

**Infant and Toddler Care after Welfare Reform:  
A Cross State Comparison**

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## **Abstract**

We provide descriptive evidence from Miami-Dade County (MDC), FL and from five representative areas in Massachusetts (MA) that government policies governing welfare reform, the child-care subsidy system and minimum-standards regulations had considerable impact on the availability, use, quality, and price of infant and toddler care, as welfare reform progressed from 1996 to 2000. During this period, we find a dramatic surge (more than a doubling) in the number of low-income infants and toddlers with child care subsidies placed in formal (licensed) care in MDC. This was likely related to a welfare reform policy in FL requiring cash assistance recipients with children three-months of age or older to engage in work-related activities. We also find evidence that during this period, in order to meet state minimum-standards regulations, child care centers in MDC and MA must have had to find other sources of funding for their infant and toddler programs since neither the prices providers charged families nor the reimbursements providers received from the state covered the full costs of providing care for these age groups. This helps to explain why it has been difficult to expand the amount of infant and toddler care available.

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## **Infant and Toddler Care after Welfare Reform: A Cross State Comparison**

We provide descriptive evidence from Miami Dade County (MDC) in Florida (FL) and from five representative areas in Massachusetts (MA) that government policies governing welfare reform, the child-care subsidy system, and minimum-standards regulations had considerable influence on the availability, use, quality and price of infant and toddler care, as welfare reform progressed from 1996 to 2000. We suspect that, in addition to the public policy environment, the very different situations we observed for infant and toddler care in MDC and MA were influenced by the markedly higher proportion of the population that is foreign born in MDC as well as by differences in income and educational levels between MDC and MA.

The period of our study, from February 1996 to March 2000, spans the period before and after welfare reform in FL (which started on October 1, 1996) and the period before and after December 1, 1996, the date when MA imposed time limits on welfare recipients. During this period the budgets for child care subsidies grew markedly in both MDC and MA.

In this chapter we describe how child care and the use of child care subsidies changed as welfare reform progressed in our research areas in FL and MA. We also provide background information about the policy and socio-economic contexts in these areas of the country. The outline of the chapter is as follows. First we discuss major differences between the two markets we study in terms of policy and socio-economic contexts. Then we describe our data. Next we discuss our findings as to what happened to child care for infants and toddlers following welfare reform in MDC and in MA, with focus on the supply, use, quality, and price of care. In the concluding section, we summarize some of the main lessons from our study, in terms of how government policies influence the quantity, price, and quality of child care for low-income families with very young children.

## **The Socio-Economic Context**

Our data from FL cover all of Miami-Dade County (MDC). MDC, located in South FL, is FL's most populous county and contains approximately 40% of the state's welfare population. The county has a population of 2,289,683. According to the 2000 Census, of all the counties in the U.S., MDC had the highest proportion (51%) of foreign-born individuals (US Bureau of the Census, 2002). Fifty-seven percent of the population is Hispanic, 21% non-Hispanic white, 20% black, and less than 2% Asian (US Bureau of the Census, 2004b). Hispanics in MDC are predominantly Cuban, Puerto Rican, Colombian, and Nicaraguan. The county's non-Hispanic white population has been dwindling, particularly after Hurricane Andrew, in large part due to the arrival of continuous waves of immigrants from Latin America and the Caribbean. The black population is split between Afro-Americans and Caribbean blacks. Haitians are the poorest and largest segment of the county's Caribbean black population. According to the 2000 Census, MDC's poverty rate was 18%, and for related children under the age of 18, it was 23%. The median household income for the county was \$35,966. Sixty-eight percent of those in MDC age 25 and over had a high school diploma and 22% had at least a bachelor's degree (US Bureau of the Census, 2004b).

Our data for MA covers areas chosen by child care experts in the MA's Executive Office of Health and Human Services to be representative of the Commonwealth's population. These areas comprise: (1) the Boston metropolitan area, (2) the area west of Boston, from Lowell to Framingham, (3) Hampden County (Springfield, Chicopee, Holyoke and surrounding areas) and (4) the New Bedford/Fall River/Taunton area. See Lemke, Witte, Queralt and Witt (2000, page 32) for a list of MA townships included in our study.

According to the 2000 Census, 12.2% of the population in MA was foreign-born (US Bureau of the Census, 2003). Eighty-four percent of the population in MA is non-Hispanic white,

6% Hispanic (of any race), 5% black, and 4% Asian. The 2000 Census revealed a statewide poverty rate of 9.3%, and for related children under age 18, a poverty rate of 11.6%. Census 2000 median household income was \$50,502. Eighty-five percent of those age 25 and over in MA had a high school diploma and 33% had at least a bachelor's degree (U.S. Census, 2004a).

### **The Policy Context**

We believe, based on the data we examine, that government policies governing welfare reform, the child-care subsidy system, and minimum-standards regulations had considerable influence on the availability and use, quality and price of infant and toddler care, as welfare reform progressed from 1996 to 2000. In this section we briefly highlight some relevant policies in each of these three areas.

#### **(1) Welfare Reform**

Welfare reform started in FL in October 1996. One important aspect of the welfare reform legislation in FL is the requirement that, in order to receive cash assistance, adults must engage in approved work activities as soon as their youngest child is three months of age or older. For most recipients, welfare reform in FL also set a limit on the receipt of cash assistance to a maximum of 24 months in any 5-year period and a maximum of 48 months in the person's lifetime. These stringent time limits began to kick in for some recipients after September 1998.

The implementation of welfare reform in FL was associated with a dramatic increase in funding for child-care subsidies and, to a lesser extent, for other early childhood education (ECE) programs, such as Head Start, Early Head Start, and public-school pre-kindergarten programs. To be specific, during our study period, the budget for child-care subsidies in FL rose from \$180 million in July 1995 to almost \$450 million in July 1999.<sup>1</sup> This increased funding for child care and ECE programs was largely for the purpose of enabling poor and low-income

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<sup>1</sup>Additional funds for child-care subsidies came from local match (either cash or in-kind contributions), which is required in order to demonstrate local commitment to the subsidized child-care program.

parents to move from welfare to work, as required by the new law, and to maintain independence from the welfare system through employment.

MA requested a welfare reform waiver from the federal government in April 1995. The waiver was granted, except for the time limits proposed. The MA reforms were initiated on November 1, 1995. After federal welfare reform, MA implemented its previously requested time limits, as they became required for federal funding. Thus, cash assistance recipients in MA became subject to time limits beginning on December 1, 1996.

