As the percentage of dual working parents with young children increases, the need for child care increases as well. Most of this care is provided informally, either by a parent who is off work (when each parent works different shifts), by a parent while he or she is working, or by a child’s sibling or other relative. In recent years, however, increasing numbers of young children are entering more-formal care provided by licensed family-care networks or child-care centers.1 Much of this formal care is delivered by the nonprofit sector through programs in churches and synagogues, community centers, and, increasingly, schools.

However, as the need for care has continued to increase, for-profit firms have become more prominent in delivering child care. Of the more than nine million children under the age of five in nonrelative-provided child care in 1995, almost six million were enrolled in organized facilities, day care centers, nurseries or preschools, Head

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1The increased use of formal child care also reflects the diminished availability of extended family members, upon whom young parents could count in times past for free or very inexpensive care. Welfare reform, in particular, with its emphasis on getting women with young children out of the home and into the workforce, has reduced the number of friends, relatives, and neighbors available to care for one’s children. Moreover, in some states (for example, California), Temporary Assistance to Needy Families (TANF) programs changed the way that providers are paid. Child-care subsidy funds that in the past were provided to parents, who then paid the providers themselves, are now paid directly to providers by TANF program administrators or their representatives (in California, Alternative Payment Providers). To receive these direct payments, providers may not live in the recipient household and must have a social security number, something that many women in immigrant communities do not possess and cannot obtain because of their resident status.
Examining the Cost of Military Child Care

Start, or school programs (Smith, 2000). Although parents are increasingly turning to formal child-care options, consensus is strong that the quality of much of the civilian care for young children that is available today in this country is mediocre at best (Cost, Quality, and Child Outcomes Study Team, 1995; GAO, 1999; Campbell et al., 2000).

Partly in response to the limited options for high-quality care, over the past decade or so increasing numbers of employers around the country have made the decision to provide worksite child-care centers. For example, in 1982, the National Employer-Supported Child Care Project identified 204 worksite facilities in the United States; as of 1996, 1,800 such facilities were identified. For the most part, these centers are of small to medium size. Burud and Associates (1996) report the average capacity of the centers in their study was 105 children. Hence, they serve only a trivial number of children and an even smaller number of families, as most of these centers make care available to siblings of enrolled children on a priority basis.

The U.S. military represents a notable exception to the usual situation in employer-sponsored child care—a small number of slots in a limited number of sites. The military today provides care to about 200,000 children from 6 weeks to 12 years of age in more than 800 Child Development Centers (CDCs) around the world, in more than 9,000 Family Child Care (FCC) homes, and in before- and after-school and holiday and summer programs. Indeed, the military is the largest provider by far of employer-sponsored care in this country. In contrast to most civilian employers, the military is quite concerned about meeting a large share of employee need for care. Indeed, the military has developed a formula to assess need at each installation that enables it to assess the degree to which available

2Employers believe that worksite child-care centers increase staff loyalty and improve recruiting and retention.
3Military child care was not included in the project study.
4The Navy uses a different term to describe FCC: “child development homes.”
5Because some spaces are shared, the 169,972 available spaces serve a number of children even higher than that (DoD, 2000).
care is meeting overall need. Currently, the military child development system provides 169,972 spaces, and has committed itself to ultimately providing 215,112 spaces (or slots) by fiscal year 2007. Calculated by slot, the military has estimated the potential need to be 268,890 slots.

As discussed in the next chapter, the military child-care system has received much praise for its quality. At the same time, in an era of defense budget cuts, intense scrutiny has been placed on the cost of support activities, such as child care, that are not central to the Department of Defense’s (DoD’s) core mission.

THE LINK BETWEEN COST AND QUALITY

Child care is a highly labor-intensive operation, with labor costs accounting for the greatest share of costs. The quality of child care is typically evaluated across many dimensions; however, the staff-child ratio and size of the group or classroom are important features of any examination of child-care quality. Such a definition of quality implies that, all other things being equal, it is more costly to provide high-quality than low-quality care. The costs of providing high-

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6The formula uses information on the family characteristics of military personnel and on the total number of civilians working at the installation to estimate the need for child care at the installation. The estimate of the number of slots needed by military personnel is based on installation-level personnel information on the number of children age 0–5 and 6–12, marital status of military personnel, and employment status of spouses. The DoD feeds this information into a formula that reflects the fact that families with different characteristics will have different probabilities of using DoD child care—either because the children do not live with their parents, because the spouse does not work outside the home, or because the family makes other arrangements. For example, the formula assumes, based on DoD experience, that the children of single parents or two active duty military parents are more likely to require child care than children with a civilian parent who works only part time. The estimate of the number of slots required by civilians is based on the total number of civilians working at the installations. The military and civilian estimates are combined to produce the number of slots needed by each installation. These numbers are then summed for the DoD as a whole.

