median mid-rural and rural counties, no center-based providers are eligible for tiered reimbursement. Another way to explain the values in Table 2 is to say, for example, that half of the 36 rural counties in Minnesota have 2 (or fewer) center-based settings and neither of the settings is accredited.

Table 2: Number and Percent of Center-based Providers in a Median Minnesota County Eligible for Tiered Reimbursement, by County Type, December 2000

	Number of Child Care Centers in a Median County	Number of Preschools and Head Start Programs in a Median County	Number of Accredited Center-based Providers in a Median County	Center-based Providers That Are Accredited in a Median County*
Metropolitan Counties (7)	48	34	13	17.1%
Mid-rural Counties (44)	2	4	0	0%
Rural Counties (36)	1	1	0	0%

* Note that this percentage is a measure of central tendency and may be slightly different from the actual percentage obtained by dividing column 3 by columns 1 and 2.

Family Child Care

Compared to center-based providers, there are substantially more — more than nine times as many — family child care providers in Minnesota. Fewer than one in five of family child care providers (14.4 percent) are eligible for tiered reimbursement, a percentage that is slightly lower than that reported for center-based care.

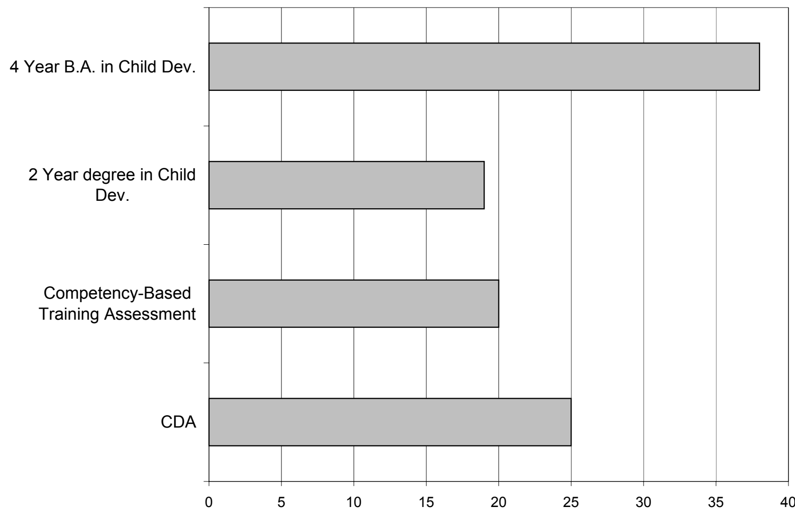
Table 3 shows that 45 percent of the family child care providers in Minnesota are located in the metropolitan counties. Of those eligible to receive tiered reimbursement because of their accreditation status or educational credentials, 46 percent live in the metropolitan counties.

Unlike the distribution of center-based providers, a similar percentage of providers are eligible for tiered reimbursement in each of the different county types. This indicates a more even distribution of credentialed family child care providers across the state. Fourteen percent of family child care providers are eligible for tiered reimbursement statewide, with 15 percent eligible in the metropolitan counties, 14 percent eligible in mid-rural counties, and 15 percent eligible in rural counties. Only 24 family child care providers in Minnesota were accredited by the National Association of Family Child Care (NAFCC) in December 2000. Thus, the majority of family child care providers are eligible for tiered reimbursement because of their educational credentials. According to Carefinder® records (reflecting providers' own reports of their educational credentials), of those eligible for tiered reimbursement, approximately 25 percent of family child care providers report that they have a CDA, 20 percent report that they completed the Competency-Based Training Assessment program, 19 percent report having a two-year degree in child development, and 38 percent report having a four-year degree in child development (note that due to overlap in the credentials reported by providers, the percentages do not sum to 100; see Figure 1).

Table 3: Number and Percent of Family Child Care Providers in Minnesota Eligible for Tiered Reimbursement, Statewide and by County Type, December 2000

	Number of Family Child Care Providers	Number of Credentialed Family Child Care Providers	Family Child Care Providers That Are Credentialed
Statewide	13607	1964	14.40%
Metropolitan Counties (7)	6105	896	14.70%
Mid-rural Counties (44)	5606	789	14.10%
Rural Counties (36)	1896	279	14.70%

Figure 1: Percent of Family Child Care Providers in Minnesota that are Eligible for Tiered Reimbursement Who Have Selected Educational Credentials, December 2000



As we did with center-based providers, we examined family child care providers in the median county. Table 4 displays these values by county type. The median counties are fairly similar across the county types. Fifteen percent of family child care providers are eligible for tiered reimbursement in the median metropolitan county compared to 14 percent in the median mid-rural county and 12 percent in the median rural county. This provides further evidence that credentialed family child care providers are more evenly distributed in counties of different types than accredited center-based providers.

Table 4: Number and Percent of Family Child Care Providers in a Median Minnesota County Eligible for Tiered Reimbursement, by County Type, December 2000

	Number of Family Child Care Providers in a Median County	Number of Credentialed Family Child Care Providers in a Median County	Family Child Care Providers That Are Credentialed in a Median County*
Metropolitan Counties (7)	890	117	14.50%
Mid-rural Counties (44)	86	11	13.70%
Rural Counties (36)	42	5	12.40%

* Note that this percentage is a measure of central tendency and is slightly different from the actual percentage obtained by dividing column 2 by column 1.

School-age Care

Finally, we examined school-age care providers that are eligible for tiered reimbursement. Similar to family child care providers, very few school-age providers are accredited. Statewide, 32 programs (5.4 percent of school-age programs) were accredited as of December 2000. We verified accreditation status for sixty percent of the programs (either NAEYC or NSACA) but were unable to verify the self-reported status of the remaining 13 programs. Therefore, these findings may overestimate the actual number of accredited school-age programs (as of December 2000).[32] As noted in Table 5, all of the accredited school-age programs are located in the metropolitan counties.

Table 5: Number and Percent of School-age Providers in Minnesota Eligible for Tiered Reimbursement, Statewide and by County Type, December 2000

	Number of School-age Care Providers	Number of Accredited School-age Care Providers	School-age Care Providers That Are Percent of Accredited
Statewide	596	32	5.4%
Metropolitan Counties (7)	373	32	8.6%
Mid-rural Counties (44)	163	0	0.0%
Rural Counties (36)	60	0	0.0%

Supply of Accredited and Credentialed Providers in the Four Study Counties

Next, before focusing on the extent to which accredited and credentialed providers are used by families receiving child care assistance in the four study counties, we use the Carefinder® data to document the supply of accredited and credentialed providers in the four study counties. The findings are presented in Tables 6, 7, and 8 and provide context for the data presented in the next section of this report.

Compared to the median metropolitan county, Anoka has a lower percentage of accredited center-based providers (17 percent for the median county versus 11 percent in Anoka County), while Hennepin has a higher percentage (26 percent) (see Table 6). Becker and Brown have no accredited center-based providers, similar to what was noted for the median mid-rural county.

Table 6: Number and Percent of Accredited Center-based Providers in the Four Study Counties, December 2000

	Number of Child Care Centers	Number of Preschools and Head Start Programs	Total Number of Center-based Providers	Number of Accredited Center-based Providers	Center-based Providers That Are Accredited
Anoka	48	34	82	9	11.0%
Becker	0	3	3	0	0.0%
Brown	2	6	8	0	0.0%
Hennepin	278	126	404	105	26.0%

Similar to the pattern noted for center-based providers, Anoka has a slightly lower percentage of credentialed family child care providers than the median metropolitan county (13 percent for Anoka versus 15 percent for the median county) while Hennepin has a slightly higher percentage (16 percent) (see Table 7). Compared to the median mid-rural county, Becker County has a substantially higher percentage of credentialed family child care providers (14 percent for the median county versus 26 percent for Becker County) while Brown has a lower percentage (9 percent).

Table 7: Number and Percent of Credentialed Family Child Care Providers in the Four Study Counties, December 2000

	Number of Family Child Care Providers	Number of Credentialed Family Child Care Providers	Family Child Care Providers That Are Credentialed
Anoka	890	117	13.1%
Becker	114	30	26.3%
Brown	123	11	8.9%
Hennepin	1,933	301	15.6%

Finally, as shown in Table 8, Hennepin is the only study county that has accredited school-age providers.

Table 8: Number and Percent of Accredited School-age Care Providers in the Four Study Counties, December 2000

	Number of School-age Care Providers	Number of Accredited School-age Care Providers	School-age Care Providers That Are Accredited
Anoka	34	0	0.0%
Becker	2	0	0.0%
Brown	2	0	0.0%
Hennepin	148	24	16.2%

Use of Accredited and Credentialed Providers by Children Receiving Child Care Assistance

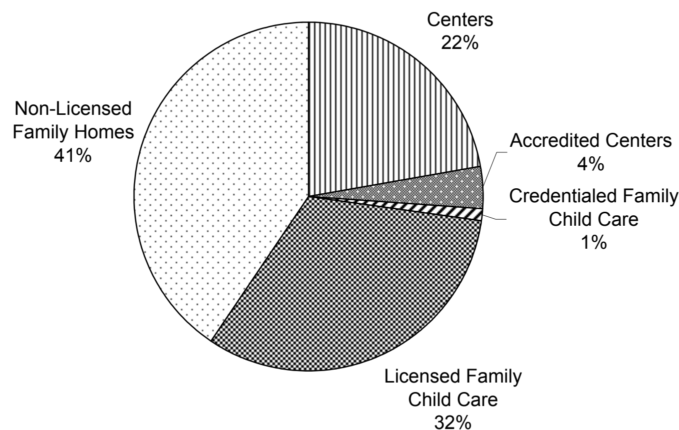
Next, we present the results from our analysis of child care assistance data from the four study counties – Anoka, Becker, Brown and Hennepin. We present the results separately by county and address the following basic questions. First, what percentage of providers being paid by the counties for a child or children in their care is eligible to receive tiered reimbursement? Note that because we did not examine the dollar amount of the payments to providers or the rates providers charged families, we do not know whether the providers el gible for tiered reimbursement actually received a higher payment rate from the county (since this depends on what the provider is charging to private-pay families). In addition, we do not know what a family was expected to pay for care (that is, the copayment). Thus, when we refer to providers that are "paid by the county," we mean providers who care for subsidized children (regardless of the amount they are paid). Second, of those providers eligible to receive tiered reimbursement, how many children on subsidies do they enroll each month, and what percent of their capacity are subsidized children filling? Finally, how many subsidized children are using accredited or credentialed providers each month?