Anyone subject to the time limits in MA is permitted to receive Transitional Assistance for Families with Dependent Children funds (TAFDC, as the TANF program is referred to) for a maximum of 24 months in any consecutive 60-month period. Anyone subject to work requirements must be actively involved in some type of work for at least 20 hours per week. If the person fails to find a job, s/he is required to perform 20 hours of community service per week. However, the MA law is less stringent than the FL law when it comes to recipients with very young children. Specifically, a TAFDC recipient in MA is exempt from the time limits *and* from the work requirement if her/his youngest child is under the age of two. The recipient remains exempt from work, but not from the time limits, until the youngest child is six years old.<sup>2</sup>

Spending on child-care subsidies in MA increased from \$180 million in Fiscal Year (FY) 1996 (July 1, 1995 to June 30, 1996) to \$316 million in FY 2000.

## (2) The Child Care Subsidy System

### *Client Eligibility*

FL law prescribes that every child younger than age 13 in an eligible family (i.e., a family with income below 150% of the Federal Poverty Level [FPL]) *may* receive subsidized

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<sup>2</sup> See Witte, Queralt, Witt, & Griesinger (April, 2002) for further details on how the time limits and work requirement interact in MA.

child care.<sup>3</sup> Before welfare reform, child-care subsidies were an entitlement for cash assistance recipients engaged in work-related activities and for those income-eligible working recipients leaving the cash assistance program. However, after welfare reform was implemented on October 1, 1996, child-care subsidies became available in FL only if resources are available. In MDC child-care subsidies are allocated on the basis of state-established priorities for participation, with highest priority allocated, in order of priority, to children at risk of abuse and neglect, the children of cash assistance recipients, and the children of families transitioning off cash assistance. Low-income working families that do not receive cash assistance and that are not eligible for transitional assistance, called Income-Eligible families, have lower priority for subsidy receipt. However, waiting lists for subsidies for infants and toddlers were relatively small during the period of our study due to the rapid increases in funding.<sup>4</sup>

According to MA's law, all families with children under the age of 13 with incomes at or below 50% of the State Median Income (SMI)<sup>5</sup> can obtain child-care subsidies, to the extent that funds were available. To facilitate welfare reform, MA offered child-care vouchers to all active recipients of cash assistance. MA also provided one year of Transitional Child Care assistance (TCC) to those leaving cash assistance. MA also made child care subsidies available to former cash assistance recipients after they exhausted their TCC benefits, for as long as they remained eligible (i.e., continued working and had gross monthly income at or below 85% of the SMI).

In MA, income-eligible low-income families that are not current or former cash assistance recipients are eligible for child-care subsidies only to the degree that funds are

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<sup>3</sup> For example, in 1999 the maximum eligible income for a family of 3 was \$20,082.

<sup>4</sup> The child-care subsidy administration files in MDC showed limited numbers of infants and toddlers waiting for care during the period of our study. The January 2001 files, for example, show 27 infants, 37 one-year-olds, and 40 two-year-olds from income-eligible families and 56 infants, 58 one-year-olds, and 68 one-year-olds from families receiving cash assistance waiting for care.

<sup>5</sup> For example, families with incomes below \$23,172 in 1999 were eligible. This would be equivalent to 167% of FPL in 1999.



available. Unlike the situation in MDC, we observed throughout our study period that MA had a substantial waiting list for Income-Eligible child-care subsidies.<sup>6</sup>

### *Subsidized Providers*

In Florida, child-care providers may choose to enter into an agreement or contract with child-care subsidy agencies to accept children receiving subsidies. Child-care subsidy recipients who ask for help in finding a provider are referred to contracted providers by the subsidy management agencies, or they can elect to receive a voucher that can be used at any provider or to purchase informal care.<sup>7</sup> During the period covered by the MDC data (February 1996 to March 2000), 95% of the child care subsidies (i.e., vouchers) issued in MDC were to directly pay contracted providers. The remaining child care subsidy monies (5%) were used to reimburse parents for the use of non-contracted providers and informal caregivers.

MA operates a “mixed” child care subsidy system that provides current and former cash assistance recipients with child care vouchers and Income-Eligible children with “slots” purchased directly by the state from selected licensed providers. As operated during our study period, the MA voucher program provided families with more choices than MDC’s purchase of service contract system, but it had a more extensive wait list.

Subsidized provider quality incentives. Under the Gold Seal Quality Care program established on July 1, 1996, FL providers accepting child care subsidies, may apply for Gold Seal designation. To qualify, providers must be accredited by a nationally recognized accrediting association whose standards substantially meet or exceed those of the National Association for the Education of Young Children (NAEYC), the National Association for Family Child Care, or the National Early Childhood Program Accreditation Commission. Beginning on July 1, 1998, Gold

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<sup>6</sup> In November 2000, for example, there were 2412 infants and 3602 toddlers (among children of other ages) from Income-Eligible families in MA on the waiting list.

<sup>7</sup> Informal care is unlicensed care provided by relatives, neighbors or friends.

Seal providers have been receiving up to 20% higher reimbursements for providing subsidized child care, as long as this higher rate does not exceed their private pay rate. During the period of our study, MA did not give subsidized providers financial incentives for accreditation.<sup>8</sup>

Subsidized provider monitoring and assessments. Both FL and MA have established elaborate ways of monitoring and assessing contracted providers participating in the subsidized child care program. Space limitations do not allow us to describe these systems. One important difference is that MA uses the regular license monitoring system to identify contracted providers at risk due to minimum standards violations for more close follow up and monitoring. In MDC at the time of our study, the county subsidy management agencies relied on the statewide Child Care Program Assessments (a group of observational tools) to regularly assess contracted providers through observation (see Queralt, Witte & Griesinger [2000, July] for more details). They did not use the quarterly license monitoring reports issued by the district's licensing enforcement office to identify providers with frequent or serious minimum standards violations.

Payments (reimbursements) to subsidized providers. In FL, as well as in MA, state payments to providers vary depending on the age of the child in care, the type of care, and the area of the state. Federal regulations governing the CCDF child-care subsidy programs require states to set provider payments (reimbursement rates) at levels that offer "equal access" to children with child-care subsidies. States must justify that their reimbursement rates provide equal access by referencing a "market-rate" survey no more than two-years old. Rates set at the 75<sup>th</sup> percentile or higher of the local market price are presumed to provide equal access.

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<sup>8</sup>However, MA providers were required to be accredited or to have applied for accreditation in order to participate in the MA Department of Education Community Partnership for Children (CPC) program, which provided substantial amounts of funding for the care of 3- and 4-year-old children.

In FL, the Department of Children & Families (DCF) establishes procedures to reimburse providers at the prevailing market rate.<sup>9</sup> Rates cannot exceed the private pay prices a provider charges. The FL DCF contracts with the central agencies that manage the subsidized child care program and provide local R&R services to survey all providers in all areas in the spring of each year. In general, the R&Rs collect list prices, not market prices. During the period of our study full-time reimbursement rates paid to center providers in MDC remained at \$85 per week for infants and \$80 per week for toddlers until October 1997 when they were raised to \$95 per week for infants and \$90 per week for toddlers. There were no other increases in reimbursement rates.

