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AGE MATTERS: Examining the Cost and Supply of Care for Infants and Toddlers

By Louise Stoney

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Concerns about the shortage of child care across the United States have grown so acute that researchers have coined a new phrase—child care deserts. Countless stories have appeared in print and social media, and an increasing number of policy makers are focused on efforts to build the supply of child care. Similar concerns have been raised about the soaring price of child care and fueled cries for increased public funding. Indeed, Kornich and Furstenberg (2013) report that per-child spending on child care increased by a factor of 21—or about 2,000 percent—between the 1970s and 2000[1] and Vox reports child care price increases of nearly twice the rate of prices economy-wide.[2]

Clearly these numbers are alarming, but is the answer a broad-brush call for more government funding and a focus on increasing the supply of child care? Or is there more to this story?

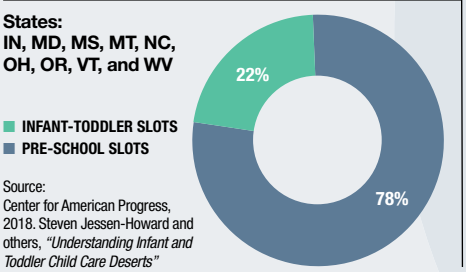
This issue brief argues for a more precise analysis of the data with a careful look at supply, cost and revenue by age of child. A more specific interpretation of the data suggests that the challenges are not applicable to children of all ages but, in most cases, uniquely focused on infants and toddlers. In short, the United States has made noteworthy strides in improving the affordability, quality and supply of care for children over the age of three. Our challenge is caring for infants and toddlers.

LOOKING MORE CLOSELY AT SUPPLY DATA

Data on the supply of child care in the US is rarely expressed by age of child. Additionally, supply data is typically limited to the licensed capacity in a market-based child care center or family child care home, but often excludes early care and education (ECE) services delivered in regulation-exempt settings like public schools, religious institutions or part-day nursery schools. A few notable exceptions raise red flags. A recent study of nine states and the District of Columbia conducted by the Center for American Progress gathered information on the availability of care by age of child, and found that child care scarcity in these states is largely due to a shortage of infant/toddler care rather than for children over three years of age.[3] (See chart at left) Even more significant, a 2017 child care needs assessment conducted by First Five LA found that licensed child care settings in Los Angeles County California had the capacity to serve only 13% of infants and toddlers, but had excess capacity for preschool age children.[4] In other words, the county had enough supply to serve 112% of preschool-age children. (See table on following page) These studies underscore the importance of collecting and reviewing supply data by age of child prior to jumping to conclusions regarding the shortage of child care.

Licensed child care supply
in a 9 state sample

States:
IN, MD, MS, MT, NC, OH, OR, VT, and WV



Source:
Center for American Progress, 2018. Steven Jessen-Howard and others, *"Understanding Infant and Toddler Child Care Deserts"*

FINANCIAL ASSISTANCE, BY AGE OF CHILD

The imbalanced supply of child care slots also impacts how child care subsidy dollars are spent, and for which children. The Hunt

