Improving Child Care: Providing Comparative Information on Child Care Facilities to Parents and the Community

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About the Oregon Child Care Research Partnership

The Oregon Child Care Research Partnership has over 10 years’ experience working together on policy-focused child care research. Partners include researchers from Portland State University and Oregon State University, the Oregon Child Care Division, the Department of Human Services, Linn-Benton Community College Division of Family Resources and Education, the Oregon Child Care Resource and Referral Network, the Oregon Progress Board, the Head Start Child Care Collaboration Project of the Oregon Department of Education, the National Association of Child Care Resource and Referral Agencies, and Parent Voices, an Oregon group working to involve parents in child care policy-making.

About the Residency Roundtables

One activity of the Oregon Partnership is the Residency Roundtable, a strategy to support learning and research development regarding child care. The roundtables are designed to move forward understanding on a critical policy issue. During roundtables, researchers, state staff, and child care practitioners from across the nation come together with Oregon partners for 3 days of shared learning and problem solving. Invitees are selected because of their specific knowledge and expertise on the issue being considered. Between 1997 and 2002, 11 roundtables were held on topics with direct relevance to state policy-makers. Roundtable results have been shared through publications that range from policy briefs to guidebooks on state-level child care research and results-accountability.

About the Child Care Policy Research Consortium

The Oregon Child Care Research Partnership and its Residency Roundtables are part of the Child Care Policy Research Consortium, an initiative of the Child Care Bureau in the Administration on Children, Youth and Families, Administration for Children and Families, U. S. Department of Health and Human Services. In its unique approach to policy-relevant research, the Consortium brings together researchers, state child care administrative staff, and child care practitioners to identify key research questions, carry out research projects, and disseminate findings. Residency Roundtables have been one strategy the Consortium has used to increase understanding of policy-relevant child care topics.

About the Residency Roundtable on Quality Indicators

In September 2001, eight participants representing state child care administrative staff, child care resource and referral agencies, and university-based researchers worked together in Skamokawa, Washington, to address these questions: “What information about the quality of child care facilities do parents need, and how can society provide that information to them? How can indicators of quality best be reported to parents and the community?” Participants included:

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- Michelle Galvan, National Association of Child Care Resource and Referral Agencies (NACCRRA), Washington, DC
- Carollee Howes, Psychological Studies in Education, University of California, Los Angeles, Los Angeles, California
- Tom Olsen, Child Care Division, Oregon Employment Department, Salem, Oregon
- Jason Sachs, Early Learning, Department of Education, Malden, Massachusetts
- Michael Silver, California Department of Education, Sacramento, California
Becky Vorpagel, Consultant to the Oregon Child Care Resource & Referral Network, Salem, Oregon

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Synopsis

The Basic Idea

This is a concept paper for a pilot project in which a local organization or collaboration involving state and local organizations would launch a community effort to improve quality of care in the child care market through collection and dissemination of factual information related to quality of care in individual child care facilities. The term “facility” is used throughout this paper and refers to an individual child care center or family child care home. The paper is addressed to state child care administrators, child care resource and referral agencies, and other child care partners who are ideally positioned to pilot a quality indicator information project.

The Tools

Drawing on a body of child-care research that has found “quality of care” predictors of favorable developmental outcomes for children, the proposed project will adapt a handful of those indicators that are factual and feasible to use as informational tools:

- Ratio of children per adult
- Education or specialized training of teachers/caregivers
- Teacher compensation level
- Staff turnover or stability in caregiver-child relationships
- Group size
- Accreditation
- Substantiated complaints

The Logic

Studies document a major need to improve the quality of child care, suggesting that better information could sharpen demand for quality and drive improvement on the supply side as well. Better information will help parents discriminate between superficially similar facilities. This will support parents in making a difficult decision. On the supply side, factual information about the characteristics of facilities, when publicly known and comparable, will be advantageous to higher-quality facilities seeking to compete. Hard information will give substance an edge over appearances, creating a pressure toward quality on the supply side.

If quality indicator data is not available in a community, a collaborating organization will survey annually a comprehensive list of child care facilities. Either existing facility-level data or new factual information will be entered into the child care resource and referral (R&R) online database used to assist parents requesting referrals.

Auspice and Context

Organizational roles will vary across states and communities. If a quality-improvement initiative is in place, the lead organization for that initiative will be an essential collaborator and the proposed parent information initiative may be added to the ongoing effort. If no initiative is in place, the community will need to identify the lead organization. The local R&R is key. The role of the R&R is to be an objective source of child-care information for the community, to provide parents with information and counsel in finding, assessing, and selecting child care; to recruit and support care providers; and to guide the community in developing needed resources to make the market work better in terms of the availability, accessibility, quality, and affordability of child care.

R&Rs customarily provide parents with more than one provider’s name, leaning over backward to be neutral, whether out of respect for parental choice or avoidance of law suits. The R&R possesses good information about the geographic location of child care but has lim-
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limited information to share that directly bears on the quality of available choices. This project will help to fill that gap and perhaps strengthen demand for quality. The R&R will provide a richer service to parents if it can impart objective information related to issues of quality. At the same time, the collection, posting, and dissemination of the quality-indicator data as public information will introduce a new dynamic into the R&R’s relationship to providers and into the competition among providers.

The Criteria for Selecting Quality Indicators

Careful thought went into deciding which quality indicators would be suitable for surveying providers and reporting to parents. The criteria were that:

- The characteristic has been shown through research to have a relationship with positive child outcomes.
- Research has predicted a large enough positive difference in developmental outcomes for children to make the indicator important.
- The characteristic is measurable; valid and reliable measures of the characteristic are available.
- Parents and providers can understand its meaning, and parents can relate it to what they want for their child and consider it as an additional relevant fact in making their decisions.
- Collection and analysis of the data and reporting findings to parents, providers, and community are feasible. Feasibility considerations include availability and access to the data and costs associated with data collection, analysis, and reporting.

The simple, straightforward descriptive indicators are referred to in the research literature as the “structural” contributions to quality. They are characteristics of the environment necessary for quality of care and have also been found predictive of the “process” of quality and the professional ratings of it, and predictive also of favorable developmental outcomes for children.

Why focus on factual indicators rather than on ratings of quality? Although the heart of quality of care in a child-care setting lies in the relationships and activities experienced by the child, those characteristics are complex, subtle, and difficult to measure simply or reduce to a single rating scale. Ratings made by professionally-trained observers are expensive to produce. Measures of indicators can be collected through less expensive strategies, including surveys and electronic or manual matches of R&R and licensing or accreditation databases. Quality indicators support, but do not replace, the individualized kind of assessment parents make for their own child in the context of family life.

Methods for Assessment of Outcomes

This proposal identifies how the data will be collected if it is not already available. The indicator data will be collected annually in a survey of child care facilities. The results will be shared with the community and incorporated in the R&R’s on-line database of provider characteristics for communication to parents who call to request leads for child care. The proposal also includes suggestions on how the initiative will be evaluated. The R&R will record which providers’ names were given parents for referral purposes. Follow-up interviews with parents will determine how parents used the information and how they assessed its usefulness. These data, plus annual analysis of the repeat provider data, comprise the core data for assessment of outcomes.