During the period of our study, MA set provider reimbursement rates by periodically hiring outside contractors to survey providers to determine the “arms-length” market price providers charged for care. This approach obtains prices for care that is actually purchased (not list prices) and requires that the care be unsubsidized and that the buyer and seller be unrelated. On July 1, 1996, the MA Legislature approved reimbursement rates set at the 55<sup>th</sup> percentile of the local market price of care, determined by a 1994 market rate survey. From this time until October 1996 Boston area center weekly rates paid were \$214 for infants and \$185 for toddlers. Rates were increased in November 1996 to \$215 per week for infants and \$190 per week for toddlers. Once again the Legislature increased reimbursement rates in September 1998. This was the last increase during the period of our study. For the Boston area weekly rates for centers increased to \$225 for infants and \$200 for toddlers.

### (3) Minimum Standards Regulations

#### *Teacher Credentials*

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<sup>9</sup> “Prevailing market rate,” according to FL law, means “the annually determined 75<sup>th</sup> percentile of a reasonable frequency distribution of market rates in a predetermined geographic market at which licensed child-care providers charge a person for child care services.”

The FL child care law requires that child care personnel employed in a child care facility be at least 16 years of age (unless the underage person is under direct supervision and not counted for the purposes of caregiver-to-child ratios). FL also requires that all child-care personnel hired on or after October 1, 1992 and all operators of family day care homes take an approved 30-clock-hour introductory course in child care. Beginning on July 1, 1996, for every 20 preschool children enrolled in a licensed child-care facility operating 8 hours or more per week, the law requires that one of the child-care personnel in the facility must have a Child Development Associate (CDA) credential or an educational credential that is equivalent or higher.

The law in MA requires considerably higher minimum teacher credentials. Classrooms must have a teacher qualified person present in the room who is at least 18 years of age and has a high school diploma. In addition, teachers must have completed three credits in a Child Growth & Development course, or they must have a CDA or must have completed a 2-year vocational course in early childhood education approved by the Office of Child Care Services (OCCS). Assistant teachers must be at least 16 years old and must work at all times under a teacher qualified staff person. Each provider site with at least 39 children must have a Lead Teacher and an additional Lead Teacher for every additional 40 children. Effective October 16, 1996, MA law required that lead teachers for infants and toddlers be at least 21 years of age and fulfill certain additional minimum education, training and experience requirements. For example, either of the following combinations would qualify: (1) a high school diploma or equivalent plus 12 college credits including credits in infant and toddler care plus 36 months of work experience, or (2) a BA or advanced degree in early education plus 12 college credits in infant and toddler care and 9 months of work experience.

#### *Caregiver-to-child ratios*

FL and MA, like most states, require that centers maintain certain minimum caregiver-to-child ratios. Such minimum standards regarding caregiver-to-child ratios can have substantial impacts on prices. In FL, for infants (under the age of 1 year), the minimum caregiver-to-child ratio is 1-to-4, for one-year old children it is 1-to-6, and for two-year olds it is 1-to-11. FL does not regulate group sizes. MA's minimum ratio standards are more stringent than FL's, particularly for toddlers. In addition, the Commonwealth also sets maximum group sizes. This is an indication that public demand for quality child care may be higher in MA than in FL. The minimum caregiver-to-child ratio in MA for infants (ages 1 to 15 months) is 1-to-3 and the minimum ratio for toddlers (ages 15 to 33 months) is 1-to-4. In addition, there can be no more than 7 children in an infant group and no more than 9 children in a toddler group. This additional group size requirement in MA has an additional impact on prices.

### **Data Sources**

For MDC, our main sources of data are: (1) provider records maintained by the two Resource and Referral (R&R) agencies serving the county; (2) Gold Seal accreditation records, and (3) administrative records for families with children receiving child-care subsidies.

The MA data we use come from three major sources: (1) provider records maintained by the five R&R agencies serving our study areas, (2) monthly voucher billing files received from OCCS, from which we obtained information on the use of and payments for child care subsidies, and (3) child care licensing lists received from OCCS, from which we obtained data on child care capacities (slots).

The provider data we use for both MDC and MA contain information on all licensed centers and most license-exempt centers. Head Start providers are included in both the MA and MDC provider data. The data contain proportionally many more licensed family child care homes in MA than in MDC because they are proportionally much more numerous in MA. Our provider

data for MA and MDC do not contain information on informal (unlicensed) providers (which are not uncommon, particularly in MDC), although our subsidy databases do contain some information on families that use their child care subsidies (vouchers) to purchase informal care from relatives, friends, and neighbors. In short, we base our findings on reasonably complete data for five representative areas in MA and for the entire metropolitan MDC for the period 1996 – 1999. Our data are not from a sample but rather cover the universe of administrative records for the geographic areas covered in our study. These data include information on licensed providers –both centers and family child care homes – as well as information on families that use their child care subsidies (vouchers) to purchase informal care.

### **Findings**

In this section we present selected findings arranged under three categories, those related to the availability and use of child care, those related to child care quality, and those related to child care prices.

#### *Findings Related to the Availability and Use of Child Care*

We found that the number of infants and toddlers in formal (licensed) care increased as welfare reform progressed in MA and MDC. Particularly in MDC, the increase was dramatic. As can be seen in Figure 1, in March 1996, the number of infants from low-income families receiving care in MDC under the child-care subsidy program was slightly less than 400. By March 2000, almost 1,000 infants were in subsidized child care. This represents an increase of almost 150%. This increase in subsidized infant enrollments was particularly marked after September 1998.<sup>10</sup> The number of one-year-olds in subsidized child care in MDC also grew

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<sup>10</sup> Only approximately 1500 families statewide reached their 24-month time limit in September 1998. The dramatic increase in the use of child care subsidies was probably largely due to the combined effects of increased work-related activity requirements for cash assistance recipients, particularly recipients with young children, and accelerated departures from cash assistance as the 24-month and 36-month time limits became more salient. The local Miami-Dade Wages Coalition that managed welfare reform became fully operational and focused on moving cash assistance recipients from welfare to work during the summer and fall of 1998.

rapidly during the period of welfare reform from slightly less than 900 in March 1996 to more than 2000 by March 2000. This represents an increase of almost 125%. As for infants, this growth accelerated after September 1998. The number of two-year-olds in subsidized care approximately doubled, from slightly over 1,100 in March 1996 to almost 2,300 by March 2000. The increase also accelerated after September 1998. However, the growth in enrollments of two-year-olds in subsidized care was less rapid than that of infants and one-year-olds probably because, prior to welfare reform, cash assistance recipients in FL were already required to participate in the JOBS program when their youngest child reached age 3.