The monthly child care assistance data for each county can be found in Appendix B.

Anoka County

Providers eligible for tiered reimbursement in Anoka county represent, in an average month, 5 percent of the providers being paid by the county for a child or children in their care. Four percent of the providers are accredited centers, and 1 percent is credentialed family child care providers (see Figure 2).

Figure 2: Types of Providers Paid by Anoka County, Monthly Average, January-April, 2001



Accredited centers paid by Anoka County care for eight subsidized children each month, on average (see Table 9), though there is variability among the centers in the number of subsidized children in their care. Half of the accredited centers serve two or fewer children each month, while four of the centers serve more than 20 children each month (not shown in the table). These centers fill a small percentage of their capacity with subsidized children (9 percent on average, with half of the centers filling less than 2 percent of their capacity). Among the small group of accredited centers serving higher numbers of subsidized children, none fill more than 50 percent of their capacity with subsidized children.

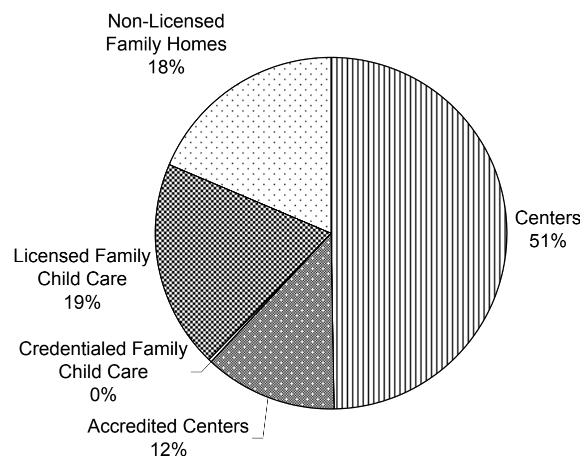
Credentialed family child care providers in Anoka County also care for small numbers of children on subsidies (see Table 9). On average, a credentialed family child care provider cares for one subsidized child each month. This represents about 10 percent of capacity for these providers.

Table 9: Subsidized Children Receiving Care in Accredited Centers and Credentialed Family Homes in Anoka County, Descriptive Statistics, January-April, 2001

	Number of Subsidized Children in Care (monthly average)				**Percent of Capacity Filled with Subsidized Children (monthly average)**			
	25th %-tile	50th %-tile	75th %-tile	Mean (st. dev)	25th %-tile	50th %-tile	75th %-tile	Mean (st.dev)
Accredited Centers	0.75	2	8.7	8.2 (12.6)	0.01	0.02	0.13	.09 (.13)
Credentialed Family Child Care Providers	1	1	2	1.2 (.57)	0.07	0.07	0.17	.10 (.05)

A final way to understand how tiered reimbursement operates in counties is to examine the proportion of subsidized children that are cared for in accredited centers and credential family child care. Figure 3 shows that 12 percent of subsidized children in Anoka County are cared for in accredited centers and fewer than 1 percent are cared for by credentialed family child care providers. Approximately half of the subsidized children in Anoka County use center-based care, while only 18 percent use non-licensed family child care homes, the lowest percentage for this type of provider across the four study counties. Nineteen percent of the subsidized children are cared for by licensed family child care providers.

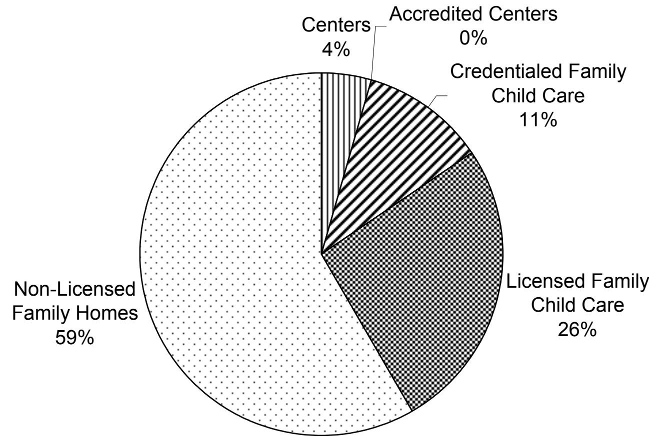
Figure 3: Types of Care Used by Children Receiving Child Care Assistance in Anoka County, Monthly Average, January-April, 2001



Becker County

While Becker County has no accredited centers, 11 percent of the providers paid by the county for one or more subsidized children in their care are credentialed family child care providers (see Figure 4). This percentage is higher than those seen for credentialed family child care providers in the other three counties.

Figure 4: Types of Providers Paid by Becker County, Monthly Average, January-April, 2001



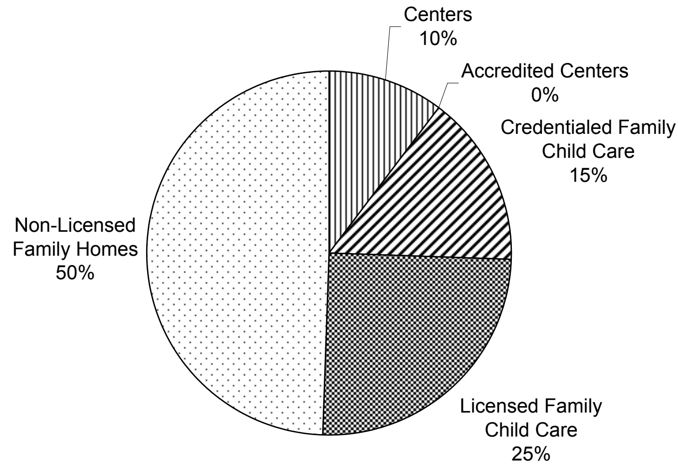
On average, credentialed family child care providers in Becker County care for three subsidized children each month (see Table 10). This fills approximately one-quarter of their capacity.

Table 10: Subsidized Children Receiving Care in Accredited Centers and Credentialed Family Homes in Becker County, Descriptive Statistics, January-April, 2001

	Number of Subsidized Children in Care (monthly average)				Percent of Capacity Filled with Subsidized Children (monthly average)			
	25th %-tile	50th %-tile	75th %-tile	Mean (st.dev)	25th %-tile	50th %-tile	75th %-tile	Mean (st.dev)
Accredited Centers	0	0	0	0	0	0	0	0
Credentialed Family Child Care Providers	1.5	3.0	4.5	3.1 (1.8)	0.15	0.25	0.35	.27 (.14)

Fifteen percent of subsidized children in Becker County use family child care providers who are eligible for tiered reimbursement. Half of the subsidized children in Becker County use non-licensed family child care homes, while one-quarter use licensed family child care (see Figure 5).

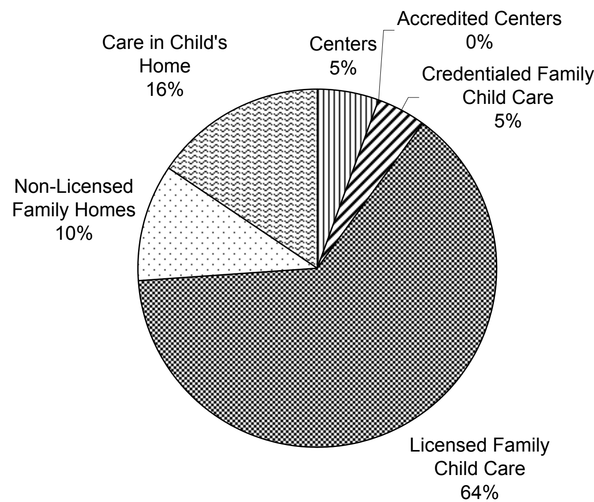
Figure 5: Types of Care Used by Children Receiving Child Care Assistance in Becker County, Monthly Average, January-April, 2001



Brown County

In contrast to Becker County (the other mid-rural study county), only 5 percent of the providers paid by the county for one or more subsidized children in their care are credentialed family child care providers (see Figure 6). Yet, 64 percent of the providers paid by the county are licensed family child care providers, the highest proportion for this type of provider in the four study counties. Similar to Becker County, there are no accredited centers in Brown County.