In process, the project will raise significant issues of public relations. As parents, centers, and community groups react to and understand the purposes, methods, and use of the information sought, the R&Rs will listen and learn.
It may be anticipated that some providers will refuse to provide the indicator data and others may lobby the R&R against the project or even withdraw from posting their services and rates with the R&R. The politics of the project may require parents to mobilize in behalf of their interests in having the information. All of which highlights the assessment problem posed by data loss and sampling. If only high-quality facilities participate, then parent discrimination between them will be reduced to a choice between those facilities that do or do not make the information available, which, while better than nothing, will not be as powerful analytically. The experimental project could be further enhanced by adding geographic areas where the project can be done differently, later, or not at all. The project is worth trying, and its feasibility will be part of what is learned.

The project calls for assessment in terms of outcomes. This is an important experiment based on faith in the value and power of information. Expected outcomes are:

- Improvement over time in the quality of child care available in a community, as measured by the indicators used.
- Evidence that the information assisted parents in discriminating among child care facilities on the basis of factors associated with quality of care, and that parents made choices that could create demand for quality.
- Wider and deeper public understanding of quality of child care and the issues involved in achieving it.

It would be naïve to analyze these outcomes without trying to take into account price of care and family financial circumstances, and the opportunity is there to add those variables to the data collection and analysis.
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Introduction

In 1975, 39% of U.S. mothers with children under 6 years of age worked outside the home, and by 1997 that rate had increased to 62% (Hayghe, 1997). The increase in labor-force participation of mothers with young children has been accompanied by growth in the use of organized child care facilities (Casper, Hawkins, & O’Connell, 1991; Smith, 2002). As usage of child care facilities has increased, strategies for helping parents find care arrangements for their children have emerged. The creation of local child care resource and referral agencies (R&Rs) has been the most frequent approach. Typically, R&Rs provide parents information about location, cost, and other basic descriptors of available care in a community. Most R&Rs also provide some quality indicator information about the facility such as group size and adult to child ratio.

But many parents want more. They ask resource and referral consultants to tell them which are “the best” facilities in their community. Because child outcomes such as school readiness are affected by how well the child care arrangement supports the child’s development, increasingly, policy-makers echo parents’ questions. Thus, both parents and policy-makers want families to have access to information on the quality of child care facilities as they make child care decisions.

This paper presents the recommendation of a group of eight child care researchers, state child care administrators, and practitioners that met for 3 days in September 2001, in a roundtable focused on providing information on the quality of child care facilities to parents. The Roundtable’s work addresses the questions, “What information about the quality of child care facilities do parents need, and how can society provide that information to them? How can indicators of quality best be reported to parents and the community?” Roundtable members recommend launching an initiative aimed at having R&R agencies provide parents additional information on quality indicators for individual child care facilities. This paper presents the thinking that led to this recommendation and addresses the following:

- Why is information on the quality of child care facilities needed?
- What is the context for a quality indicator information initiative?
- What are the characteristics of child care related to positive child outcomes?
- What criteria should be used as indicators of quality?
- Which indicators meet these criteria?
- What are the sources of data for measuring indicators?
- How can information on the indicators of child care quality be objectively reported to parents?

A discussion of the logic underlying efforts to provide quality indicator information to parents follows. Clarification of the logic is key to efforts to evaluate any initiative; we need to know how we expect these information-sharing
initiatives to affect child care in order to determine whether or not they do. The paper ends with a discussion of implementation issues.

This concept paper is addressed to state child care administrators, child care resource and referral agencies, and other child care partners who are ideally positioned to pilot a quality indicator information project.

**Rationale for a Child Care Quality Indicators Information Initiative**

The rationale for the roundtable recommendation of an initiative to have R&R agencies provide additional information on individual child care facilities to parents is based on the following beliefs:

- The provision of more information will support families.
- Information to parents may make the child care market function more effectively and efficiently.
- Collecting and reporting information on quality indicators may spur improvements by providers.
- R&Rs are positioned to deliver quality indicator information on child care facilities to parents and the community.

**Support Parents**

The primary reason to collect and report quality indicator information on child care facilities is to support parents. In the vast majority of cases, they make their child’s care arrangements. Parents make their own assessments but find they need additional information beyond what they can observe for themselves. Parents typically observe the arrangement only at drop-off and pick-up. Some aspects, such as the education and stability of staff, cannot be observed. We recommend the development of measures of quality as supplemental information that may be critical to parents in making a choice about the child care they want for their child.

Our recommendations are designed to support, not supplant, parent judgment.

**Improve Child Care Market Functioning**

There is a commonly expressed view that America is experiencing market failure in the child care sector. Economists describe market failure as a situation in which a market left on its own fails to allocate resources efficiently (Vandell & Wolfe, 2000; Paulsel, 2001). One major indicator of failure is the low level of quality found in child care facilities. Based on an extrapolation of findings from the NICHD Study of Early Child Care, Vandell and Wolfe (2000) report that 6 of every 10 children under age 3 are in care that is of poor to fair quality, and only 1 in 10 is in excellent child care. Vandell and Wolfe’s findings are congruent with a body of evidence that the level of quality in the child care facilities from which families have to choose is very mixed—ranging from very poor to very good. Further, poor quality care is more common in centers serving infants and toddlers compared to centers serving older children (Helburn, et al, 1995; Kontos, Howes, Shinn, & Galinsky, 1995, Vandell & Wolfe, 2000, Whitebook et al., 1990).

Prices that close some families out of the market, low wages that lead many qualified members of the workforce to leave the field, and low levels of quality that do not support children’s development are signs of market failure. Economists argue that when consumers have imperfect information about the services they purchase, markets function poorly. It follows that, for the child care market to function effectively, parents must have information about the range of quality in child care. This logic has led many researchers to argue for the provision of quality indicator information to parents. Vandell and Wolfe (2000) argue that “at a minimum, the public sector should provide information on available child care slots, hours of operation, structural quality [italics added], costs, and staff training” (p. ix). In his proposal to reform child care, economist David Blau (2001) includes provision of information and help to parents in
identifying quality-related characteristics of child care. Similarly, Hofferth (1998) concludes that parents need more information about child care options, specifically the quality of their options.

Improve Quality in Individual Child Care Facilities
In addition to helping parents discriminate among facilities, providing information on quality indicators may have direct effects on the level of quality of child care in a community. Collection and reporting of information may encourage child care providers to focus on aspects of care highly related to promoting positive child outcomes, thus improving child care quality.

Build Upon R&R System
R&Rs have a special role to play because of the functions they perform and their location in communities throughout the United States. A primary function of an R&R is to help parents find child care that meets child and family needs. Another is to work closely with providers of child care and education: supporting them through trainings and consultations. A third is to support community efforts to improve the quality and functioning of the local child care system. Collection and maintenance of data on child care facilities provides a foundation for all three functions. Both database and functions are relevant to a quality-information initiative. There is an opportunity to use the R&R database for storage of quality indicator information and the R&R consultations as a mechanism for providing parents this information. The information may be aggregated to the community level to assess quality levels over time. The R&R role depends on community context: what other organizations exist and the role each plays. Emerging parent-focused initiatives involve R&Rs in a variety of roles.