While the increase in the number of subsidies issued in MDC for infant and toddler care was dramatic, the growth in the full-time enrollment of infants and toddlers at centers accepting child care subsidies was far less so. Figure 2 shows that full-time infant (i.e., age <12 months) enrollments in MDC at centers accepting subsidies increased only slightly from about 1,000 in February 1996 to about 1,150 by February 1999, an increase of 15%, compared to the over 150% increase in the number of child care subsidy vouchers issued by the child-care subsidy agencies in MDC for infant care (see Figure 1). During the same period, full-time infant enrollments at centers not accepting vouchers actually declined from about 1,160 to 1,000.<sup>11</sup>

There are a number of possible explanations for this discrepancy. For example, it is possible that many vouchers issued for infant care were for part-time care.<sup>12</sup> It is also possible that infants with child-care subsidies increasingly displaced other infants without subsidies, leaving enrollments largely unchanged. Another possible explanation, particularly for the income-eligible group, is that families that were initially paying the full cost of care were later

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<sup>11</sup> The reader should note that these enrollment-by-age figures reported by providers to the MDC R&Rs are not considered to be as reliable as the overall enrollments they report.

<sup>12</sup> During our study period, only 30% of cash assistance recipients with subsidies were working and among those working only 23% worked 20 or more hours per week. In contrast, 93% of those receiving Transitional Child Care Assistance (TCC) were working (88% of those in this group were working at least 20 hours per week) and 99% of Income-Eligible subsidy clients were working (95% of those in this group were working at least 20 hours per week).

receiving subsidies as funding was increased. The fact that the full-time enrollment of infants at providers accepting subsidies increased, while the enrollment of infants at unsubsidized providers declined provides some support for this hypothesis.

Figure 2 also shows that, the number of one-year-olds and two-year olds in full-time care at subsidized providers increased at rates of 17% and 13%, respectively. In contrast, enrollment of one-year-olds and two-year-olds in full-time care at unsubsidized providers decreased by a similar amount.

In MA, as welfare reform unfolded, the increases in the use of subsidized care for infants and toddlers were much less dramatic and, particularly with respect to infant care, largely handled by the informal system (i.e., relatives, neighbors and friends). A review of the monthly billing files of three representative Child Care Resource Agencies (CCRAs)<sup>13</sup> for the month of May in 1997, in 1998 and in 1999 shows that the number of infants from low-income families receiving care under the voucher program in these three areas in MA increased by 10 percent between 1997 and 1999, from 1157 to 1277. During this period, the proportion of infants enrolled in centers declined from 44% to 34%, while the proportion of infants in informal care increased from 27% to 34%.

The proportion of vouchers issued by the same three CCRAs in MA and used by families for toddler care increased somewhat more rapidly (by 12%) between 1997 and 1999.<sup>14</sup> Around 45% of the vouchers for toddler care went to centers and 20% to informal caregivers. Throughout this period, the percent of vouchers for the care of infants and toddlers in MA going to family child-care homes remained approximately the same.

### *Findings Related to Quality of Care*

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<sup>13</sup> The three CCRAs are Child Care Choices of Boston, New England Farm Workers Council in Hampden County, and Child Care Works, which serves the Fall River/New Bedford/Taunton area of the state. We were not able to use data for our other two study areas because of a redefinition of their service boundaries.

<sup>14</sup> This greater increase was in accordance with the MA welfare reform time limits and work requirements, which become stricter when the youngest child turns 2.



Quality child care and early education fosters children's intellectual, social, and emotional development, gets them ready for school, and puts them on the right path toward healthy and productive citizenship.

Staff Credentials. One recognized aspect of quality in the child care and early childhood education world is the educational level of the staff.

In MDC, we find that, as welfare reform progressed, there was a decline in the average percent of staff with a high school education or higher academic credential employed at centers with infant programs and participating in the subsidized child care program, from 88% in 1997 to 85% in 1999. Similarly, the average percent of staff with a high school education or higher at centers with toddler programs and accepting subsidies, declined from 88% in 1997 to 86% in 1999. Centers that did not accept subsidies, with infant and toddler programs, had a higher percent of staff with high school or higher credentials, but the proportion also decreased as welfare reform got under way, from 91% in 1996 to 86% in 1999 at centers with infant programs and from 92% to 88% at centers with toddler programs.

We observed improvement in MDC in relation to the proportion of staff with associate degrees and bachelor's degrees as welfare reform progressed. However, only a relatively small proportion of staff at child care centers had these higher levels of education during our study period. Specifically, the average percent of staff with an associate degree employed at centers accepting subsidies with infant programs increased from 33% in 1997 to 39% in 1999 and it also increased at similar facilities with toddler programs from 33% in 1997 to 37% in 1999. Centers not accepting subsidies made less progress in the hiring and retention of staff with an associate degree as welfare reform got underway, from 34% in 1996 to 35% in 1999 at facilities with infant programs, and from 36% in 1996 to 38% in 1999 at facilities with toddler programs.

There was solid progress, during the early welfare reform years in MDC in terms of the proportion of staff with bachelor's degrees at child care centers. The average percent of staff with a bachelor's degree employed at subsidized facilities with infant programs increased from 10% in 1997 to 14% in 1999, and it also increased at subsidized facilities with toddler programs from 9% in 1997 to 12% in 1999. Providers that did not accept subsidies made more limited progress during these years. Specifically, the proportion of staff with a bachelor's degree at facilities with infant programs increased as welfare reform progressed, but only from 9% in 1996 to 11% in 1999. Similarly, the percent of staff with a bachelor's degree at unsubsidized facilities with toddler programs increased from 11% in 1996 to 13% in 1999.

Welfare reform was also associated with an increase in the proportion of staff with CDA credentials in MDC.<sup>15</sup> The average percent of staff with a CDA employed at subsidized facilities with infant programs increased from 44% in 1997 to 49% in 1999, and at those with toddler programs it increased from 46% in 1997 to 51% in 1999. For unsubsidized providers, the increase was more limited, from 41% in 1996 to 44% in 1999 at facilities with infant programs and from 42% in 1996 to 44% in 1999 at facilities with toddler programs.

At the time of our study, MA's R&Rs did not collect data on the educational credentials held by staff employed at child care centers. Therefore, we do not have parallel information to the data presented on MDC. We only have information on whether family child care providers had an associate degree, a bachelor's degree or a CDA credential.

As welfare reform progressed in MA, we observe a generally downward trend in the educational credentials held by family child care providers, particularly among providers not taking children with child care subsidies. The average percent of family providers with an associate degree caring for infants with vouchers remained stable at 4% between 1997 and

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<sup>15</sup> This was in accordance with recently instituted changes in the child care regulations requiring a certain minimum number of staff with the CDA credential at each facility.