Figure 6: Types of Providers Paid by Brown County, Monthly Average, January-April, 2001



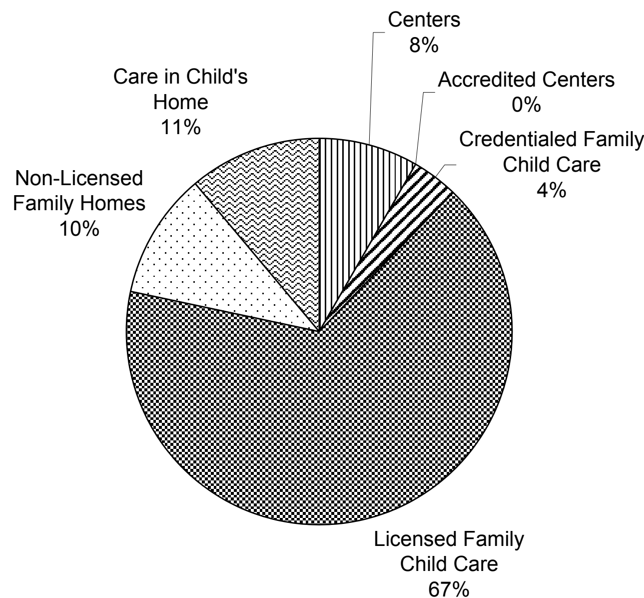
Compared to Becker County, credentialed family child care providers care for fewer subsidized children – one (versus three in Becker County) – in an average month (see Table 11). They fill approximately 10 percent of their capacity with subsidized children.

Table 11: Subsidized Children Receiving Care in Accredited Centers and Credentialed Family Homes in Brown County, Descriptive Statistics, January-April, 2001

	Number of Subsidized Children in Care (monthly average)				Percent of Capacity Filled with Subsidized Children (monthly average)			
	25th %-tile	50th %-tile	75th %-tile	Mean (st.dev)	25th %-tile	50th %-tile	75th %-tile	Mean (st.dev)
Accredited Centers	0	0	0	0	0	0	0	0
Credentialed Family Child Care Providers	0.88	1.0	2.2	1.4 (.83)	0.06	0.09	0.16	.11 (.07)

The types of care used by subsidized children in Brown County mirror the types of providers paid by the county for subsidized children in their care. Four percent of children use credentialed family child providers, while 67 percent use licensed family child care (see Figure 7).

Figure 7: Types of Care Used by Children Receiving Child Care Assistance in Brown County, Monthly Average, January-April, 2001

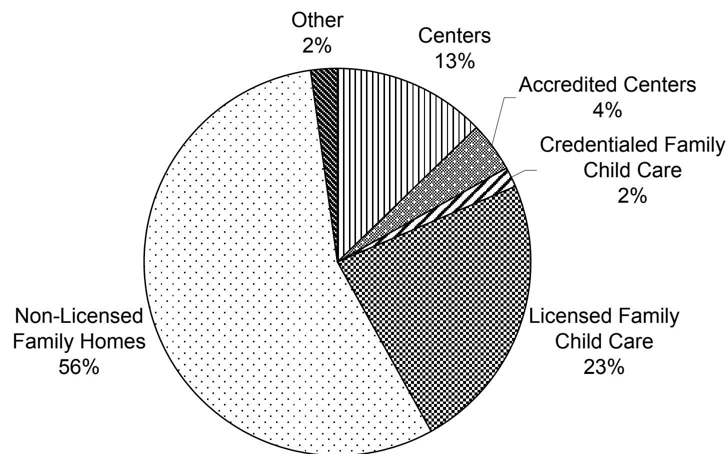


 http://www.dhs.state.mn.us/main/groups/children/documents/pub/DHS_id_008779.hcsp

Hennepin County

As noted, because of the complexities in Hennepin County's payment system and difficulties determining links between service and payment, we describe child care service relationships that have been authorized by the county. When care is authorized for a child, it means that eligibility for a child care subsidy has been verified by the county and an official agreement has been established with a child care provider to provide care for the child. Approximately 6 percent of the providers authorized in Hennepin County are eligible for tiered reimbursement (see Figure 8). Four percent are accredited centers and 2 percent are accredited or credentialed family homes. Over half of the providers (56 percent) authorized in Hennepin County are non-licensed family child care homes.

Figure 8: Types of Providers Authorized by Hennepin County, Monthly Average, January-April, 2001



There is wide variation in the average number of subsidized children cared for in accredited centers in Hennepin County (see Table 12). The mean across all accredited centers is 11 children per month, but half of the centers are caring for 5 or fewer children per month. Similarly, the percent of accredited centers' capacity that is filled with subsidized children varies. The mean is 12 percent, but half of the centers are filling 6 percent or less with subsidized children. These discrepancies between the means and the medians indicate that a few accredited centers are serving a large number of subsidized children and thus positively skewing the mean. It is helpful to use both the mean and the percentile values to understand this pattern.

Credentialed family child care providers care for an average of 5 subsidized children each month, though again there is wide variation across providers. On average, credentialed providers fill over 40 percent of their capacity with subsidized children. One-quarter of the credentialed family child care providers are filling over half of their capacity (57 percent) with subsidized children.

Table 12: Subsidized Children Receiving Care in Accredited Centers and Credentialed Family Homes in Hennepin County, Descriptive Statistics, January-April, 2001

	Number of Subsidized Children in Care (monthly average)				Percent of Capacity Filled with Subsidized Children (monthly average)			
	25th %-tile	50th %-tile	75th %-tile	Mean (st.dev)	25th %-tile	50th %-tile	75th %-tile	Mean (st.dev)
Accredited Centers	1.4	4.9	17.6	10.9 (14.3)	.02	.06	.16	.12 (.16)
Credentialed Family Child Care Providers	1.0	3.3	6.4	5.1 (5.7)	.10	.29	.57	.41 (.41)

Just under 15 percent of subsidized children in Hennepin County have parents who choose accredited or credentialed providers (see Figure 9). The majority of these children (12 percent) have parents who choose accredited centers, and the remainder choose credentialed family child care providers (2 percent).

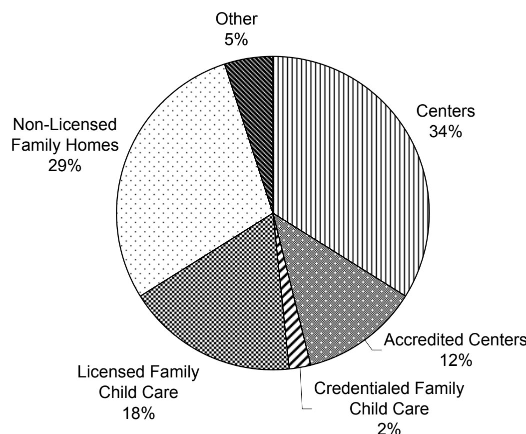


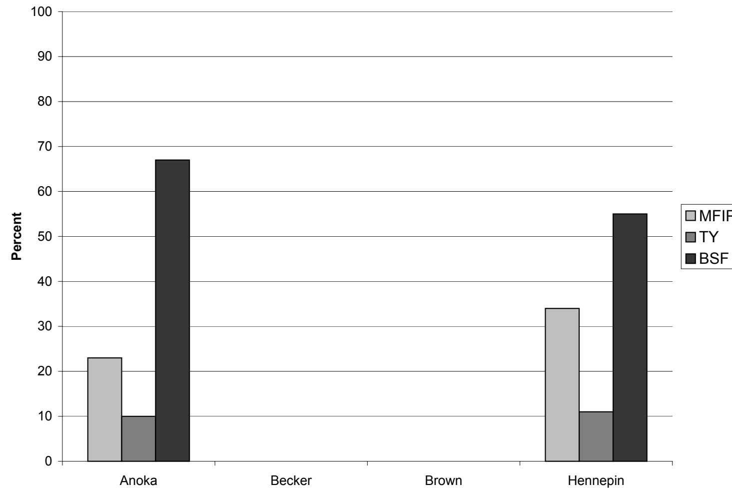
Figure 9: Types of Care Authorized for Children Receiving Child Care Assistance in Hennepin County, Monthly Average, January-April, 2001

Child Care Assistance Program Used to Pay Providers

Next, to better understand the use of accredited and credentialed providers by families receiving child care assistance, we examined the program – Basic Sliding Fee (BSF), Transition Year (TY), or Minnesota Family Investment Program (MFIP) – used to pay the providers. First, for each accredited and credentialed provider paid by the county, we calculated the average monthly number of children using each of the three subsidy programs. We divided these numbers by the average monthly total of subsidized children cared for by each provider to obtain the percentage of children using each subsidy program. (For example, an accredited center in Anoka county cares for 44 subsidized children each month. Seventy-one percent of the subsidized children receive BSF funds, 15 percent receive MFIP funds, and 14 percent receive TY funds.) We then calculated county averages of these percentages for accredited centers and credentialed family child care. Unfortunately, we were not able to compare the breakdown of subsidy program used for the other types of care paid for by the counties. The following averages are presented only for subsidized care provided by accredited and credentialed providers.