Context for a Quality Indicator Initiative: Multiple Strategies for Improving the Quality of Child Care Facilities
An initiative to provide information on quality indicators to parents is part of a larger effort to improve the quality of child care facilities through the collection of data on the level of quality in individual child care facilities. The child care community in the United States is in the midst of experimentation around assessing and reporting the quality of care at the level of child care facilities.1 These strategies to improve quality share an overarching goal of improving the lives of children by encouraging improvements in child care facilities. Three distinct strategies for achieving that goal have emerged:

- Identification of levels of quality as part of child care licensing activity
- Provision of monetary rewards to encourage facilities to provide higher levels of quality and/or to reward those that do provide higher levels of quality
- Provision of quality indicator information on child care facilities to parents

As of 2002, efforts are underway in 36 states and at least 5 more states are planning initiatives. Appendix A provides a listing, by state, of initiatives under each of the three strategies.2 Each strategy depends on an assessment of level of facility quality and each aims to identify facilities that provide higher levels of quality. Any given initiative may employ one or more strategies. The focus of this paper is the third strategy, the provision of quality indicator information on child care facilities to parents. This strategy may stand alone or could be added to a strategy based on licensing.

1Not all quality enhancement initiatives are focused on facilities. A large number of initiatives are designed to increase quality by increasing the education/training and compensation of the child care workforce. Those initiatives are not addressed in this paper.
2The table in Appendix A relies heavily on the work of Louise Stoney, Judy Collins, and Tracy Dry, all of the National Child Care Information Center. See the reference section to access source data.
Thoughts on Ratings and Findings
Findings, such as the turnover rate of teaching staff in a center or group size in a family child care home, are factually based. Ratings, such as a number of stars, combine findings into a rating on a scale of from better to worse (e.g., four stars is better than three stars and a lot better than one star). In addition to a report of actual findings, ratings involve a judgment that a specific combination of findings is better than another combination.

Roundtable participants discussed differences in the potential usefulness to parents of reports of findings and of ratings. An important question is how parents understand and apply

Improving Quality by Associating Levels of Quality with Child Care Licenses
Five states now associate ratings of the level of quality with child care licenses. Levels, commonly described by stars, range from three to five. Higher levels exceed the state’s minimal operating standard. Licensing agencies vary in characteristics that they measure but the list includes education or training of staff, adult:child ratios, group size, age-appropriate environmental ratings, curriculum, parent communication, compliance with licensing regulations, accreditation, compensation, personnel policies, and turnover.

Improving Quality by Providing Monetary Rewards to Facilities that Provide Higher Levels of Quality
Financially rewarding facilities that provide higher levels of care is by far the most common strategy being used, and within this strategy the most common mechanism is higher child care subsidy payments for higher levels of quality.

Higher subsidy payments
Thirty-two states currently relate subsidy payments to level of quality, and five more are planning to do so. In an additional three states, the subsidy program is operated at the county level, and counties have the option to pay at higher levels based on quality ratings. Accreditation by a national professional organization is the only type of documentation used in 18 states, and 13 additional states use accreditation plus other types of documentation. Four states use means other than accreditation to document levels of quality. Two states pay only centers at a higher rate, and states vary in terms of which professional organizations’ accreditation is accepted.

Financial awards to providers
In seven states, mechanisms other than subsidy payments are used to financially encourage or reward higher levels of quality. Pennsylvania’s Keystone Stars Program provides grants for programs working to achieve higher ratings and merit awards to those who receive above a one star rating. Although priority is given to programs serving children with subsidies, all regulated programs may apply. Early childhood programs funded through the Massachusetts Department of Education’s Community Partnerships Program must work toward accreditation and higher levels of professional development. Educare Colorado and some Colorado county pilot projects give programs grants to enhance quality. In Kentucky and Utah, bonuses are awarded based on achievement awards. Arkansas and Maine allow families to double the dependent care tax credit if using higher-quality care.
Improving Quality by Providing Quality Indicator Information on Child Care Facilities to Parents

In five states, there are initiatives designed primarily for parents. The non-profit Educare Colorado has developed a voluntary star rating system of child care facilities. Child care facilities are rated on a four-star continuum based on five measures of quality: classroom environment, parent involvement, staff credentials, adult-child ratio, and national accreditation. At present, Educare is giving only generic information on quality to parents through their Parent Tool Kit (see www.educarecolorado.org). Beginning in early 2004, they will be publishing ratings of providers who get an Educare Quality Rating, but they are still determining what that will look like. Once established and operating, the ratings will be on their Web site.

Through its Child Care Programs of Excellence program, Cornell University is in the process of developing, within several New York counties, a quality rating for child care centers and family child care providers similar to those used by Consumers Union. Scores from program evaluation measures will be combined with ratings of teacher education and experience and a rating for health and safety compliance to create a star rating. Child Care Programs of Excellence will publish information on high-quality providers in a “Child Care Consumer Report.”

Under Tennessee’s Child Care Report Card System, every licensed child care child care facility must be evaluated and assigned a star rating and the agency must post a report card of the results. Texas Rising Star, a program of the Texas Workforce Commission, targets qualitative information on child care facilities to parents eligible for child care subsidies, and ratings are limited to child care programs that serve children receiving a child care subsidy. Local Workforce Investment Boards decide whether or not to participate in the quality-rating program.

R&Rs are active partners in both Educare Colorado and Cornell University’s Child Care Programs of Excellence program. In states across the country, R&Rs are partnering on the range of quality enhancement initiatives and working to provide parents whatever solid qualitative information is available. In Wisconsin, the R&R system is the lead, piloting the inclusion of three quality indicators in their child care facility database: education level, accreditation, and absence of complaints. Parents will receive a cover letter describing the indicator levels for referred facilities and why the indicators are important. The impact of the initiative is being evaluated.

An added thought about reporting findings versus ratings focuses on liability questions. If a non-governmental organization provides ratings to parents, issues of liability arise. Parents can argue that the organization told them that a specific center was “good” or “better than other facilities.” Such a statement may make the organization that provides the rating responsible in some way for what happens to a child in that facility. If something negative happens to a child in a highly rated
facility, the parent can argue that the organization that rated the facility or that provided the rating information is partially liable for what happened to the child. R&Rs that have provided ratings to parents have struggled with both parent perceptions of the meaning of ratings and with liability issues surrounding provision of the rating to parents.

**Child Care Quality**

Before discussing the indicators of quality, it is important to review the use of the term “quality” in child care. Researchers use the term quality to describe care that has been empirically associated with positive child outcomes. Based on years of study, researchers have concluded that certain characteristics of child care facilities are associated with children’s development (Howes & Brown, 2000; Lamb, 1998; Shonkoff & Phillips, 2000; Vandell & Wolfe, 2000). When quality characteristics are present, children score higher on measures of language and cognitive functioning, social skills, and emotional well-being. These findings are true even when researchers control for family differences.

Quality includes both process and structural characteristics. Process characteristics capture the day-to-day experiences of children and focus on behavior of the caregiver, activities available to the child, and ability of the environment to support development. Warm and nurturing behaviors of the caregiver result in trusting, supportive relationships between the child and the caregiver. Both parents and professionals believe a warm, nurturing adult is the most important component of quality.

A safe and rich environment in which children can engage in age-appropriate, stimulating activities is the other major component of quality. The quality of the caregiver-child relationship, richness of environment, and appropriateness of activities are highly correlated with what are called structural characteristics of quality such as group size (see table in Appendix B for the literature documenting the relationship between structural characteristics and child outcomes).