1999, and the proportion of those caring for toddlers with vouchers also remained stable at 2% between 1997 and 1999. But the proportion of unsubsidized family providers with an associate degree caring for infants declined from 5% in 1997 to 4% in 1999, and the proportion of those caring for toddlers declined from 5% in 1997 to 0% in 1999.

Family providers in MA are more likely to have a bachelor's degree than an associate degree, although the proportion with either degree is small. The average percent of family providers with a bachelor's degree caring for infants with vouchers declined from 8% in 1997 to 6% in 1999, and the proportion of those caring for toddlers with vouchers also declined from 6% in 1997 to 5% in 1999. The proportion of unsubsidized family providers with a bachelor's degree caring for infants declined slightly from 15% in 1997 to 14% in 1999 and the proportion of those caring for toddlers declined dramatically from 15% in 1997 to 4% in 1999.

Very few family providers in MA had the CDA credential during the period of our study. This is not surprising since MA law does not require the CDA but rather accepts a reasonably wide range of early childhood education credentials and training. Yet, we observe an increase in the proportion of family providers with the CDA caring for infants, both those with vouchers and those without, from less than 1% in 1997 to almost 2% in 1999. However, we found no family providers caring for toddlers who had the CDA credential.

Accreditation. Accreditation by a nationally recognized professional organization is also widely recognized in the child-care field as an indicator of quality. To be accredited and re-accredited by an entity such as the National Association for the Education of Young Children (NAEYC), a child care facility must pass periodic and extensive reviews of all aspects of its program.

Only a very small fraction of the child care and early childhood education facilities serving infants and toddlers in MDC were accredited during the 38-month period of our study.

Two percent of centers that were not participating in the subsidized child care program and that were offering infant care were accredited in February 1996, compared to 1.5% of centers offering infant care and participating in the subsidized child care program. By March 1999, the level of accreditation in both sectors remained strikingly low, with only one additional provider in the subsidized sector and one in the unsubsidized sector becoming accredited.<sup>16</sup>

Unsubsidized center providers serving toddlers were more likely to be accredited at both the beginning and end of our study period (approximately 3%). However, subsidized center providers serving toddlers were no more likely to be accredited than those serving infants.

It is interesting to note that, for the period of our study, the majority of accredited facilities in MDC were run by faith-based organizations. A handful of others were run by Head Start programs. The number of private, non-religious, accredited providers in MDC was minimal both at the beginning and the end of our study period.

In contrast, in the five representative areas of MA we studied, a much larger proportion of center providers (including Head Start providers) were nationally accredited, but the trend we observed in the proportion that were accredited during the early years following welfare reform was mixed, with subsidized providers improving their accreditation rate and unsubsidized providers losing ground on this measure. Specifically, for centers with infant enrollments and accepting vouchers, the proportion accredited was 18% in 1997, and it had increased to 22% by 1999. Similarly, for centers with toddler enrollments and accepting vouchers, the proportion accredited was 21% in 1997, and it had grown to 24% by 1999. In contrast for centers with infant enrollments that did not accept vouchers, the proportion accredited declined from 24% in 1997 to 19% in 1999. Similarly, for providers with toddler

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<sup>16</sup> We used Gold Seal program accreditation records going back to the inception of this program in 1996. These records were kept by the state's R&R Network (The Florida Children's Forum). We also used the on-line NAEYC records.

enrollments that did not accept vouchers, the proportion accredited declined from 25% in 1997 to 20% in 1999.

We suspect that the substantially higher proportion of accredited providers in MA than in MDC is directly related to the substantially higher market prices for care and substantially higher reimbursements paid to subsidized providers in MA. In a subsequent section, we will describe prices in both areas. For information on provider reimbursement rates, please refer to the Policy Context section. In contrast, in MDC, during the time of our study, many providers wishing to become Gold Seal accredited were unable, for financial reasons, to make the necessary changes in staff, facilities, resources, and programs. To overcome the financial barriers, the Miami Dade School Readiness Coalition, with child care quality enhancement funds from the state, has been awarding a limited number of grants to providers wishing to upgrade in order to achieve Gold Seal accredited status. This program has been successful, after the period of our study, in substantially increasing the accreditation rate of MDC providers. However, for providers to be able to retain their accredited status they must be able to maintain quality and, to do so without government subsidies, they must be able to charge higher prices. Raising prices is harder in MDC than in MA, given the lower median income of the population and higher levels of poverty of families with children. We also believe that MA has a substantially higher proportion of accredited providers because, compared to MDC, MA has a much higher proportion of the population that is native born and that has a higher level of education.

#### *Findings Related to Price of Care*

Overall we find that prices charged for infant and toddler care in MA during the period surrounding welfare reform were more than 2 ½ times the equivalent prices in MDC. We also

find that, proportionally, prices increased slightly more during this period in MA than in MDC. In this section we detail the price differences we found.

Figure 3 summarizes the weekly non-zero prices charged for full-time infant care in MDC from the first quarter of 1996 to the first quarter of 1999. As can be seen in this figure, median infant prices remained flat at \$75 per week for unsubsidized care. For subsidized infant care, prices increased once (from \$75 to \$85 per week in the third quarter of 1996) and then remained at \$85 per week until the end of our observation period. Similarly, the median weekly prices for full-time toddler care in MDC also remained largely unchanged—at around \$70 during 1996 and 1997 and up to \$75 by 1999 for unsubsidized care and at \$79 for subsidized care for 1997-1999.

In contrast, weekly non-zero median prices for full-time infant care in MA increased from \$205 in 1997 to \$220 in 1999 for subsidized (voucher) care, although they decreased slightly from \$232 to \$230 for unsubsidized care. Median weekly prices for full-time toddler care in MA increased from \$183 in 1997 to \$200 in 1999 for subsidized (voucher) care and they also increased from \$195 in 1997 to \$209 in 1999 for unsubsidized care.

Tables 1 and 2 provide descriptive statistics for the full-time prices of infant and toddler care in MA and in MDC for the period 1997-1999 as a whole. As can be seen in Table 1, the median weekly price of full-time infant care during the period 1997-1999 in MA was \$218 for providers participating in the voucher program and \$234 for providers not participating. By way of contrast, Table 2 shows that the median price of infant care in MDC for the same period (1997-1999) was \$85 per week for providers participating in the child care subsidy program and \$75 per week for providers that did not participate. As per Table 1, in MA the median weekly full-time price of toddler care was \$194 for providers participating in the voucher program and \$214 for non-participating providers. In MDC, as per Table 2, the median weekly full-time price

of toddler (one-year-old) care was \$79 for subsidized providers and \$70 for unsubsidized providers.