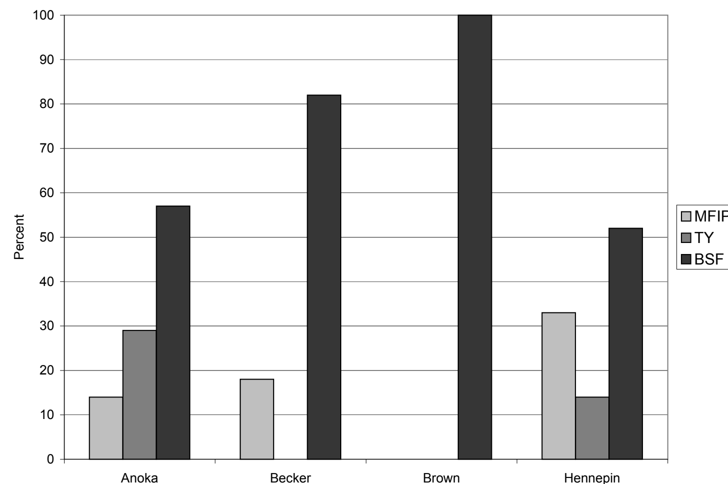
As shown in Figure 10, in the two study counties with accredited child care centers, the majority of payments to accredited centers were BSF subsidies (67 percent in Anoka County and 55 percent in Hennepin County). MFIP subsidies were used for about one-fifth of the accredited care in Anoka County and about one-third of the accredited care in Hennepin County.

Figure 10: Child Care Assistance Program Used to Pay Accredited Child Care Centers in Four Counties, Monthly Average, January-April, 2001



Similarly, for credentialed family child care in the four counties (see Figure 11), the majority of payments were BSF subsidies (57 percent in Anoka, 82 percent in Becker, 100 percent in Brown, and 52 percent in Hennepin), though significant proportions of payments for credentialed care were with MFIP and TY subsidies. For example, MFIP care accounted for one-third of the authorizations for credentialed family child care in Hennepin County, while TY accounted for 29 percent of the credentialed family care in Anoka County.

Figure 11: Child Care Assistance Program Used to Pay Credentialed Family Child Care Providers in Four Counties, Monthly Average, January-April, 2001



Accredited and Credentialed Providers Participating in the Subsidy System

One important question we are not able to examine with these data is whether children receiving subsidies are in settings eligible for tiered reimbursement at the same rate as children who do not receive subsidies (since we do not know the proportions of non-subsidized children in different types of care arrangements in each county). We can ask, however, whether the proportion of providers in the subsidy system who are accredited or credentialed is similar to the overall proportions of accredited and credentialed providers documented for the four study counties. For example, it may appear as if children receiving subsidies have limited access to accredited and credentialed providers when in fact all children in a county may have limited access. The following analyses help us examine whether this discrepancy exists and, if so, if it holds across provider types and across the four study counties. We compared accredited and credentialed providers as a percentage of all providers in the county (either center-based or family child care providers) with accredited and credentialed providers as a percentage of all providers participating in the subsidy system. Figures 12 and 13 show the comparisons.

Figure 12: Accredited Center-based Providers as a Percentage of All Center-based Providers vs. Center-based Providers Caring for Subsidized Children

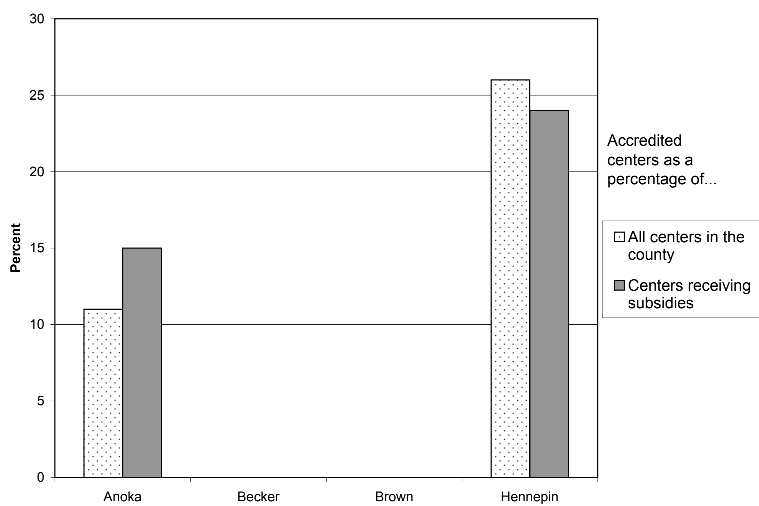
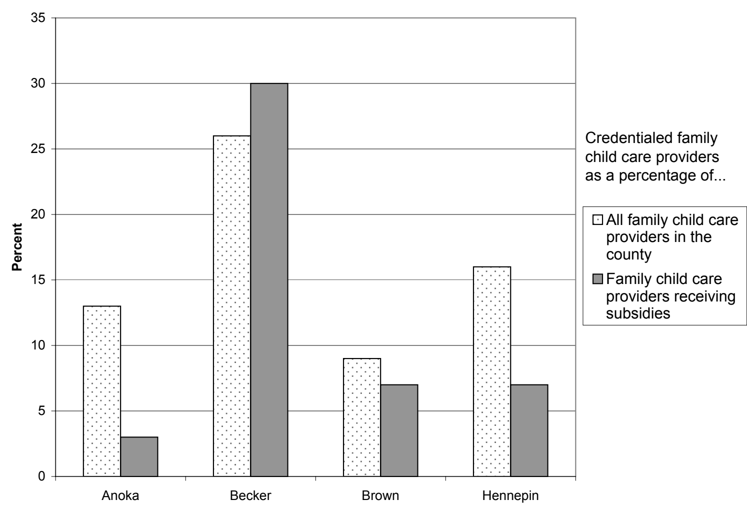


Figure 13: Credentialed Family Child Care Providers as a Percentage of All Family Child Care Providers vs. Family Child Care Providers Caring for Subsidized Children



As seen in Figure 12, accredited center-based providers are represented in the subsidy system and in the county in general in similar proportions, indicating limited access to accredited center-based providers for all children, not just those in the subsidy system.

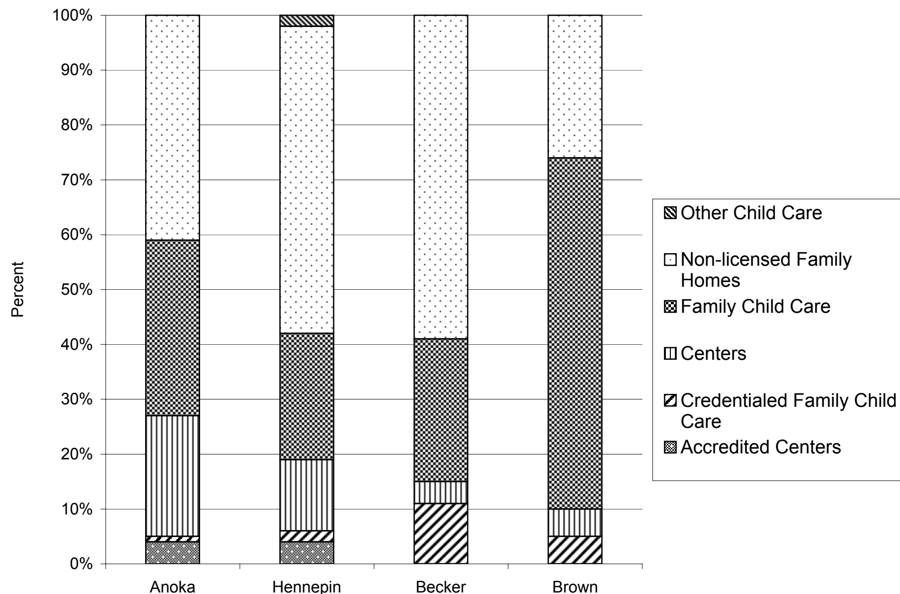
The picture is somewhat different for credentialed family child care providers depending on the county (see Figure 13). In the metropolitan counties, Anoka and Hennepin, there is a discrepancy between the presence of credentialed family child care providers in the county and in the subsidy system, with a greater representation of credentialed family child care providers in the county in general. This pattern is not seen in the two mid-rural counties, however. Credentialed family child care providers are represented similarly in the county in general and in the subsidy system. Becker County, as noted earlier, has a substantially higher proportion of credentialed family child care providers than the other study counties. The credentialed family child care providers are also a fairly large proportion (almost one-third) of all family child care providers serving subsidized children in the county.

Brief Summary of Findings

The supply and distribution of providers eligible for tiered reimbursement vary by county type (metropolitan, mid-rural, and rural) and by the type of provider. Overall, the supply of accredited centers is limited and restricted primarily to metropolitan counties. The supply of credentialed family child care providers is also limited but is more evenly distributed across the three county types.

Providers eligible for tiered reimbursement make up a relatively small share of the providers paid by county child care assistance programs. In Figure 14 (which consolidates the pie charts from Figures 4, 6, 8, and 10), the lower portion of the columns represents the proportion of accredited and credentialed providers paid by the counties. Accredited centers and credentialed family homes make up less than 10 percent of the providers paid by the counties (credentialed family child care providers are 11 percent of the providers paid in Becker County – the highest percentage in the study counties).