**Criteria for Selection of Indicators**

The Roundtable’s central question is the identification of quality characteristics that should be reported to parents. The five criteria for selecting the characteristics that Roundtable participants use to identify quality indicators are:

- The characteristic has been shown through research to be positively related to child outcomes.
- Research has predicted a large enough positive difference in developmental outcomes to make the indicator important.
- The characteristic is measurable; valid and reliable measures of the characteristic are available.
- Parents and providers can understand its meaning, and parents can relate the measure to what they want for their child and consider it as an additional relevant fact in making their decisions.
- It is feasible to collect and analyze the data and report findings to parents, providers, and community. Feasibility considerations include availability and access to the data and costs associated with data collection, analysis, and reporting.

Although process indicators—such as caregiver-child relationship—are most critical to how well the child’s development is supported, measurement of child care processes demands observations by trained observers. Paying trained observers to record the activities and interactions in child care facilities may be more costly than communities can afford, especially on an ongoing basis. If findings based on observation by trained observers using validated instruments exist, they should be made available to parents and the community.
Quality Indicators

From a long list of facility characteristics, seven meet the criteria for a quality indicator. Six characteristics meet all five of the selection criteria. The six are: adult:child ratio, education/specialized training of caregiver, compensation, turnover/stability, group size, and accreditation status. A seventh characteristic, substantiated complaints, lacks a research link but is included because of the obvious importance of the information. The quality of the caregiver-child relationship, richness of environment, and appropriateness of activities are highly correlated with these structural characteristics.

A substantial body of research documents the relationships between these selected indicators and child outcomes. Recent summaries of this body of research (Howes & Brown, 2000; Lamb, 1998; Love, 1996; Shonkoff & Phillips, 2000; Vandell & Wolfe, 2000) provide descriptions of the studies that have demonstrated these six to be reliable indicators of how well a facility supports a child’s development. Appendix C is taken from these research summaries. It is a listing of the studies by quality indicator.

Seven Selected Quality Indicators

Adult:child ratio. In a large number of studies, researchers have identified a positive relationship between the ratio of adults to children and child outcomes. That is, a higher ratio of adults to children contributes to more positive child outcomes. Referring to findings from the NICHD study of early care, Shonkoff and Phillips (2000) note that adult:child ratio may be “relatively more important for infants and toddlers and that the educational level of the provider may become more important as children move beyond the infant years into toddlerhood and beyond” (pp. 115–116). Leading professional and policy organizations have published child care standards including standards for adult:child ratio based on the age of the child (The Panel on Child Care Policy of the National Research Council, 1991; the National Association for the Education of Young Children, 1997; and the American Public Health Association in partnership with the American Academy of Pediatrics, 1992). Each state has its own requirements, but few have regulations that meet the age-based guidelines associated with positive developmental outcomes.

Roundtable participants recommend that standards for adult:child ratio set by APHA and AAP or NAEYC be used as the indicator of quality.

Group Size. The number of children in each group of children, known as group size, and adult:child ratio are important because they affect the amount of time that the caregiver can devote to the relationship with the child. As noted in Appendix C, numerous studies provide evidence of the effect of group size on child outcomes. The size of a group affects the ability of the caregiver to provide sensitive, attentive care given the demands of supporting numerous children. Roundtable participants recommend that standards for group size set by APHA and AAP be used as the indicator of quality.

Education or Specialized Training of Teachers/Caregivers. Caregivers vary widely in formal education and specialized training. A bachelor’s degree or greater is positively associated with the most effective teaching, and caregivers with an associate of arts degree or Child Development Associate certificate are more effective than individuals with no formal education (see table in Appendix C for studies that document the relationship of caregiver education and child outcomes). A better-educated provider working in a group with a high ratio of adults to children is consistently associated with more positive child outcomes (Shonkoff & Phillips, 2001). Roundtable participants recommend reporting both the highest level of education and hours of child care-related training for director and teaching staff.
Compensation of Teachers. The level of wages and benefits are positively associated with child outcomes (see Appendix C for studies that have found that better wages and benefits are associated with better child outcomes). Compensation, education, and turnover are related indicators because better-educated teachers are less willing to work for low wages and facilities with low wages experience higher levels of staff turnover. Residency Roundtable participants recommend that wages and benefits be reported by position for director and teaching staff and that earnings be reported for family child care providers.

Turnover/Stability. Stability of child/caregiver relationships has been shown to be associated with positive child outcomes (see Appendix C for list of studies that document the relationship of turnover and child outcomes). Children need the predictability and security that come from an attached relationship with a caring adult. Adults need time with the child and a small enough group to develop a stable relationship with the child. High staff turnover or instability in family child care settings reduce the stability of child/caregiver relationships. Residency Roundtable participants recommend that in centers the staff turnover be reported, whereas in family child care, the time that the provider has been giving care in the current location without interruption be reported.

Accreditation. The National Association of the Education of Young Children (NAEYC) accreditation has been shown through research to be linked to quality (Cost, Quality, and Child Outcomes Team, 1995; Whitebook et al., 1990; Whitebook et al., 1997). Researchers have yet to examine the relationship of accreditation by the National Association of Family Child Care (NAFCC) or other professional organizations to child outcomes. The NAFCC accreditation instrument emphasizes the child/caregiver relationship, which research has shown to be positively associated with child outcomes. NAFCC-accredited facilities complete a rigorous self-study and commit to meeting high standards. Similarly, although the relationship of accreditation by the National School-Age Child Care Alliance (NSACCA) and child outcomes has not been studied, school-age programs meet rigorous criteria in order to be accredited by NSACCA. Residency Roundtable participants recommend reporting accreditation by NAEYC, NAFCC, or NSACCA.

Substantiated Complaints. A substantiated complaint is evidence of failure to meet the state rules and regulations governing child care facilities. Although a record of all complaints may have limited value because the complaint may be frivolous or unfounded, a history of substantiated complaints is a basic piece of information that clearly relates to safety and quality. Residency Roundtable participants recommend that the annual number of substantiated complaints be provided to parents.

Measurement of Quality Indicators

Sources of Data and Methods of Collection
When a community has a system for collecting quality indicator information on facilities, the local R&R is very likely to be reporting to parents the findings on facility quality (M. Galvan, NACCRA, personal communication, September 20, 2002). In communities that do not now collect or report information on quality, the Residency Roundtable participants recommend that a community begin to collect and report data on individual child care facilities.

Roundtable participants recommend that communities that lack a source of reliable and accurate quality indicator information work together to establish a data collection and reporting system. Roundtable participants further recommend that data be collected annually. Whitebook and Bellm provide a model for collection of data on education, compensation, and turnover for centers.
Improving Child Care: Providing Comparative Information on Child Care Facilities to Parents and the Community

(Whitebook & Bellm, 1999). Such indicators can be valid for both child care centers and family child care home, but measures may differ in some instances.

Roundtable participants propose that an annual survey of local child care facilities be conducted and that findings be merged with data from the child care licensing agency and accrediting organizations. It is recommended that survey reports of adult:child ratio and group size be validated by the licensing agency staff who actually observe facilities. More detail on the data collection method is included in the table on the next page.