In MA, prices charged by providers that did not accept children with child-care vouchers were significantly higher than prices charged by providers that accepted vouchers. In MDC, the situation was the reverse, that is, prices charged by providers participating in the child care subsidy program were significantly higher than the prices charged by providers that did not participate.

As noted before, for the period 1997-1999, the median price of infant and toddler care in MA was more than 2 ½ times the median price of infant and toddler care in MDC. We computed that the costs of labor and other items needed to provide child care at the time was between 10% and 34% higher in MA than in MDC.<sup>17</sup> In addition, MA's more stringent minimum-standards requirements meant that centers providing infant care in MA would have labor costs 32% higher than centers providing infant care in MDC. For children between 15 and 24 months old, minimum standards in MA caused labor costs that were 50% higher in MA than in MDC and labor costs that were 275% higher in MA than in MDC for children 24 months to 33 months old.

Computing the costs of meeting higher minimum-standards requirements in MA than in FL explains most of the observed differences in the price of care for 24 to 33 month old children in MA and MDC. But this only partially explains the differences in prices charged for the care of children less than two-years old. The existing literature (see, for example, Vandell and Wolfe, 2000) suggests that the income and educational levels of the population are strongly related to the demand for higher-quality child care. Accordingly, we suspect that the much higher educational and income levels in MA, as compared to MDC, likely account for much of the

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<sup>17</sup> For example, at the time of our study, the overall cost of living was 34% higher in Boston than in MDC and in the western part of MA it was 10% higher than the cost of living in MDC. The median child care worker's wage in MA is approximately 10% higher in MA than in MDC (\$8.59 per hour in MA and \$7.79 per hour in MDC).

remaining price difference (after adjustment for costs) between MA and MDC with respect to the care of infants and one-year-olds.

We also find that the prices paid for the weekly full-time center care of infants and one-year-olds in MDC are less than 10% apart, even though the labor costs of providing infant care, given FL's minimum caregiver-to-child ratio requirements, should be about 50% higher than the labor costs of providing care for one-year-olds. In addition we find that the prices paid for the weekly full-time center care of infants in MA are approximately 12% more than prices paid for toddler care, even though the labor costs of providing infant care, given MA's minimum caregiver-to-child ratio requirements, should be about 32% higher than the labor costs of providing care for one-year-olds. We also find that the prices paid for the weekly full-time center care of infants and two-year-olds in MDC are at most 32% apart, even though the labor costs of providing infant care, given FL's minimum caregiver-to-child ratio requirements, should be about 175% higher than the labor costs of providing care for two-year-olds. These price differences suggest that centers that comply with the state-promulgated minimum standards for infant care must be using funds from sources other than the prices paid by parents. For centers receiving child care subsidies, the reimbursement rates paid by the state of FL for the care of infants in MDC also are only 8-12% higher than the reimbursement rates for two-year-olds. Thus, the costs of providing infant care that is in compliance with state-imposed standards are not covered by the prices the state pays either.

The situation in MA, while not as stark, also indicates that centers that comply with the state's minimum standards must be using other sources of funding to subsidize the infant care they provide. As can be seen by comparing the price of infant and toddler care in Table 1, the price of infant care in MA is only approximately 12% higher than the price of toddler care. MA's provider reimbursement rates for infant care are 12.5% higher than the state's reimbursement



rates for toddlers in Boston and 9% higher in the western part of the state. Yet, minimum standards imply labor costs that are 32% higher. For more details on the relationship between infant and toddler care costs, provider reimbursements and prices in MDC and MA, please refer to Witte, Queralt, Witt & Griesinger (2000, April) and Queralt, Witte, & Griesinger (2000, July).

## **CONCLUSIONS**

We provide descriptive evidence from MDC in FL and from five representative areas in MA that government policies governing welfare reform, the child-care subsidy system, and minimum-standards regulations had considerable influence on the availability and use, quality, and price of infant and toddler care as welfare reform progressed from 1996 to 2000. We suspect that the markedly different socio-cultural contexts in MDC and MA also had some influence on the very different situations for infant and toddler care in MDC and MA.

Our data suggest that child-care regulations, market prices, and provider reimbursements rates in MDC were out of synchrony in the period surrounding the passage of welfare reform. Specifically, the prices charged by providers in MDC for the care of infants and the reimbursements providers received from the state for infant care did not appear to be sufficient to cover the costs of providing infant care that met the state-imposed minimum standards. In the five areas of MA we studied, prices charged, reimbursements, and regulations were more closely aligned.

We find that prices for infant and toddler care in MDC were uncommonly flat during the period of our study and strikingly lower than in MA, even after adjusting for the higher cost of living and for the more stringent regulatory environment in MA. We suspect, and provide some evidence, that this marked difference negatively impacted, at least in part, the quality of infant and toddler care in MDC as compared to MA. This is a concern, given the rapid and dramatic increase (150%) in the number of low-income infants and toddlers that were placed in

subsidized formal (licensed) care in MDC following passage of FL's stringent, work-first welfare reform. MA's less stringent welfare reform rules were associated with a much lower rate of increase (about 10%) in the number of infants and toddlers placed in formal care.