7A recent U.S. General Accounting Office report found that labor costs account for 75 percent of the total cost of providing child care in the Air Force (GAO, 1999). Culkin, Morris, and Helburn (1991) examined the cost of care at seven centers and found that labor costs account for between 56 and 72 percent of costs at those centers.

8See Cost, Quality, and Child Outcomes Study Team (1995) for a summary of several instruments used to evaluate the quality of child care.
quality care must be paid by someone—parents, employers, governments, or charity groups—and some argue that a lack of resources is an important reason for the overall low quality of care (Schulman, 2000).

The full cost of high-quality care is substantial—well beyond the means of most parents (Schulman, 2000). For example, the U.S. General Accounting Office (GAO) report found that in Air Force Child Development Centers the cost per child-hour for infants (who are, because of the need for very low child-to-staff ratios, the most expensive children for whom to provide care) was $5.43 per hour. Per-hour costs averaged across all child age groups were $3.86 per child-hour.9

Unless the cost of care is subsidized by the government, a philanthropic agency, or an employer, high costs translate into high parent fees. Although the cost of care is prohibitively high for some parents, several researchers have noted that low wages10 paid to child-care workers represent another subsidy to parents (Campbell et al., 2000; Cost, Quality, and Child Outcomes Study Team, 1995). If not for this "subsidy," child-care fees would be even higher.

There are a number of government programs that provide assistance to families in meeting their child-care expenses. The federal government offers a Child Care Tax Credit.11 The states provide a variety of forms of child-care assistance, including, in more than 40 states, state-funded pre-kindergarten programs. The Child Care and

9 The GAO study calculated the production cost, or how much the CDCs spent in producing an hour of care. This cost is covered by a combination of parent fees and DoD funding.

10 The Cost Quality and Child Outcomes Study Team (1995) found that the average child-care worker would require a 45 percent raise to achieve wage parity with the average worker of the same gender, education, age, and minority status in the economy as a whole.

11 The Child Care Tax Credit is available to some individuals paying for child care for dependents age 13 and younger. To qualify, the child or children must be living with those receiving the credit and the child care must be used to enable the credit recipient to work or conduct a job search. The credit represents a percentage of adjusted gross income (AGI) ranging from 20 to 30 percent, with the lower percentage rates applied to higher incomes. The maximum credit is $2,400 for one child and $4,800 for two or more children. Any employer-provided benefits must be subtracted from the calculated tax credit.
Development Block Grant (CCDBG) provides funds to states to subsidize child care for low-income families through both grants to providers and vouchers to parents. The Temporary Assistance to Needy Families (TANF) program provides funds to states to subsidize child-care costs for women who must enter training or employment as a condition of receiving their welfare grant. Because of limited funds and strict income limits on most of these subsidies, these programs serve only a fraction of families that need assistance. For example, the CCDBG reaches only 12 percent of children eligible under federal guidelines (Campbell et al., 2000; DHHS, 1999). As a result, a large percentage of working families must cover the cost of child care without assistance. Many spend well over the 10 percent of gross income that experts recommend be allocated to child care (Schulman, 2000).

While cost is the major reason for low-quality care, difficulties in assessing quality care are also contributing factors. Most people can’t distinguish high-quality care from low-quality care when they see it, so they cannot make an informed choice concerning quality even if they are motivated to do so (Cost, Quality, and Child Outcomes Study Team, 1995). It has been asserted that even those parents who might be able to afford high-quality care lack the knowledge necessary to assess what constitutes high-quality care. Therefore, they may wind up inadvertently paying for high-quality care but receiving care of a lesser quality (Price, 2000; Cost Quality and Child Outcomes Study Team, 1995).

**THE ROLE OF QUALITY STANDARDS IN CARE DELIVERY**

A number of mechanisms and standards have been created to support the delivery of higher-quality care. State licensing represents one mechanism through which quality is supported and enforced. However, existing state licensing operations generally focus on easily accessible and measurable criteria, such as square footage and the presence of safety gates at child-care facilities. While such attributes are indeed critical to ensuring young children’s well-being and safety, they do not address the quality of the relationship between children and caregivers, which is the aspect of quality more closely linked to developmental outcomes (Belsky, 1984; Bredekamp, 1986).
About half the states now offer some additional reimbursement to child-care providers who serve low-income families. Using tiered reimbursement based on provider characteristics, states provide additional funds to accredited providers, those that require specified staff training, and those that offer child-to-staff ratios that are lower than those required for licensing, among other features (Blank, Behr, and Schulman, 2000).

Accreditation by the National Association for the Education of Young Children (NAEYC) is a voluntary process that holds centers to a higher quality standard. To become accredited, a center must engage in a three-step process that includes self-study, a site validation visit, and a commission decision. The process must be repeated every three years. An accreditation process is available for family-based care through the National Association of Family Child Care (NAFCC) and for school-age care through the National School-Age Care Alliance (NSACA).