**Additional Information for Parents**

In addition to the seven quality indicators described in earlier pages (adult:child ratio, group size, education/training level of caregiver, compensation, turnover, accreditation status, and substantiated complaints), Roundtable participants suggest other characteristics could be reported to parents when reliable data are available, even though they do not meet some of the selection criteria. The first of these deals with consistency in language and culture between family and child care. Michael Lamb (1998) hypothesizes that “similarity in the practices and values manifest in the two contexts [familial and nonfamilial child care settings] may play an important role in facilitating healthy development” (p. 74). Language is one measurable indicator of similarity between settings for the child. Although the importance of access to a caregiver who speaks the child’s home language has not been documented, some roundtable participants believe that having a caregiver who speaks the child’s home language will positively affect developmental outcomes. Roundtable participants propose that the percentage of children with a caregiver who speaks the child’s home language be collected on the annual survey.

Observational measures, when done by trained observers, can provide valuable information on child care quality. If *Early Childhood Education Rating Scale* (Harms & Clifford, 1980, 1990, 1994) scores collected by trained observers or scores from other appropriately administered, validated instruments are available, findings should be shared with parents.

**Limitations of Indicators**

Although researchers have found a strong relationship between structural and process characteristics of child care, it is the behavior of caregivers that shapes child outcomes. Clearly, observations of caregiver behavior done by trained observers using validated instruments are highly desirable. However, intensive program quality assessments are seldom done due to cost constraints and the high level of skill needed to get reliable findings.

Four of the seven quality indicators are based on self-report data in annual facility surveys. Researchers routinely collect reliable data through surveys; nevertheless, all self-report data are subject to bias and error. Roundtable participants believe that self-report bias from use of a survey can be tolerated when compared to the costs and difficulties of observation. In cases in which validation of self-report is possible, Roundtable participants recommend doing so. Care and survey expertise is needed in the development of the survey instrument.

**Reporting Quality Indicators to Parents and the Community**

Providing parents with empirical, descriptive findings on facilities in their community is a promising practice. Both Emlen (2000) and Hofferth (1998) found that, on the whole, parents value the same characteristics that developmental psychologists have found associated with positive child outcomes. Roundtable participants believe how the collected data are reported to parents is important. Participants agree that the goal is to give parents accurate, reliable, and unbiased reporting of quality indicator data. Parents need to know why an indicator is important. For example, it
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Source of Data</th>
<th>Data Collection Method</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult:child ratio</td>
<td>Facility</td>
<td>Annual self-report survey of all local facilities with validation by licensing agency</td>
<td>Adult:child ratio is a derived variable determined by dividing the reported group size by the reported number of full-time equivalency of staff per group. Group size data should be collected for each classroom and reported by age group.</td>
</tr>
<tr>
<td>Education/specialized</td>
<td>Facility</td>
<td>Annual self-report survey of all local facilities</td>
<td>Education status should be collected for director and teaching staff in each classroom who have worked in the facility over the past year. Findings can be reported as percentages of teaching staff with: a BA or greater, AA, CDA, or formal education certificate, and no formal post-secondary education. If the state has a credentialing program with a training registry, the professional level would be an added category.</td>
</tr>
<tr>
<td>Compensation</td>
<td>Facility</td>
<td>Annual self-report survey of all local facilities</td>
<td>For child care centers, wages and provision of specific benefits (health, dental, retirement) should be collected for each teaching staff and director who have worked in the facility over the past year. Findings can be reported as average wages by position (i.e., teacher, teacher’s aide) and the provision of health benefits (yes/no) for each benefit type. Family child care providers can report earnings from Schedule C, line 31, of their tax return as actual amount or could be given earnings categories and asked to note into which category their earnings fall.</td>
</tr>
<tr>
<td>Turnover/stability of</td>
<td>Facility</td>
<td>Annual survey of all local facilities</td>
<td>For child care centers, dates of employment beginning and ending should be collected for each teaching staff and director who have worked in the facility over the past year. Findings can be reported as the annual teacher turnover rate. In family child care, stability is measured by the length of time the provider has continuously operated the current family care home.</td>
</tr>
<tr>
<td>Group size</td>
<td>Facility</td>
<td>Annual survey of all local facilities</td>
<td>Data should be collected and reported by age group. Centers should be asked if children are enrolled in a group with the same caregivers in a typical day. If groups change at beginning and end of day, the center should provide a description of the process. Family child care providers should be asked to report number of children enrolled, children present on a typical day, maximum number of children present at the same time. Reporting should be group size by age for centers and typical group size for family child care homes. Significant variance from community averages could be noted.</td>
</tr>
<tr>
<td>Accreditation</td>
<td>Accrediting</td>
<td>Manual match with accrediting organization</td>
<td>Determination of accreditation should be done annually through the accrediting agency. A program that received accreditation during the year could notify the R&amp;R and upon confirmation by the accrediting organization be updated in the database.</td>
</tr>
</tbody>
</table>

*Continued on next page*
Table 1: Data Collection Methods continued

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Source of Data</th>
<th>Data Collection Method</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substantiated complaints</td>
<td>State child care licensing agency</td>
<td>An electronic match of R&amp;R and licensing data, if possible. If not possible, manual match of licensing public records and R&amp;R records.</td>
<td>Access to this information is through child care licensing agencies. Roundtable participants envision partnerships between child care licensing agencies and R&amp;Rs that will support a computerized match of records. Compliance records are public information in most, if not all, states. If computerized matching is not possible, then a manual match will be necessary. Only the number of substantiated complaints should be collected in the R&amp;R database and reported. Parents will be directed to the licensing agencies for additional information.</td>
</tr>
</tbody>
</table>

will be important for parents to know that adult:child ratio and group size may affect how much attention a child will receive. If there are too many children in the group or too many children for the adults to interact with, their child’s needs may not be met. The absence of a responsive adult can affect all areas of a child’s development. Parents also need to know how a particular facility compares to others in the community.

Most initiatives designed to provide information on quality to parents combine empirical findings on indicators into a single rating. In contrast, Roundtable participants recommend providing parents specific findings for each indicator along with text that describes how the characteristic is associated with child outcomes. Evaluation of a quality indicator initiative could include an assessment of parent perception of the usefulness of the two methods: evaluative ratings and reports of findings.

Many R&Rs provide a printed referral following a telephone consultation. Roundtable participants envision a computer-generated report on each facility that includes that facility’s measures on each of the seven indicators in addition to basic information such as location, ages served, and hours of operation. The brief text on the meaning or importance of each quality indicator will be followed by actual measures for that facility, an average for facilities in the community, and, if appropriate, the standards for that indicator. For instance, the American Public Health Association/American Academy of Pediatrics and NAEYC standards for adult:child ratios and group size could be listed for those indicators.

Roundtable participants value the production of community-level reports. Findings on facilities could be aggregated and reported annually. Audiences for a community-level report will include parents but also providers, provider associations, business leaders, local government officials, and others concerned about child care quality and quality improvement. Changes in level of quality could be observed over time. Such over-time data will be extremely valuable for assessing the impact of community quality improvement initiatives.

Pilot projects will have to determine the amount of outreach, including media coverage, they think is needed. The involvement of key local and state leaders in disseminating information will add credibility.

**Thoughts on Evaluation of a Child Care Quality Indicator Initiative**

The idea of providing information on child care quality indicators to parents is based in the belief that such information will lead to improvements in the quality of care children receive and ultimately improvements in child outcomes. It is important to be clear on how such an initiative is expected to have these effects. The following logic model depicts the
Effects of Access to Child Care Quality Indicator Information on Parental Selection and Quality of Supply

Family Characteristics
- Level of flexibility
- Financial resources
- Education level of mother
- Ethnicity
- Family values and goals

Community child care supply
- Types of care
- Number of slots by type of care
- Quality of supply

Assessment of facility quality

Provision of information on quality indicators to parents

Increase in parent knowledge about child care facilities

Increased demand for facilities with higher levels of quality

Quality of arrangement selected

Quality of community child care supply

Increased child care facility awareness of opportunities for improvement

Increased investment in components that increase quality

paths through which the provision of quality indicator information on child care facilities to parents, providers, and the community could affect the quality of care in a community.