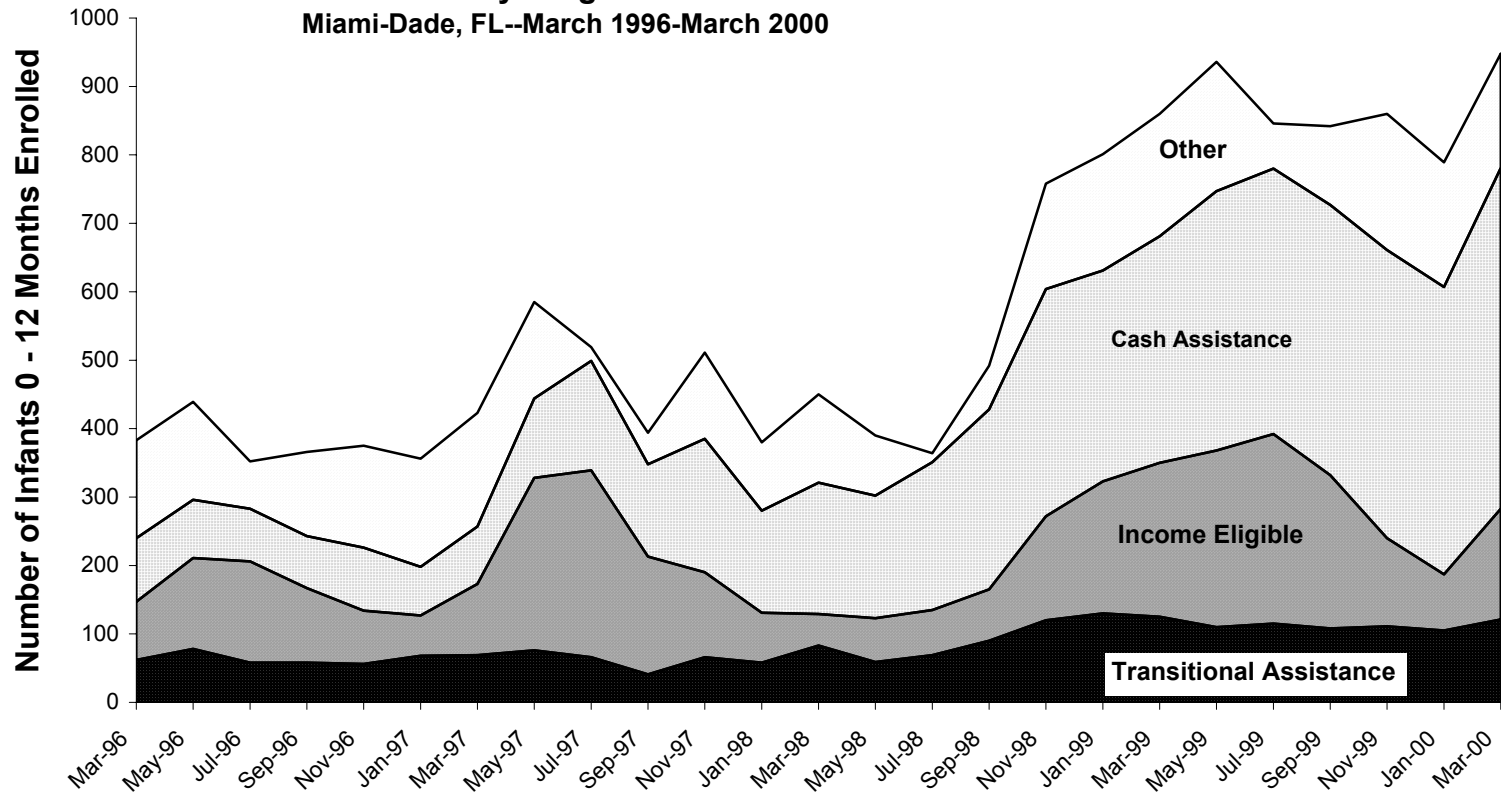
In MDC, enrollments at facilities with infant and toddler programs that accepted child care subsidies increased moderately during the period of our study, while enrollments at providers that did not take children with subsidies declined. We suggest that the fact that the growth in the full-time enrollment of infants and toddlers at subsidized facilities was far less dramatic than the increase in the number of child care subsidies issued for infant and toddler care may be indicative of a displacement of infants and toddlers from unsubsidized families by those with child care subsidies.

With respect to quality of infant and toddler care, we find, as welfare reform progressed during the years of our study, there was some deterioration in MDC in the proportion of staff with a high school education or higher credential at subsidized centers (from 88% in 1997 to 85-86% in 1999) as well as at unsubsidized centers (from 91-92% in 1996 to 86-88% in 1999). However, there was small but consistent improvement in the proportion of staff with associate and bachelor's degrees and with CDAs at both subsidized and unsubsidized centers serving both infants and toddlers. In MA we find a generally downward trend with respect to the credentials held by family child care providers as welfare reform progressed. There exist no equivalent MA data on centers.

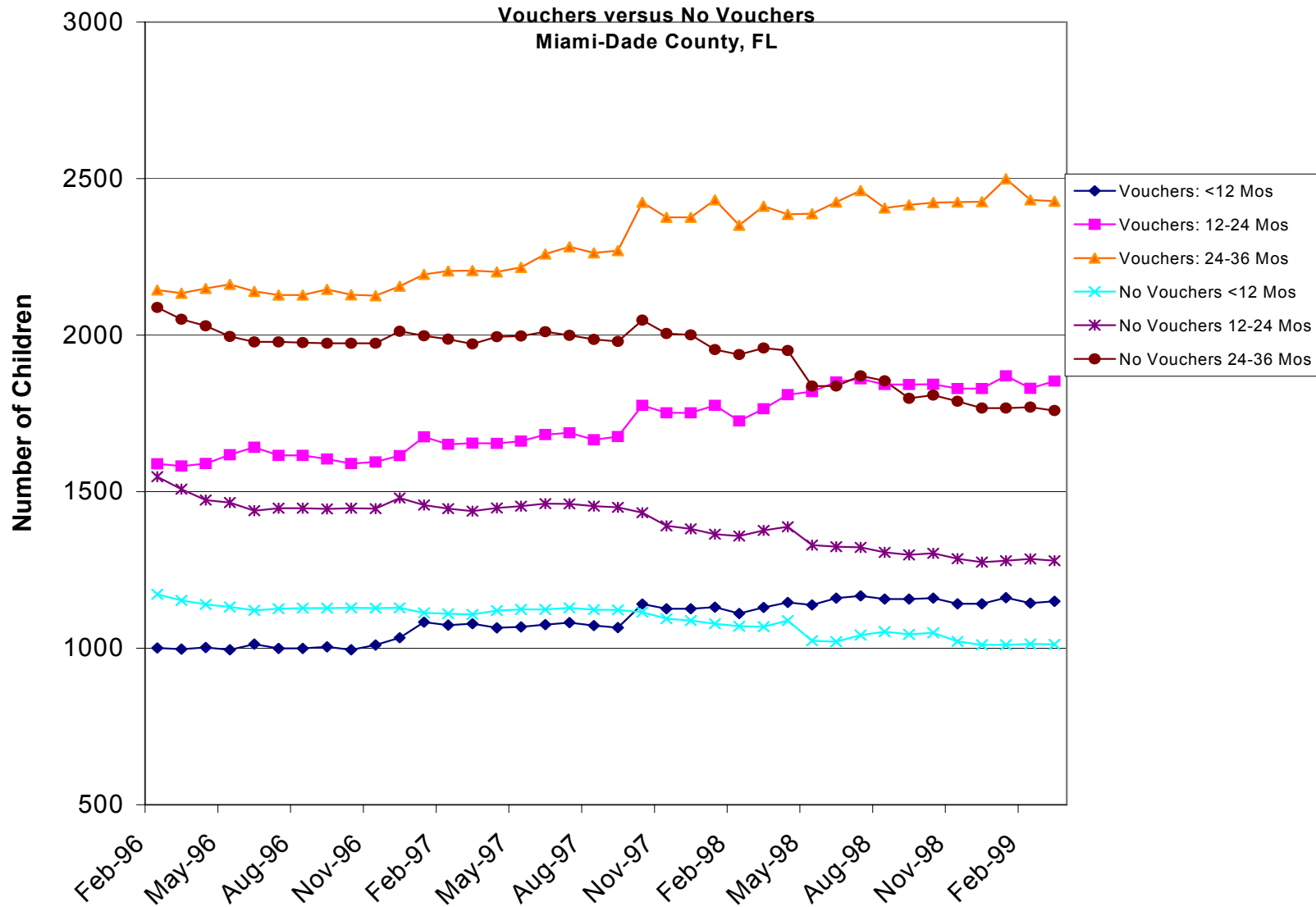
National accreditation levels for centers with infant and toddler programs in MDC were flat and distressingly low (1.5-3%) during the period surrounding welfare reform. These exceedingly low levels of accreditation in MDC existed despite the fact that, under FL's Gold Seal program, subsidized providers could receive up to a 20% increase in reimbursements if they became accredited. In contrast, the MA subsidized child care program did not offer higher