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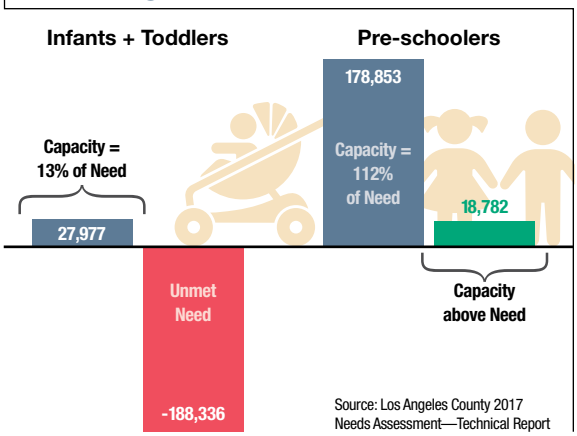
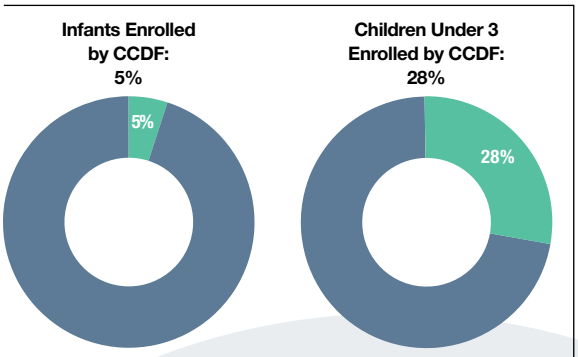
Institute conducted an analysis of federal Child Care and Development Fund (CCDF) spending by age of child and found that in federal fiscal year 2016 only 5% of the children who received CCDF subsidy were under 1 year of age and only 28% of children were under 3 years of age.[5] Yet the Urban Institute reports that almost half (46%) of low-income children under the age of 6 with working parents are infants and toddlers.[6] In short, CCDF spending does not appear to align with either need or likely demand; a disproportionate percentage of these dollars are being spent on children over the age of three. A similar inequity exists in Head Start funding for children under the age of three. While a separate initiative—called Early Head Start—has been created for infants and toddlers, these dollars reflect only about 8.5% of the overall Head Start appropriation.[7]

Supply + Demand of Licensed child centers + Family Child Care Homes in Los Angeles, CA



Source: Los Angeles County 2017 Needs Assessment—Technical Report



Source: Analysis by Hunt Institute, based on https://www.acf.hhs.gov/occ/resource/fy-2016-final-data-table-9

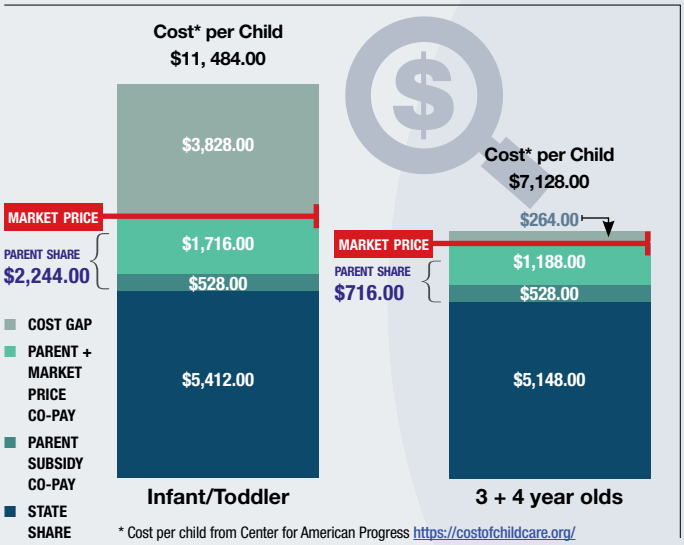
It is important to underscore that CCDF and Early Head Start are by far the largest—and often the only—public funds available to support infants and toddlers. In contrast, preschool age children receive funding from multiple sources, including state and local PreK initiatives and the federal Head Start program.

These data point to a key question: do infant/toddler child care deserts result from a lack of supply or a lack of money to pay for the care, and more specifically the higher cost of care for very young children? If increased CCDF dollars were specifically earmarked for infant and toddler tuition in child care centers and homes, would the supply of child care increase? If additional Head Start funding was specifically earmarked for Early Head Start, would more spaces for low-income infants and toddlers become available? Or is even deeper reform needed?

A careful look at how CCDF reimbursement rates are established and funds administered, as well as some of the assumptions that undergird state child care licensing and quality rating, suggest helpful pathways for increasing the supply of care for infants and toddlers. A discussion of these issues follows.