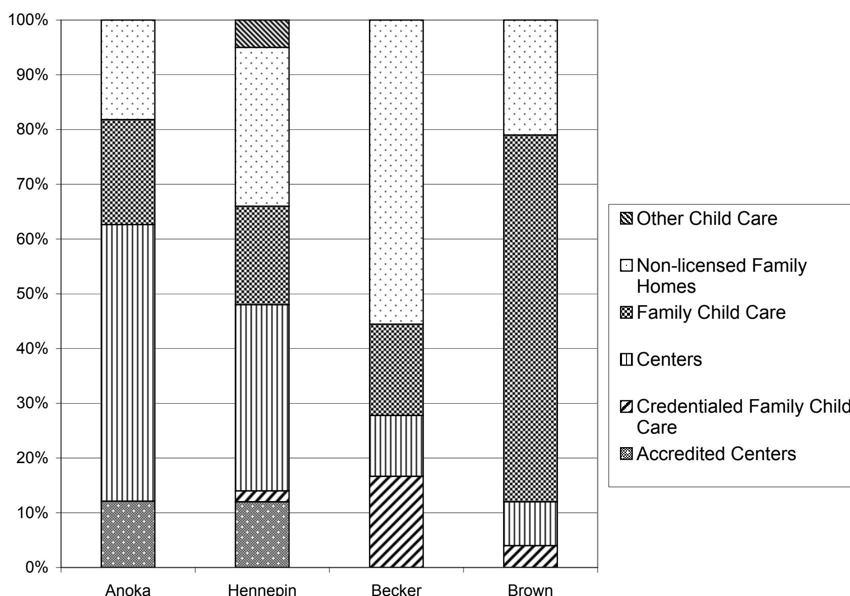
Figure 14: Comparison of Providers Paid by Child Care Assistance Programs in Four Counties, Monthly Average, January-April, 2001



Most accredited and credentialed providers in the subsidy system do not experience a large density of child care assistance in terms of the percentage of their capacity filled by subsidized children. Accredited centers in the two metropolitan counties fill less than 5 percent of their capacity with subsidized children. The impact of child care assistance on credentialed family child care providers in the metropolitan counties varies by county. Most credentialed family child care providers in Anoka County fill 5 to 10 percent of their capacity with subsidized children, while half of the credentialed family child care providers in Hennepin County fill 29 percent or more of their capacity with subsidized children. Credentialed family child care providers in Becker County fill about a quarter of their capacity with subsidized children compared to 10 percent of capacity filled by credentialed family child care providers in Brown County.

The percentage of subsidized children cared for by an accredited or credentialed provider in each county ranges from 4 percent in Brown County to 14 percent in Hennepin County, as shown in Figure 15. Notably, the predominant form of care used by subsidized children varies considerably across the four study counties. For example, subsidized children in Anoka County are more likely to use center-based care than in the other counties. Subsidized children in Brown County are more likely to use licensed family child care providers than in the other counties.

Figure 15: Comparison of the Types of Child Care Used by Children Receiving Subsidies in Four Counties, Monthly Average, January-April, 2001



Finally, BSF is the program used in counties to pay for the majority of care by accredited or credentialed providers.

 http://www.dhs.state.mn.us/main/groups/children/documents/pub/DHS_id_008779.hcsp

SUMMARY AND IMPLICATIONS

A number of compelling findings emerge in this descriptive profile of tiered reimbursement in Minnesota. We review the findings in this section and discuss their implications for policies and programs.

First, we examined the number of providers eligible to receive tiered reimbursement and their distribution in Minnesota. Statewide, accredited child care centers and credentialed family child care providers are a similar percentage of all licensed care (16 percent and 14 percent respectively).

A closer look at the distribution of accredited and credentialed providers reveals distinct patterns by county type. For example, the metropolitan counties (Minneapolis, St. Paul, and surrounding suburban areas) are more likely to have accredited child care centers (1 in 5) than midrurual (1 in 10) and rural counties (less than 1 in 20). Indeed, 17 percent of the centers in the median metropolitan county are accredited, while there are no accredited centers in the median mid-rural and rural counties.

In contrast, credentialed family child care providers are found across the different county types in similar proportions: 15 percent of family child care providers in metropolitan counties are credentialed, 14 percent in mid-rural counties, and 15 percent in rural counties. Almost all of these providers are eligible for tiered reimbursement because of their educational status, as very few family child care providers are accredited in Minnesota.

Thus, families across the state have limited access to credentialed family child care providers. Access to accredited centers is also limited and restricted primarily to families in the metropolitan area. The availability of accredited school-age care is even more limited – only 5 percent of all school-age care statewide is accredited.

Second, we examined the extent to which children receiving child care assistance in each of the four study counties were cared for by accredited or credentialed providers. (Note this does not mean that eligible providers necessarily received the 10 percent differential).

In the two metropolitan counties, accredited and credentialed providers make up less than 10 percent of the providers selected by subsidized families (5 percent in Anoka County and 6 percent in Hennepin County) and serve 12 percent and 14 percent of the children receiving subsidies, respectively.

It is important to note that accredited centers are represented in metropolitan county subsidy systems in about the same proportion as they exist in the counties in general. This is not the case for credentialed family child care providers in metropolitan counties where credentialed family child care providers make up a smaller proportion of those in the subsidy system than in the counties in general. In the two mid-rural study counties, credentialed family child care providers are represented in county subsidy systems in about the same proportion as in the counties overall. Thus, there is not a large discrepancy between the presence of accredited and credentialed providers in the subsidy system and their presence in the counties in general.

Most of the accredited centers paid by subsidies in the two metropolitan counties fill less than 5 percent of their capacity with children receiving subsidies from the study county (though they could be receiving subsidies from other counties). Some providers in each of the counties fill a greater proportion of their capacity with subsidized children, but these providers are the exception.

For credentialed family child care providers, the capacity filled with subsidized children differed by county: in Anoka, most credentialed family child care providers caring for subsidized children fill 5 to 10 percent of their capacity while over half of Hennepin credentialed family child care providers fill at least 29 percent of their capacity with children receiving subsidies.

No centers were accredited in the two mid-rural study counties. Therefore the only child care settings available that are eligible for tiered reimbursement are those offered by credentialed family child care providers. In Brown County, credentialed family child care providers make up 5 percent of the providers paid by the county. They care for 4 percent of the county's subsidized children. In Becker county, credentialed family child care providers constitute 11 percent of the providers paid by the County. They care for 15 percent of the county's subsidized children. The credentialed family child care providers paid by Becker County also fill a greater proportion of their capacity with children receiving subsidies than those in Brown County.

In sum, we find differences in the availability (that is, the number and distribution) of accredited and credentialed providers both across and within county types (metropolitan, rural and mid-rural) in the state. We note differences between counties in the extent to which families receiving subsidies use accredited or credentialed providers. We also find variations in the percent of accredited and credentialed providers' capacity that is filled by families receiving child care subsidies.

Questions for Future Research

From the perspective of children's development, the most important finding to emerge from this study is that, with some exceptions, only a small percentage of subsidized children in the study counties are cared for by accredited or credentialed providers. Accredited and credentialed providers play a small role in county subsidy systems, just as they do in the licensed child care market available to all families. Because this study did not examine the reasons families chose their child care arrangements or the reasons providers participated in the subsidy program, we raise a series of follow-up questions that could be examined in future work on the effectiveness of tiered reimbursement.

First, given their relatively small presence in the overall child care market, **are credentialed providers available or accessible to families using subsidies?** We know from the supply data that accredited and credentialed providers are a limited portion of the licensed child care settings in Minnesota, so it is not surprising that few families – subsidized or not – are using these providers. However, the substantial variability noted in the numbers of subsidized children served by accredited and credentialed providers highlights the fact that select providers are serving larger numbers and filling a greater percentage of their capacity with subsidized children. **What are the characteristics of these providers? Are they different from accredited and credentialed providers who do not participate in the subsidy system?** Future work on this project will begin to address some of these questions through a survey of providers. We will also examine maps of accredited and credentialed child care sites in relation to neighborhood characteristics to better understand where these providers are located.

A second set of related questions concerns the willingness of accredited and credentialed providers to serve subsidized children. **Are accredited or credentialed providers more or less likely than other providers to accept subsidies?** Little is known about providers' experiences in the subsidy system, but factors such as difficulties receiving payments, poor communication with the subsidy agency, and low reimbursement rates have been identified by providers in a recent national study as issues they face when serving subsidized children.[33]

Further work is necessary to understand how providers' experiences and interactions affect their willingness to participate in the subsidy system. It is also important to know **to what degree do accredited and credentialed providers have the opportunity to serve subsidized children?** Providers may be willing to serve subsidized children but may never be sought out by a family on subsidies or may be located in areas where few subsidized families live.

A final set of follow-up questions relates to the process by which families choose their child care providers. **Do families specifically seek out providers that are accredited or who have certain educational credentials? What weight do families give other factors such as flexibility and familiarity with the provider? When families choose accredited or credentialed providers, what are the circumstances surrounding their decision?** In future work, it will be critical to understand more about families' preferences and constraints when selecting providers.[34] In particular, research that addresses the affordability of high quality care is necessary. **Can subsidized families afford to use accredited or credentialed providers? Does tiered reimbursement assist in making accredited or credentialed providers a more feasible option for subsidized families?** More information is needed about the cost of accredited and credentialed providers relative to other providers, though previous research suggests that higher quality care is related to higher costs.[35]

Though further research needs to be done to address these questions, the findings in this report provide a first step in thinking about the effectiveness of tiered reimbursement as a quality improvement strategy.

Goals for an Effective Tiered Reimbursement System

In addition to identifying questions for future research, it is also helpful to identify a set of goals for supporting an effective tiered reimbursement system and, in turn, improving the quality of care available and accessible to all families. Based on the findings from this study and a review of research on quality improvement initiatives, we propose three broad goals. These goals are listed below along with a series of questions to consider in the development of supportive strategies.