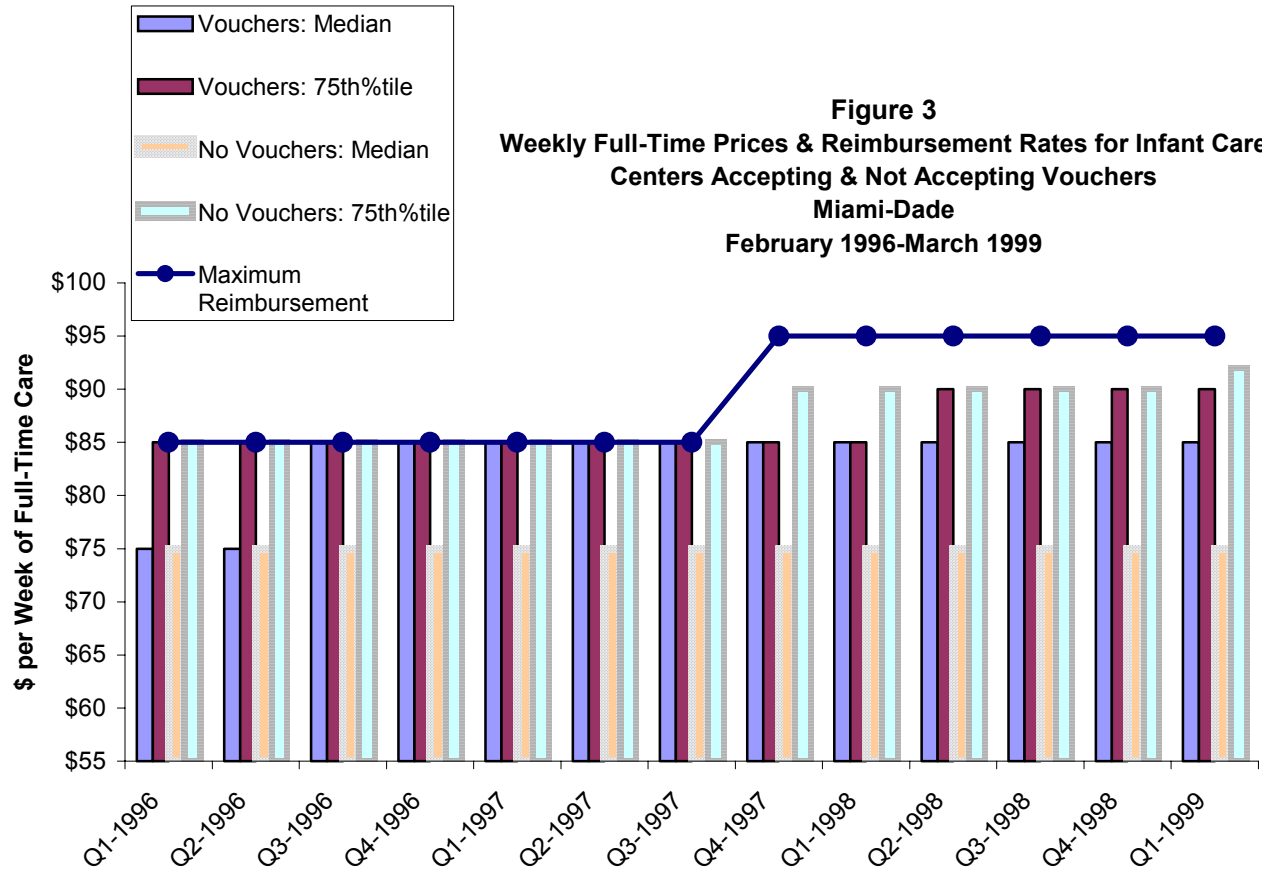
reimbursements to providers with accreditation. Yet, accreditation levels grew during this period in MA from 18-21% to 22-24% for centers with infant and toddler programs that accepted vouchers. However, for centers serving infants and toddlers that did not accept vouchers accreditation levels decreased in MA from 24-25% to 19-20%.

**Figure 1**  
**Infant Enrollment in Subsidized Child Care**  
**By Program**  
**Miami-Dade, FL--March 1996-March 2000**



**Figure 2**  
**Changes in Full-Time Center Enrollment of Infants and Toddlers**





<b>Table 1</b>										
<b>Weekly Non-Zero Prices of Center-Based Child Care and Early Childhood Education</b>										
<b>Five Representative Areas of Massachusetts--1997-1999</b>										
	Prices of Programs Participating in the Subsidized Center-Based Care Programs					Prices of Programs not Participating in the Subsidized Center-Based Care Programs*				
	#Obs.	Mean	Median	SD	CV	#Obs.	Mean	Median	SD	CV
Infant full-time (<15m)	535	\$218.08	\$217	45.30	0.21	157	\$233.65	\$240	54.01	0.23
Toddler full-time (15m-33m)	714	\$194.12	\$194	40.61	0.21	229	\$210.66	\$214	51.08	0.24
*The non-subsidized market prices are the non-zero prices charged by providers other than FCC's, head start, public schools, non-public schools and those centers participating in the subsidized child care program.										

<b>Table 2</b>										
<b>Weekly Non-Zero Prices of Center-Based Child Care and Early Childhood Education</b>										
<b>Miami-Dade County--1997-1999</b>										
	Prices of Programs Participating in the Subsidized Center-Based Care Programs					Prices of Programs not Participating in the Subsidized Center-Based Care Programs*				
	#Obs.	Mean	Median	SD	CV	#Obs.	Mean	Median	SD	CV
Infant full-time (<12m)	575-638	\$84.92	\$85	12.44	0.15	491-527	\$78.60	\$75	18.76	0.24
One-Year Old (12m-24m)	700-746	\$79.25	\$79	11.09	0.14	620-654	\$74.24	\$70	17.63	0.24
Two-Year Old (24m-36m)	784-842	\$76.73	\$76	12.16	0.16	932-1011	\$72.00	\$70	17.66	0.25
*The non-subsidized market prices are the non-zero prices charged by providers other than FCC's, head start, public schools, non-public schools and those centers participating in the subsidized child care program.										

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