As depicted in the logic model, the outcome of a quality indicator initiative will be affected by key characteristics of community families and the existing child care supply prior to the provision of quality indicator information. Key characteristics of the child care supply include how much of what types of care are available and the existing quality of care in those facilities, as these conditions will affect family decisions. Key characteristics of families include factors empirically related to child care selection; specifically, the amount of flexibility from home, work, and child care arrangement (Emlen, 2000), household income (Smith, 2000), education level of mother (Hagy, 1998), ethnicity (Hirshberg, Huang, & Fuller, 2002), and family goals and values (Zinsser, 1991).

Clearly, parental selection of a child care arrangement is influenced by the availability of child care options in the community and by other realities of the family’s life. Families make their child care arrangement as a part of a broader set of family decisions about employment and use and maximization of resources for all family members. Price of care will constrain some parents’ choices as child care prices consume over 20% of low-income families’ income (Casper, 1995; Smith, 2000). Nontraditional work schedules limit many families’ child care options. Parental knowledge of key characteristics of available child care options is one of many influences on their decision-making. In addition, parents rely on trusted relationships in making child care arrangements. In finding a caregiver they can trust, a majority of parents look to recommendations of family and friends (Hofferth, 1998) and may not seek out other information. One would expect the provision of objective data on how various facilities “measure up” on key quality characteristics associated with child outcomes will influence, but not determine, parent decisions.

Also depicted in the model is the expectation that the collection and dissemination of quality
indicator information on key characteristics of child care facilities will have both direct and indirect effects on parental decision-making and on child care facilities. Having objective data on each facility is expected to directly affect parental decision-making, because parents will likely use that information to select the highest quality care that meets other family needs. It is expected that parents will reward facilities with higher levels of quality by selecting them and possibly paying higher fees, thus producing an indirect effect on the community’s supply of child care. In turn, higher quality care will have a “market advantage” that will drive up overall quality of care.

One can also expect a direct effect on child care facilities as providers may be motivated to “look good” in comparison with other community child care facilities. This direct effect on child care facilities has the potential to increase the overall level of quality of community facilities and thus also indirectly affect parental child care choices since families will then be choosing from higher quality options.

Roundtable participants expect that provider participation in the quality indicator initiative be voluntary, but extensive participation will be important. R&Rs have noted that when only a small number of community facilities are accredited, parents report that knowing accreditation status is not helpful, as choosing from that small number of accredited programs does not work for them. Therefore, it will be important that a substantial portion of child care programs in a community provide quality indicator information if the project is to be helpful to parents.

Although it is assumed that community pressure will motivate providers to participate, this assumption needs to be tested. Researchers need to assess the actual impact of quality indicator information on the quality of care. It will be essential to survey parents who received quality indicator information. It will be helpful to also survey parents using child care who did not receive the quality indicator information. Researchers should collect data on family demographics such as household income, ethnicity, and marital status, as impact of the pilots may vary by family characteristics. Some questions to be addressed in a research design are:

- What percentage of parents with children in paid care receive quality indicator information from the R&R?
- How does impact vary by family demographics such as household income and marital status.
- How do parents rate the inclusion of information on quality indicators as compared to a standard consultation that is limited to information on price, location, and other features of care?
  - Which pieces of information do parents perceive as most helpful?
  - In looking for care, does having information on quality indicators impact selection?
- Is there evidence that child care quality indicator information is being incorporated into informal communication amongst families, friends, and neighbors?
- What number and percentage of providers participate in the voluntary system?
  - Do provider participation rates vary by type of care, ages of children served, profit/non-profit status of program, or other characteristics?
  - Do the changes relate to type of care, ages of children served, profit/non-profit status of program, or other characteristics?
- Do quality ratings of individual participating child care facilities change over time?
- Is the data judged to be useful in community planning?
  - Do the average level of quality of child care facilities in the community increase over time?
- What is the cost of providing quality indicator information on child care facilities to
parents?
• What amount of time is involved in the project for child care facilities, R&Rs, or other partners?
• What are the financial costs of data collection, analysis, and reporting?

Is stakeholder buy-in an important component of an implementation strategy?

This model does not assume an infusion of new resources for facilities to improve quality of care. If the provision of quality indicator information is accompanied by an investment in quality, one can expect stronger effects.

**Implementation Considerations**

This paper is focused on getting quality indicator information on individual child care facilities to parents and the community. Specifically, this paper describes indicators of care quality that can be embedded in local community-based R&R databases and reported by R&Rs to parents.

**Components of a Quality Indicator Information Initiative Whether or Not a Quality Measurement Process Currently Exists**

What needs to be done to increase the ability of the R&Rs to provide quality indicator information depends on what is currently in place and the constellation of local and state partners currently working, or willing to work, on the provision of quality indicator information to parents. In a state or community that is currently measuring the level of quality at the facility level, the project is likely to be more focused on how to integrate the sharing of that information into the structure and operation of the R&R. Here is a potential list of project components, regardless of whether or not a community currently measures quality at the facility level:

- A module within NACCRRAware (the computer software used by R&Rs to store facility data) for capturing and reporting quality indicator data on facilities
- User-friendly text for describing the relevance of quality indicators to parents
- Project evaluation design, including measurement instruments.

A NACCRRAware module that works effectively with the entire software package will enhance local efforts. The software model will need to be developed. Having accurate and user-friendly descriptions of how quality indicators relate to child well-being will greatly strengthen local efforts. It will be of benefit to have a highly knowledgeable child care researcher write simple text or scripts that can be built into the NACCRRAware software reporting function and adapted locally.

Evaluating project impact on an ongoing basis so that the initiative is continuously improved will be of great value. Affecting the quality of child care arrangements through provision of information to parents is complex because parents may be weighing a large number of factors when making child care arrangements. An evaluation design, done by a knowledgeable and experienced program evaluator, can be created in a way that local communities can adapt to their conditions.

Creation of these three components (a NACCRRAware data collection module, parent scripts, and an evaluation design) can be done most efficiently with a one-time investment. Once developed, they can be adapted for use at any site.

**Components of an Initiative when No Quality Measurement Process Exists**

In communities that have no facility quality measurement initiatives in place, the following project components will be needed in addition to those listed above:

- Instruments for measuring the quality of facilities
- A process for engaging stakeholders in project design and implementation
A process for determining different roles played by different community partners

Creation of a prototype facility survey instrument can serve sites across the country. Stakeholder engagement and role definition processes are local. Inclusive processes for engaging stakeholders in project design that have proved successful in other initiatives can be applied. Communities will need to decide roles and responsibilities, and these will vary depending on what organizations operate in the community and the strengths of different partners. In design of the assessment project, the proposed seven indicators offer a place to begin. Other reliable data may already be collected and can be included. Some communities may determine it is not feasible to measure all seven. The project can start with a small number of indicators on which data will be collected and add other indicators over time, as is being done in Wisconsin. Similarly, the project can start with centers and add information on family child care facilities after the processes for collecting, analyzing, and reporting center data are in place.