Zellman, Johansen, and Van Winkle (1994, pp. 35–36) compared DoD certification standards and NAEYC accreditation requirements to illustrate the differences between certification and accreditation:

Comparisons of the two sets of standards on environment and curriculum help to illustrate the qualitative differences between certification and accreditation. Certification and accreditation have identical standards for minimum usable indoor and outdoor play areas. NAEYC (the accrediting body), however, provides specifics on room layout, storage areas, the provision of cushions and carpeted areas, and the variety of surfaces that should be incorporated into the playground. Both sets of requirements stress a developmentally appropriate curriculum, but NAEYC’s program descriptions are much more extensive and include types of activities, a mix of activities, and the presentation of multicultural learning opportunities. Another important difference between accreditation and certification is the relative emphasis on caregiver relationships with children. Certification checks that caregivers respond appropriately to children, but the certification checklist lacks any definition or standard for appropriateness. . . . it is assumed that appropriate behavior will follow from the training, although the

12See NAEYC (1991) for more details on the accreditation process.
nature of that behavior is not explicitly stated in the certification criteria.

Welfare reform initiatives represent another opportunity for government to exert pressure on providers to improve the quality of care. Enormous amounts of public funds currently are being spent to provide care for the children of welfare recipients who, under the TANF legislation, are required to participate in training or employment as a condition of continuing to receive welfare support. Many states have responded to the resulting enormous need for child care by funding whatever care parents can find for their children. California is a typical case. The state has adopted a “parental choice” plan, which allows parents complete freedom to select care, including unlicensed care, for their children. Viewing TANF primarily as an employment program, the state did not choose to use these funds as a lever to improve child-care quality. This leverage could have been exerted in a number of ways. For example, the state could have required that all care be licensed.

Although government regulation and high quality standards appear at first glance to be an effective way of increasing the overall quality of care, Chipty (1995) found that many day care providers meet, but do not exceed, state licensing standards. One reason that providers may not exceed minimal standards is that higher standards increase the cost of care. When costs increase, providers have two unattractive options: absorb the additional cost or raise the price. When prices increase, parents generally purchase less care. Either way, Chipty contends, providers don’t benefit financially from providing higher-quality care.

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14 One reason states chose not to create quality criteria was that they wanted to maximize the number of available slots so that more women could work or enter training. Tying funding to license status or other quality indicators reduces the number of slots that are available, at least in the near term.

15 The market dynamics described by Chipty do not apply in DoD CDCs, where care is heavily subsidized and standards far exceed minimal licensing requirements.
REDUCING COSTS WITHOUT REDUCING QUALITY

As we noted earlier, child care is a labor-intensive activity, and high-quality care requires more labor than low-quality care. Within this reality, many observers have speculated about ways to provide high-quality care in a more cost-effective manner, including relying on nonprofits, receipt of government support, and promoting larger centers. Mocan (1997), for example, finds that despite widespread support for nonprofit centers, they are no more or no less efficient at providing child care, holding the quality levels constant. He has also found that centers that receive public money (state or federal) that is tied to higher standards have variable costs that are 25 percent higher than other centers. Mocan also finds some evidence that larger centers are more efficient (due to economies of scale), as are centers that serve children of different ages (due to economies of scope).

In the past five years, the DoD has considered the extent to which competitive sourcing of DoD CDCs will reduce costs. Any serious evaluation of this policy needs to be informed by solid data on child-care costs and must be based on an understanding of the potential sources of savings. These data would be helpful even if child care continued to be operated by the military; such cost data might help in determining appropriate center sizes and in thinking through the relative magnitude and scope of the different system components. The need for these data led the DoD to ask RAND to investigate the cost of delivering military child care. Unlike the GAO report mentioned earlier, the RAND mandate included all the Military Services and extended the scope of the effort beyond CDCs to FCC and school-age care (SAC). And unlike the GAO report, RAND also investigated the delivery of child care in the worksite by DoD contractors and by civilian employers in order to contextualize the results of the work and draw more meaningful implications for policymakers, practitioners, and employers.

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16 This finding is consistent with Mukerjee and White (1993).
17 Our analysis of school-age care costs had to be limited to school-age care provided in CDCs since our survey went to CDC staff. The proportion of school-age care in CDCs is on the decline as services have attempted to increase the number of preschool slots by moving school-age care out of CDCs.
In Chapter Two of this report, we provide an overview of the military child-care system. In Chapters Three and Four, we present the methods and results of a cost survey of military CDCs. Next, in Chapter Five, we present the results of our visits to a number of centers supported by civilian employers, including the federal General Services Administration (GSA). In Chapter Six, we conclude with a discussion of the implications of our findings for military and civilian child care.