1. Increase the supply of accredited and credentialed providers.

   - What types of technical assistance, financial support, and educational resources increase the supply of accredited and credentialed providers? What additional supports are needed for providers as they work toward quality improvements? The answers to these questions can provide the basis for policies and programs aimed at creating and supporting high quality care.
   - What rate differential should be used to recognize the higher costs associated with the provision of higher quality care? The only analysis completed to date suggests that a differential of at least 15 percent will encourage more centers to seek accreditation, but further research is needed to understand what resources providers need to improve quality and maintain quality improvements over time.[36]
   - Does the provision of financial incentives – in addition to tiered reimbursement – to accredited and credentialed providers help support quality improvements and maintenance and encourage providers to seek additional quality credentials? Such financial supports may be especially attractive to providers, especially those serving low-income families, who cannot set rates that recognize the full cost of providing high quality care.

2. Increase awareness of tiered reimbursement policies and access to supports for quality improvements.

   - Are child care providers aware of tiered reimbursement policies? Agencies that administer child care assistance programs as well as resource and referral agencies could play an important role in ensuring that providers understand the eligibility criteria for tiered reimbursement. They can also help connect providers to resources (for example, technical assistance) that can assist them with making quality improvements.

   - Are providers asked about their accreditation status and their educational credentials when registering with county subsidy programs? The agencies administering subsidies should request documentation of qualifications and should be notified as these qualifications change.[37]

   - Are parents given information about the types of providers they may choose when they receive child care assistance? Parents receiving subsidies should know that providers that are accredited or who have educational credentials are eligible to receive a higher reimbursement rate from the county because they have those qualifications. Informing parents about tiered reimbursement underscores the significance of these qualifications for the quality of care that their children receive.

3. Increase availability of information for parents about the characteristics of high quality care.

   - Do parents know that program accreditation and providers' education credentials are associated with child care quality and that high quality care is, in turn, linked to children's cognitive, language, and social development? It is important to provide families with information about the characteristics of high quality care that they can use when selecting care for their children. While accreditation status and providers' education level do not **guarantee** the quality level of a program, they are helpful indicators. In general, improving parents' awareness about child care programs and the components of quality can help make them better consumers.

In conclusion, it is important to note that tiered reimbursement is one of many potentially promising strategies for improving the affordability and the quality of child care. In a recent report from the Smart Start Evaluation Team in North Carolina, the authors emphasize that "quality enhancement requires clearly focused goals and multiple strategies that are built as a system of linked services. Community collaborators are necessary to make the system work, as are continued financial support and public involvement."[38] The effectiveness of tiered reimbursement in a state, therefore, is best assessed in the context of other policies and programs aimed at improving child care quality.

APPENDICES

Appendix A: Number and Percent of Providers Eligible for Tiered Reimbursement, by Minnesota County, December 2000

Center-based Providers

County Name	Region Type	Child Care Centers	Pre-schools	Centers and Preschools	Accredited Centers and Preschools	Centers and Preschools that are Accredited
Aitkin	Mid-rural	1	1	2	0	0.0%
Anoka	Metro	48	34	82	9	11.0%
Becker	Mid-rural	0	3	3	0	0.0%
Beltrami	Rural	3	2	5	0	0.0%
Benton	Mid-rural	4	2	6	1	16.7%
Big Stone	Rural	0	1	1	0	0.0%
Blue Earth	Mid-rural	11	7	18	2	11.1%
Brown	Mid-rural	2	6	8	0	0.0%
Carlton	Mid-rural	2	6	8	0	0.0%
Carver	Metro	13	16	29	0	0.0%
Cass	Rural	3	0	3	0	0.0%
Chippewa	Rural	2	1	3	0	0.0%
Chisago	Rural	7	7	14	1	7.1%
Clay	Mid-rural	11	3	14	3	21.4%
Clearwater	Rural	1	0	1	0	0.0%
Cook	Mid-rural	1	1	2	0	0.0%
Cottonwood	Rural	1	2	3	0	0.0%
Crow Wing	Rural	8	5	13	2	15.4%
Dakota	Metro	78	38	116	29	25.0%
Dodge	Mid-rural	2	2	4	0	0.0%
Douglas	Mid-rural	2	5	7	2	28.6%
Faribault	Mid-rural	2	1	3	0	0.0%
Fillmore	Mid-rural	2	1	3	0	0.0%
Freeborn	Mid-rural	3	2	5	0	0.0%
Goodhue	Mid-rural	7	1	8	0	0.0%
Grant	Mid-rural	0	0	0	0	0.0%
Hennepin	Metro	278	126	404	105	26.0%
Houston	Mid-rural	0	4	4	0	0.0%
Hubbard	Rural	2	1	3	0	0.0%
Isanti	Rural	5	2	7	0	0.0%
Itasca	Mid-rural	4	5	9	2	22.2%
Jackson	Rural	2	3	5	0	0.0%
Kanabec	Rural	1	1	2	0	0.0%
Kandiyohi	Mid-rural	6	4	10	0	0.0%
Kittson	Rural	0	1	1	0	0.0%
Koochiching	Mid-rural	0	1	1	1	100.0%
Lac Qui Parle	Rural	0	3	3	0	0.0%
Lake	Mid-rural	0	4	4	1	25.0%
Lake of the Woods	Rural	0	0	0	0	0.0%
Le Sueur	Mid-rural	0	3	3	1	33.3%
Lincoln	Rural	0	0	0	0	0.0%
Lyon	Rural	3	4	7	0	0.0%
McLeod	Mid-rural	8	8	16	0	0.0%
Mahnomen	Rural	1	0	1	0	0.0%
Marshall	Rural	0	1	1	0	0.0%

County Name	Region Type	Child Care Centers	Pre-schools	Centers and Preschools	Accredited Centers and Preschools	Centers and Preschools that are Accredited
Martin	Mid-rural	0	8	8	0	0.0%
Meeker	Mid-rural	3	1	4	0	0.0%
Mille Lacs	Rural	6	2	8	0	0.0%
Morrison	Rural	3	1	4	0	0.0%
Mower	Mid-rural	4	8	12	0	0.0%
Murray	Rural	1	6	7	0	0.0%
Nicollet	Mid-rural	8	4	12	2	16.7%
Nobles	Rural	2	11	13	0	0.0%
Norman	Rural	0	1	1	0	0.0%
Olmsted	Mid-rural	17	11	28	7	25.0%
Otter Tail	Mid-rural	1	8	9	0	0.0%
Pennington	Rural	3	1	4	2	50.0%
Pine	Rural	1	2	3	0	0.0%
Pipestone	Rural	2	5	7	0	0.0%
Polk	Rural	6	1	7	1	14.3%
Pope	Mid-rural	2	4	6	0	0.0%
Ramsey	Metro	129	75	204	35	17.2%
Red Lake	Rural	1	0	1	0	0.0%
Redwood	Rural	0	0	0	0	0.0%
Renville	Mid-rural	1	2	3	0	0.0%
Rice	Mid-rural	4	6	10	1	10.0%
Rock	Rural	0	3	3	0	0.0%
Roseau	Rural	0	0	0	0	0.0%
St. Louis	Mid-rural	30	24	54	9	16.7%
Scott	Metro	13	13	26	2	7.7%
Sherburne	Mid-rural	13	6	19	0	0.0%
Sibley	Mid-rural	0	2	2	0	0.0%
Stearns	Mid-rural	22	9	31	4	12.9%
Steele	Mid-rural	4	7	11	1	9.1%
Stevens	Mid-rural	1	2	3	0	0.0%
Swift	Rural	1	1	2	0	0.0%
Todd	Rural	0	3	3	0	0.0%
Traverse	Mid-rural	0	0	0	0	0.0%
Wabasha	Mid-rural	2	0	2	0	0.0%
Wadena	Rural	2	1	3	0	0.0%
Waseca	Mid-rural	1	4	5	0	0.0%
Washington	Metro	30	24	54	13	24.1%
Watonwan	Mid-rural	1	3	4	0	0.0%
Wilkin	Mid-rural	0	2	2	0	0.0%
Winona	Mid-rural	7	6	13	0	0.0%
Wright	Mid-rural	8	11	19	1	5.3%
Yellow Medicine	Rural	1	0	1	0	0.0%
TOTALS		**854**	**596**	**1450**	**237**	**16.3%**