Since the efficacy of a quality assessment strategy depends on the accuracy and reliability of the measurement process, there will be great value in bringing a high level of research skill to the development of instruments and processes to be used to assess levels of quality. Instruments can be used by local community partnerships. Using a common set of measurement instruments will support comparisons across pilot sites.

### Conclusion

Many parents ask for more information on the quality aspects of child care facilities. Developmental psychologists express concern that the level of quality of child care arrangements is too low. Economists argue that the child care market does not effectively produce desired outcomes. Concern about the level of quality in child care has generated an array of initiatives designed to improve quality in child care facilities, a few whose primary audience is parents.

Parents make child care arrangements for the vast majority of children. Participants in a Child Care Bureau Residency Roundtable recommend providing parents with quality indicator information on child care facilities. Either reporting of quality indicator information to parents can be added to an existing initiative that includes collecting data on characteristics of child care facilities or an assessment and reporting initiative can be created. In either case, participants recommend piloting an initiative that embeds measures of quality indicators in Child Care Resource and Referral databases. Evaluation of a pilot is seen as an integral part of an initiative. Implementation and evaluation processes need to be carefully considered. A quality-indicator initiative that delivers information in a way that supports parents, providers, and communities is a good idea worthy of being implemented.
References


## Appendix A

### Strategies to Enhance Quality in Child Care Facilities: A Description by State

#### Strategies Designed Primarily to:

<table>
<thead>
<tr>
<th>Provide Parents with Qualitative Information on Child Care Facilities</th>
<th>Identify Level of Quality in Association with Child Care License</th>
<th>Provide Monetary Rewards to Facilities that Provide Higher Levels of Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially Encourage and Support Child Care Facilities Providing Higher Levels of Quality</td>
<td>Increase Payment for Care for Children Receiving Subsidies in Facilities with Higher Levels of Quality Based on Quality Rating that Includes Accreditation, or Other Criteria</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>State</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Accreditation and CDA.</td>
</tr>
<tr>
<td>Alaska</td>
<td>Tiered payment system is in planning.</td>
</tr>
<tr>
<td>Arizona</td>
<td>Accreditation and CDA.</td>
</tr>
</tbody>
</table>

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1 States in italics do not currently have a strategy in place but are considering one.
2 Accreditation is recognition of quality granted by professional associations and, in a few places, by state agencies. It typically involves a self-assessment validated by a representative of the professional organization. States vary in which professional association's accreditation they recognize. Accreditation by the National Association for the Education of Young Children’s Academy of Early Childhood Programs is accepted by all states that use accreditation to give higher rates.
<table>
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<tr>
<th>Provide Parents with Qualitative Information on Child Care Facilities</th>
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<th>Provide Monetary Rewards to Facilities that Provide Higher Levels of Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arkansas</strong></td>
<td>Arkansas doubles the “allowable” federal Child and Dependent Care Tax Credit for families using a developmentally appropriate early childhood education program for children 3–5 years. Arkansas Better Chance (ABC) programs achieving Arkansas Early Childhood Accreditation/Quality Approval Status receive annual incentive grants.</td>
<td>Program meeting ABC standards reimbursed at a rate directly related to cost.</td>
</tr>
<tr>
<td><strong>Colorado</strong></td>
<td>The non-profit Educare Colorado has developed a voluntary star rating system of child care facilities. Child care facilities are rated on a four star continuum based on five measures of quality: classroom environment, parent involvement, staff credentials, adult-child ratio, and national accreditation.</td>
<td>Educare and some county pilots give gap grants to programs based on their star rating. Colorado has explored an innovative tax credit linked to the quality rating system.</td>
</tr>
<tr>
<td><strong>Connecticut</strong></td>
<td></td>
<td>Higher rates for accreditation now. Planning to implement new payment incentives tied to accreditation and professional development.</td>
</tr>
</tbody>
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</tr>
</thead>
<tbody>
<tr>
<td>District of Columbia</td>
<td></td>
<td></td>
<td>The Gold Quality rating system has four levels. Accreditation is included as one level. Payment rates are linked to rating level.</td>
</tr>
<tr>
<td>Florida</td>
<td></td>
<td></td>
<td>Gold Seal Quality Care Program uses national accreditation as a basis for higher payment rates. Local Partnerships for School Readiness Coalition may determine a quality rating system.</td>
</tr>
<tr>
<td>Georgia</td>
<td></td>
<td></td>
<td>Accreditation plus other criteria.</td>
</tr>
<tr>
<td>Hawaii</td>
<td></td>
<td></td>
<td>Accreditation.</td>
</tr>
<tr>
<td>Idaho</td>
<td></td>
<td></td>
<td>Considering a tiered reimbursement system.</td>
</tr>
<tr>
<td>Illinois</td>
<td></td>
<td></td>
<td>Accreditation.</td>
</tr>
<tr>
<td>Indiana</td>
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<tr>
<td>Iowa</td>
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<th>Increase Payment for Care for Children Receiving Subsidies in Facilities with Higher Levels of Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kentucky</td>
<td></td>
<td><em>STARS for KIDS NOW uses a scale of one to four stars to identify levels of quality above and beyond those required by child care licensing and include: staff to child ratios, overall group sizes, caregiver education and training, parent involvement, and program curriculum. Voluntary system. Ratings issued by the Division of Licensed Child Care.</em></td>
<td>Levels 2–4 receive one-time Star Achievement Awards and quality incentive payments based on the number of subsidy children served.</td>
<td>An additional amount is paid to programs rated in Levels 2–4 of <em>STARS for KIDS NOW</em> child care licenses.</td>
</tr>
<tr>
<td>Louisiana</td>
<td></td>
<td></td>
<td>Doubles the state Dependent Care Tax Credit for quality—defined as center programs that are NAEYC accredited or family child care providers that have a CDA or NAFCC accreditation.(^3)</td>
<td></td>
</tr>
<tr>
<td>Maine</td>
<td></td>
<td></td>
<td>Higher payments for accreditation or substantial progress toward accreditation.</td>
<td></td>
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<tr>
<td>Maryland</td>
<td>Tiered Reimbursement, a voluntary program for facilities with four levels based on participation in program accreditation, provider credentialing, enhanced learning environment, parent involvement, and program evaluation. Facilities participating at Level Two or higher receive a paid differential for children receiving subsidy. Programs must be in process of becoming accredited by State Department of Education or national professional organization.</td>
<td>Community Partnerships Program (CPC) of Department of Education requires child care facilities participating in CPC-funded programs to work toward accreditation and higher levels of professional development.</td>
<td>Tiered rate based on: Literacy initiative, self-assessment with environmental rating scale, professional development, willingness to participate in longitudinal study.</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Tiered Reimbursement, a voluntary program for facilities with four levels based on participation in program accreditation, provider credentialing, enhanced learning environment, parent involvement, and program evaluation. Facilities participating at Level Two or higher receive a paid differential for children receiving subsidy. Programs must be in process of becoming accredited by State Department of Education or national professional organization.</td>
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<tr>
<td>Mississippi</td>
<td>Accreditation.</td>
<td>Accreditation.</td>
<td>Accreditation.</td>
</tr>
<tr>
<td>Missouri</td>
<td>Accreditation and Missouri Center for Accreditation system.</td>
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</thead>
<tbody>
<tr>
<td>Montana</td>
<td><em>Star Rating System has three level (Licensed/Registered, 1-Star and 2-Star) licensing based on staff ranking on Early Child Care and Education Career Registry, personnel policies, staff turnover, and parent communication. Accreditation required for 2-Star.</em></td>
<td>Based on licensing level with accreditation included in highest level.</td>
</tr>
<tr>
<td>Nebraska</td>
<td></td>
<td>Accreditation.</td>
</tr>
<tr>
<td>Nevada</td>
<td></td>
<td>Accreditation and those making progress toward accreditation.</td>
</tr>
<tr>
<td>New Jersey</td>
<td></td>
<td>Accreditation.</td>
</tr>
<tr>
<td>New Mexico</td>
<td>In four New York counties Cornell University’s Programs of Excellence rates facilities. Results will be shared with parents through a consumer guide and R&amp;R consultations.</td>
<td>Payment rates linked to level on <em>Aim High</em>, a quality rating system, with highest rate paid to accredited programs.</td>
</tr>
<tr>
<td>New York</td>
<td></td>
<td>Child care subsidy program is administered by counties. County option whether or not to pay a higher rate for an accredited program.</td>
</tr>
</tbody>
</table>