Family and School-age Child Care Providers

County Name	Region Type	Family Child Care	Credentialed FCC	FCC that are Credentialed	School-age Care	Accredited SAC	SAC that are Credentialed
Aitkin	Mid-rural	20	2	10.0%	0	0	0.0%
Anoka	Metro	890	117	13.1%	34	0	0.0%
Becker	Mid-rural	114	30	26.3%	2	0	0.0%
Beltrami	Rural	122	35	28.7%	10	0	0.0%
Benton	Mid-rural	133	24	18.0%	5	0	0.0%
Big Stone	Rural	30	2	6.7%	0	0	0.0%
Blue Earth	Mid-rural	168	27	16.1%	7	0	0.0%
Brown	Mid-rural	123	11	8.9%	2	0	0.0%
Carlton	Mid-rural	75	14	18.7%	5	0	0.0%
Carver	Metro	202	35	17.3%	9	0	0.0%
Cass	Rural	57	3	5.3%	1	0	0.0%
Chippewa	Rural	53	7	13.2%	2	0	0.0%
Chisago	Rural	93	9	9.7%	0	0	0.0%
Clay	Mid-rural	213	38	17.8%	5	0	0.0%
Clearwater	Rural	15	2	13.3%	2	0	0.0%
Cook	Mid-rural	9	3	33.3%	2	0	0.0%
Cottonwood	Rural	30	2	6.7%	1	0	0.0%
Crow Wing	Rural	177	30	16.9%	3	0	0.0%
Dakota	Metro	978	175	17.9%	57	7	12.3%
Dodge	Mid-rural	88	10	11.4%	3	0	0.0%
Douglas	Mid-rural	133	19	14.3%	4	0	0.0%
Faribault	Mid-rural	55	6	10.9%	2	0	0.0%
Fillmore	Mid-rural	59	11	18.6%	3	0	0.0%
Freeborn	Mid-rural	69	12	17.4%	2	0	0.0%
Goodhue	Mid-rural	141	20	14.2%	4	0	0.0%
Grant	Mid-rural	19	4	21.1%	2	0	0.0%
Hennepin	Metro	1933	301	15.6%	148	24	16.2%
Houston	Mid-rural	84	14	16.7%	1	0	0.0%
Hubbard	Rural	55	17	30.9%	2	0	0.0%
Isanti	Rural	30	5	16.7%	0	0	0.0%
Itasca	Mid-rural	66	9	13.6%	3	0	0.0%
Jackson	Rural	41	5	12.2%	0	0	0.0%
Kanabec	Rural	32	5	15.6%	0	0	0.0%
Kandiyohi	Mid-rural	155	25	16.1%	4	0	0.0%
Kittson	Rural	15	0	0.0%	2	0	0.0%
Koochiching	Mid-rural	34	2	5.9%	1	0	0.0%
Lac Qui Parle	Rural	15	2	13.3%	1	0	0.0%
Lake	Mid-rural	13	0	0.0%	4	0	0.0%
Lake of the	Rural	13	1	7.7%	2	0	0.0%
Le Sueur	Mid-rural	91	7	7.7%	3	0	0.0%
Lincoln	Rural	24	2	8.3%	0	0	0.0%
Lyon	Rural	113	26	23.0%	0	0	0.0%
McLeod	Mid-rural	135	17	12.6%	3	0	0.0%
Mahnomen	Rural	17	4	23.5%	4	0	0.0%
Marshall	Rural	32	3	9.4%	5	0	0.0%
Martin	Mid-rural	77	3	3.9%	1	0	0.0%
Meeker	Mid-rural	62	4	6.5%	3	0	0.0%
Mille Lacs	Rural	39	7	17.9%	0	0	0.0%
Morrison	Rural	98	19	19.4%	4	0	0.0%

County Name	Region Type	Family Child Care	Credentialed FCC	FCC that are Credentialed	School-age Care	Accredited SAC	SAC that are Credentialed
Mower	Mid-rural	137	19	13.9%	2	0	0.0%
Murray	Rural	21	5	23.8%	0	0	0.0%
Nicollet	Mid-rural	97	8	8.2%	6	0	0.0%
Nobles	Rural	69	3	4.3%	0	0	0.0%
Norman	Rural	25	2	8.0%	1	0	0.0%
Olmsted	Mid-rural	479	78	16.3%	9	0	0.0%
Otter Tail	Mid-rural	177	41	23.2%	4	0	0.0%
Pennington	Rural	49	4	8.2%	0	0	0.0%
Pine	Rural	42	3	7.1%	0	0	0.0%
Pipestone	Rural	33	5	15.2%	0	0	0.0%
Polk	Rural	111	16	14.4%	5	0	0.0%
Pope	Mid-rural	25	2	8.0%	2	0	0.0%
Ramsey	Metro	1060	129	12.2%	82	1	1.2%
Red Lake	Rural	24	3	12.5%	2	0	0.0%
Redwood	Rural	75	7	9.3%	1	0	0.0%
Renville	Mid-rural	56	5	8.9%	0	0	0.0%
Rice	Mid-rural	162	22	13.6%	3	0	0.0%
Rock	Rural	49	5	10.2%	0	0	0.0%
Roseau	Rural	88	9	10.2%	3	0	0.0%
St. Louis	Mid-rural	442	59	13.3%	14	0	0.0%
Scott	Metro	394	45	11.4%	12	0	0.0%
Sherburne	Mid-rural	263	42	16.0%	9	0	0.0%
Sibley	Mid-rural	51	5	9.8%	0	0	0.0%
Stearns	Mid-rural	579	80	13.8%	15	0	0.0%
Steele	Mid-rural	162	15	9.3%	2	0	0.0%
Stevens	Mid-rural	37	7	18.9%	0	0	0.0%
Swift	Rural	59	6	10.2%	1	0	0.0%
Todd	Rural	62	9	14.5%	4	0	0.0%
Traverse	Mid-rural	14	1	7.1%	1	0	0.0%
Wabasha	Mid-rural	74	11	14.9%	5	0	0.0%
Wadena	Rural	42	11	26.2%	3	0	0.0%
Waseca	Mid-rural	83	10	12.0%	1	0	0.0%
Washington	Metro	648	94	14.5%	31	0	0.0%
Watonwan	Mid-rural	46	1	2.2%	1	0	0.0%
Wilkin	Mid-rural	35	6	17.1%	1	0	0.0%
Winona	Mid-rural	169	27	16.0%	2	0	0.0%
Wright	Mid-rural	382	38	9.9%	15	0	0.0%
Yellow Medicine	Rural	46	5	10.9%	1	0	0.0%
TOTALS		**13607**	**1964**	**14.4%**	**596**	**32**	**5.4%**

Appendix B: Child Care Assistance Data from the Four Study Counties

Anoka County

Total Number of Providers Paid in Anoka County, by Month

	Jan-01	Feb-01	Mar-01	Apr-01	Average	%
Centers	107	122	117	112	114.50	22.24%
Accredited Centers	26	21	15	18	20.00	3.89%
Licensed Family Child Care	167	171	169	158	166.25	32.30%
Credentialed Family Child Care	7	6	5	5	5.75	1.12%
Non-licensed Family Child Care Homes	198	200	208	227	208.25	40.46%
Other	0	0	0	0	0	0.00%
Total	505	520	514	520	514.75	

Total Number of Children Using Child Care Assistance in Anoka County, by Type of Care, by Month

	Jan-01	Feb-01	Mar-01	Apr-01	Average	%
Centers	954	944	573	992	865.75	49.60%
Accredited Centers	263	208	137	246	213.50	12.23%
Licensed Family Child Care	342	337	324	338	335.25	19.21%
Credentialed Family Child Care	11	9	7	7	8.50	0.49%
Non-licensed Family Child Care Homes	325	311	268	386	322.50	18.48%
Other	0	0	0	0	0.00	0.00%
Total	1895	1809	1309	1969	1745.50	

Becker County

Total Number of Providers Paid in Becker County, by Month

	Jan-01	Feb-01	Mar-01	Apr-01	Average	%
Centers	5	6	7	4	5.50	4.31%
Accredited Centers	0	0	0	0	0.00	0.00%
Licensed Family Child Care	29	34	35	35	33.25	26.08%
Credentialed Family Child Care	15	15	14	13	14.25	11.18%
Non-licensed Family Child Care Homes	70	78	73	77	74.50	58.43%
Other	0	0	0	0	0.00	0.00%
Total	119	133	129	129	127.50	

Total Number of Children Using Child Care Assistance in Becker County, by Type of Care, by Month

	Jan-01	Feb-01	Mar-01	Apr-01	Average	%
Centers	37	33	34	23	31.75	10.36%
Accredited Centers	0	0	0	0	0.00	0.00%
Licensed Family Child Care	57	76	87	85	76.25	24.88%
Credentialed Family Child Care	48	54	44	41	46.75	15.25%
Non-licensed Family Child Care Homes	131	159	158	159	151.75	49.51%
Other	0	0	0	0	0.00	0.00%
Total	273	322	323	308	306.50	

Brown County

Total Number of Providers Paid in Brown County, by Month

	Jan-01	Feb-01	Mar-01	Apr-01	Average	%
Centers	4	4	6	6	5.00	5.48%
Accredited Centers	0	0	0	0	0.00	0.00%
Licensed Family Child Care	57	64	55	57	58.25	63.84%
Credentialed Family Child Care	4	4	5	4	4.25	4.66%
Non-licensed Family Child Care Homes	10	7	10	11	9.50	10.41%
Child's Home (In-home)	13	17	14	13	14.25	15.62%
Total	88	96	90	91	91.25	

Total Number of Children Using Child Care Assistance in Brown County, by Type of Care, by Month

	Jan-01	Feb-01	Mar-01	Apr-01	Average	%
Centers	21	7	23	20	17.75	8.42%
Accredited Centers	0	0	0	0	0.00	0.00%
Licensed Family Child Care	127	142	138	150	139.25	66.07%
Credentialed Family Child Care	6	7	10	10	8.25	3.91%
Non-licensed Family Child Care Homes	25	19	23	21	22.00	10.44%
Other	26	24	23	21	23.50	11.15%
Total	205	199	217	222	210.75	

Hennepin County

Total Number of Providers Authorized in Hennepin County, by Month

	Jan-01	Feb-01	Mar-01	Apr-01	Average	%
Centers	273	270	268	273	271.00	12.91%
Accredited Centers	87	87	82	87	85.75	4.08%
Licensed Family Child Care	499	480	483	477	484.75	23.09%
Credentialed Family Child Care	34	30	49	32	36.25	1.73%
Non-licensed Family Child Care Homes	1190	1125	1152	1229	1174.00	55.92%
Mother and Infant Care and Education	20	19	19	19	19.25	0.92%
Strong Beginnings	5	6	6	4	5.25	0.25%
Special Needs	23	21	20	28	23.00	1.10%
	2131	2038	2079	2149	2099.25	