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2 Accreditation is recognition of quality granted by professional associations and, in a few places, by state agencies. It typically involves a self-assessment validated by a representative of the professional organization. States vary in which professional association’s accreditation they recognize. Accreditation by the National Association for the Education of Young Children’s Academy of Early Childhood Programs is accepted by all states that use accreditation to give higher rates.
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<tr>
<th>Provide Parents with Qualitative Information on Child Care Facilities</th>
<th>Identify Level of Quality in Association with Child Care License</th>
<th>Provide Monetary Rewards to Facilities that Provide Higher Levels of Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Carolina</td>
<td>Five Star Rated Licensing System bases levels on ratios, scores on environmental ratings (ECERS, etc.), education of staff, and compliance with licensing requirements.</td>
<td>Financially Encourage and Support Child Care Facilities Providing Higher Levels of Quality</td>
</tr>
<tr>
<td>Payment level based on number of stars on license.</td>
<td>Increase Payment for Care for Children Receiving Subsidies in Facilities with Higher Levels of Quality Based on Quality Rating that Includes Accreditation, or Other Criteria</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>Reaching for the Stars has four levels based on licensing, meeting quality criteria including additional training, literacy, parent involvement, and program assessment including national accreditation.</td>
<td>Currently higher for accreditation. Planning to implement a voluntary three-level tiered reimbursement system.</td>
</tr>
<tr>
<td>Oklahoma</td>
<td></td>
<td>Payment level based on level on license including accreditation.</td>
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<td><strong>Oregon</strong></td>
<td></td>
<td>Financially Encourage and Support Child Care Facilities Providing Higher Levels of Quality</td>
</tr>
<tr>
<td>Focus is on encouraging providers who care for children on subsidy to meet licensing standards. All Child Care Division (CCD)-regulated providers and those CCD-exempt providers who meet licensing standards receive 7% enhancement in subsidy payment. This is one of the few quality enhancements targeted to relatives, friends and neighbor caregivers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pennsylvania</strong></td>
<td>In the Keystone Stars Program, Child Care Resource Developer agencies will award stars to centers and group homes for four levels of quality performance standards. Programs above a one star are eligible for bonuses and priority is given programs serving children receiving subsidy.</td>
<td></td>
</tr>
<tr>
<td><strong>Rhode Island</strong></td>
<td></td>
<td>State pays a higher rate for children enrolled in Comprehensive Child Care Services Programs who are at 108% FPL. Programs must meet quality standards similar to head Start Performance standards.</td>
</tr>
<tr>
<td><strong>South Carolina</strong></td>
<td></td>
<td>Three levels with accreditation in highest.</td>
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<td><strong>Tennessee</strong></td>
<td>Under Tennessee’s Child Care Report Card System, every licensed child care agency must be evaluated and post a report card of the results.</td>
<td>The Star-Quality Child Care Program is a voluntary program that recognizes child care agencies that meet quality criteria to receive a one-, two-, or three-star license based on environment (ECERS, etc.), staff qualifications, staff pay, and compliance with basic health and safety rules and regulations.</td>
</tr>
<tr>
<td></td>
<td>Payments for care of children receiving subsidy is linked to star rating associated with license.</td>
<td></td>
</tr>
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<tr>
<td><strong>Texas</strong></td>
<td><em>Texas Rising Star</em>, a program of the Texas Workforce Commission, targets qualitative information on child care facilities to parents eligible for child care subsidies. Ratings are limited to child care programs that serve children eligible for subsidy. Placement on a level is based on exceeding licensing standards for health and safety, group size, child/staff ratios, caregiver training, and age-appropriate curricula and activities. The Board’s contractor visits sites and determines levels.</td>
<td>Child care subsidy program is administered by Texas Workforce Boards and their contractors. Some Workforce Boards pay higher rates based on provider level within the Texas Rising Star Program. Accredited and military-regulated programs are given 4-Star rating.</td>
</tr>
<tr>
<td><strong>Utah</strong></td>
<td></td>
<td><em>Child Care Provider Achievement Award</em> program is administered through the Office of Child Care. Providers can earn one to five stars and bonuses are attached.</td>
</tr>
<tr>
<td><strong>Vermont</strong></td>
<td></td>
<td>Accreditation. Vermont has developed a proposed quality rating system that they hope to link to reimbursement rates.</td>
</tr>
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<td>West Virginia</td>
<td>The R&amp;R system is piloting collection of data on three quality indicators and reporting findings to parents.</td>
<td></td>
<td>Accreditation.</td>
</tr>
<tr>
<td>Wisconsin</td>
<td></td>
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Sources: This table relies heavily on the work of Louise Stoney, *States with Systems to Pay Higher Reimbursement Rates to Programs That are Accredited and/or Meet Other Quality Standards* (June 2002). Retrieved on November 8, 2002 from [http://www.naeyc.org/childrens_champions/criticalissues/accred-reimburse/chart1.asp](http://www.naeyc.org/childrens_champions/criticalissues/accred-reimburse/chart1.asp). We are also grateful to Judy Collins and Tracy Dry, National Child Care Information Center (NCCIC), and representatives of quality initiatives in different states who also contributed information. New initiatives continue to emerge. See NCCIC at [http://www.nccic.org/faqs/tieredstrategies](http://www.nccic.org/faqs/tieredstrategies) for the most current information on tiered strategies.

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A considerable body of research has documented a relationship between structural indicators of child care quality, process indicators of quality, and child outcomes. The following studies were identified from surveying major reviews of the literature on the effects of quality child care on children. Citations of the reviews used to create this appendix are bolded.


Appendix C

Research that Links Structural Indicators to Process Quality or Child Outcomes

A Listing by Quality Indicator

The following studies were identified in major reviews of the relationship of child care and child outcomes. Citations for the reviews are listed at the end of this reference list.

**Accreditation**


**Adult:child Ratio**


**Education and Specialized Training**


**Group Size**


**Stability/Turnover**


Workforce Issues: Compensation, Benefits


Reviews of Research on Effects of Child Care on Child Development


For more information on this project, contact:

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Corvallis, OR 97331-5151

Telephone: (541) 737-9243
Facsimile: (541) 737-5579
E-mail: Bobbie.Weber@oregonstate.edu

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