Total Number of Children Authorized for Child Care Assistance in Hennepin County, by Type of Care, by Month

	Jan-01	Feb-01	Mar-01	Apr-01	Average	%
Centers	2920	3135	2806	2773	2908.50	33.93%
Accredited Centers	999	1093	992	1045	1032.25	12.04%
Licensed Family Child Care	1565	1700	1413	1352	1507.50	17.59%
Credentialed Family Child Care	224	224	179	198	206.25	2.41%
Non-licensed Family Child Care Homes	2572	2719	2364	2322	2494.25	29.10%
Mother and Infant Care and Education	194	210	189	187	195.00	2.28%
Strong Beginnings	197	209	195	200	200.25	2.34%
Special Needs	25	30	26	27	27.00	0.32%
Total	8696	9320	8164	8104	8571.00	

ENDNOTES

[1] Gormley, W.T., & Lucas, J.K. (2000). Money, accreditation, and child care center quality. Working Paper Series. New York, NY: The Foundation for Child Development. Available at http://www.fcd-us.org

[2] This is a statutory requirement (Minnesota Rule 3400/0130, subp. 2a).

[3] Despite the growth in numbers of children served, the percentage of eligible children receiving child care assistance remains low. In fiscal year 2000, only 15 percent of children eligible for child care assistance under federal requirements received it. See Mezey, J., Greenberg, M., & Schumacher, R. (October, 2002). The vast majority of federally-eligible children did not receive child care assistance in FY 2000. Washington, DC: Center for Law and Social Policy. Available at http://www.clasp.org/

[4] Consumer Product Safety Commission. (1999). Safety hazards in child care settings. Washington, DC: U.S. Consumer Product Safety Commission; U.S. Department of Health and Human Services, Office of Inspector General. (1998). States' child care certificate systems: An early assessment of vulnerabilities and barriers (OEI-05-97-00320). Washington, DC: Author.

[5] Cost, Quality, and Outcomes Study Team. (1995). Cost, quality, and child outcomes in child care centers (Public report). Denver: University of Colorado, Economics Department; NICHD Early Child Care Research Network (2000). Characteristics and quality of child care for toddlers and preschoolers. Applied Developmental Science, 4(3), 116-135.

[6] Lamb, M. E. (1998). Nonparental child care: Context, quality, correlates, and consequences. In W. Damon, I. E. Sigel, & K. A. Renninger (Eds.), Handbook of child psychology: Vol.4, Child psychology in practice (5th ed., pp. 73-133). New York: Wiley; National Research Council and Institute of Medicine (Committee on Integrating the Science of Early Childhood Development, Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education). (2000). From neurons to neighborhoods: The science of early childhood development. J.P. Shonkoff & D.A. Phillips, (Eds.). Washington, DC: National Academy Press; Vandell, D. L., & Wolfe, B. (2000). Child care quality: Does it matter and does it need to be improved? Report prepared for the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, Washington, DC.

[7] National Association for the Education of Young Children. (April, 2003). Tiered reimbursement systems: States with systems to pay higher reimbursement rates to programs that are accredited and/or meet other quality standards. Available at http://www.naeyc.org/childrens_champions/criticalissues/accred-reimburse/chart1.asp Accessed September 23, 2003.

[8] Minnesota Statute 119B.011, subd. 16 & 19

[9] Minneosta Rule 3400.0130, subp. 2

[10] Minnesota Rule 3400.0130, subp. 2a

[11] See, for example, Burchinal, M., Howes, C., & Kontos, S. (2002). Structural predictors of child care quality in child care homes. Early Childhood Research Quarterly, 17, 87-105; Clarke-Stewart, K.A., Vandell, D.L., Burchinal, M., O'Brien, M., & McCartney, K. (2002). Do regulable features of child-care homes affect children's development? Early Childhood Research Quarterly, 17, 52-86; Whitebook, M., Sakai, L., & Howes, C. (1997). NAEYC Accreditation as a strategy for improving child care quality: An assessment by the National Center for the Early Childhood Work Force. Washington D.C.: National Center for the Early Childhood Work Force; Whitebook, M., Sakai, L., Gerber, E., Howes, C. (2001). Then and now: Changes in child care staffing, 1994-2000. Washington D.C.: Center for the Child Care Workforce.

[12] Whitebook et al., 2001.

[13] Cost, Quality, and Outcomes Study Team, 1995; Marshall, N.L., Creps, C.L., Burstein, N., Glantz, F.B., Wagner Robeson, W., & Barnett, S. (2001). The Cost and Quality of Full Day, Year-round Early Care and Education in Massachusetts: Preschool Classrooms. Wellesley and Cambridge, MA: Wellesley Centers for Women and Abt Associates.

[14] The reimbursement rates and copayments described in this example are current as of November 2002. They were published in Minnesota Department of Children, Families & Learning Bulletin #02-004 (reimbursement rates – issued July 1, 2002) and Bulletin #02-003 (copayments – issued July 1, 2002). For simplicity, all numbers are rounded to the nearest whole number.

[15] Morgan, G. (May, 1999). Tiered reimbursement rates and rated licenses. Boston, MA: Center for Career Development in Early Care and Education, Wheelock College. Note that the name of this organization has changed to the Wheelock College Institute for Leadership and Career Initiatives at http://institute.wheelock.edu/

[16] U.S. General Accounting Office (2000). Child care: State efforts to enforce safety and health requirements (GAO/HEHS-00-28). Washington D.C.: Author.

[17] Morgan, 1999.

[18] Details about North Carolina's rated license can be found at http://ncchildcare.dhhs.state.mn.us/providers/pv_sn2_ov_sr.asp

[19] Morgan, 1999.

[20] National Association for the Education of Young Children, 2003.

[21] Azer, S.L. (June, 1999). Overview of states with differential reimbursement. Boston, MA: Center for Career Development in Early Care and Education, Wheelock College.

[22] Gormley & Lucas, 2000.
[23] Schulman, K., Blank, H., Ewen, D. (November, 2001). A fragile foundation: State child care assistance policies. Washington, DC: Children's Defense Fund. Available at http://www.childrensdefense.org/head-resources.htm
[24] Schulman et al., 2001.
[25] Schulman et al., 2001.
[26] T.E.A.C.H. is a scholarship program that offers child care providers an opportunity to pursue educational credentials. Participants are eligible to receive increased compensation. They also make a commitment to stay in their child care program for six months to a year, depending on the particular T.E.A.C.H. program. For online information: http://www.childcareservices.org/TEACH/T.E.A.C.H.%20Project.htm
[27] Gormley, W.T. (2000). Differential reimbursement and child care accreditation. Paper presented at Georgetown University, Washington , D.C; Gormely & Lucas, 2000.
[28] The Minnesota Child Care Resource and Referral system has converted its database to NACCRRAware, a new information management software system for child care resource and referral agencies.
[29] Providers who qualified for the 10% bonus (above the county's maximum reimbursement rate) only received the bonus if they charged the higher rate to private-pay families.
[30] Of the four study counties, Hennepin County is the only one with an automated payment system. Payments are made in batches that cover multiple service dates and multiple children. By using authorizations instead of payment records, we can more accurately document care provided in the period of interest. However, in some cases, care may have been authorized but never provided during the period of interest. Therefore, this method may overestimate the number of children receiving care in Hennepin County.
[31] All figures presented in this section were obtained from the U.S. Census Bureau State and County Quick Facts, accessed online at http://quickfacts.census.gov/qfd/states/27000.html, and the U.S. Census Bureau American FactFinder, accessed online at http://factfinder.census.gov, on September 19, 2002.
[32] As of August 2002, the National School-Age Care Alliance lists 28 accredited programs in Minnesota. The number has more than doubled from August 2001 when there were 11 NSACA accredited programs in Minnesota.
[33] Adams, G., & Snyder, K. (2002). Essential but often ignored: Child care providers in the subsidy system. In Assessing the New Federalism Occasional Paper (No.63). Washington DC: Urban Institute.
[34] Emlen, A.C. (1999). From a Parent's Point of View: Measuring the Quality of Child Care. Portland, OR: Portland State University and the Oregon Child Care Research Partnership.
[35] Cost, Quality, and Outcomes Study Team, 1995; Marshall et al., 2001.
[36] Gormley & Lucas, 2000.
[37] This is a statutory requirement (Minnesota Rule 3400/0130, subp. 2a).
[38] Smart Start Evaluation Team. (September, 2002). Demonstrating effective child care quality improvement. FPG Child Development Institute, University of North Carolina at Chapel Hill.

This report and a briefing paper are available from the Minnesota Child Care Policy Research Partnership at www.dhs.state.mn.us/main/groups/children/documents/pub/DHS_id_008779.hcsp

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Coordinated by the Minnesota Department of Human Services, the Partnership brings together researchers and policy-makers from around Minnesota along with several national researchers.

Anoka County Community Action Program

Becker County Human Services

Brown County Family Services

Child Trends

Hennepin County Children and Family Services Department

Minnesota Child Care Resource and Referral Network

Minnesota Department of Employment and Economic Development

Minnesota Department of Human Services

Wilder Research Center

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