THE COST GAP

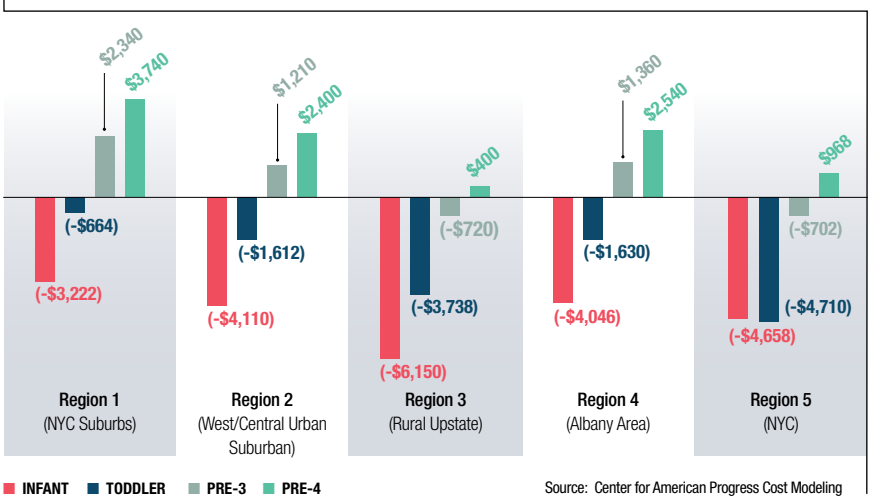
A common rallying cry among advocates for increased child care spending is to raise per-child reimbursement for publicly funded child care to "the market rate" based on an assumption that the tuition charged by early care and education programs (the market price) is a good indicator of the revenue needed to cover costs. Yet the table, at left, underscores why rates based on market prices are not likely to close the infant/toddler cost gap in many states or cities. This bar chart compares the likely cost of delivering care for infants and toddlers with the cost of serving preschool-age children in a small child care center (one classroom per age group) that meets minimum licensing standards in a southern state. Likely revenues from CCDF subsidy and parent fees are subtracted from this cost to reveal a "cost gap"—which is relatively small (about $260 per child per year) for preschool age children but staggering (over $3,800 per child per year) for infants and toddlers. Often, as in the example at left, no funding is available to fill the cost gap—so the child care center must either serve infants and toddlers at a significant loss or eliminate this age group from their roster. Even if public reimbursement was raised to the full market price (indicated by the red line) this program would still be unable to cover the cost of infant/toddler care.



* Cost per child from Center for American Progress https://costofchildcare.org/

It is important to note that the cost data used in this analysis is based on a market-based child care center that complies with minimum licensing standard in a state with higher staff:child ratios and lower teacher qualifications than recommended by industry leaders. Centers that meet higher standards, such as those recommended by the National Association for the Education of Young Children or the national Head Start program, will have much higher per child costs, as will child care centers located in the northeast or west coast where facility and personnel costs are higher. Indeed, it is not at all uncommon for high-quality centers in major cities to incur infant/toddler costs in excess of $35,000 per child per year. However, the cost vs. tuition differential between infant/toddler care and preschool care tends to remain relatively constant regardless of the location. The table, at left, from a New York State cost analysis conducted by Workman and Jessen-Howard at the Center for American Progress, is a case in point.[8] While costs, prices and public reimbursement rates vary by region of the state, programs are typically able to break even (or generate a fund balance) when serving preschool-age children but lose significant sums on infant and toddler classrooms.

Gap Between Subsidy and Estimated Cost
New York Child Care Center



Source: Center for American Progress Cost Modeling

The bottom line is this—raising child care center reimbursement rates to market prices will rarely address the infant/toddler cost vs price gap because few parents—not even those in higher income families—can (or will) pay the full cost of care. Regardless of the local economy, cost drivers for center-based infant/toddler care are not aligned with market prices. Few programs are able to charge tuition that is high enough to cover the cost of serving children under the age of three. Thus, most child care programs either elect not to serve infants and toddlers at all or accept babies at a loss in order to fulfill their mission or keep slots for older-age siblings full.

Given the persistent lack of alignment between market prices and the cost of delivering infant/toddler care, it is clear that states need to make a significant shift toward cost-modeling as the basis for establishing child care reimbursement rates. When the Child Care and Development Fund was enacted (almost 30 years ago) the concept of basing rates on market price surveys as a strategy aimed at ensuring that low-income families have 'equal access' to care was introduced. States were required to conduct biennial market price surveys and use these data to establish reimbursement rates, benchmarked at the 75th percentile. The 2013 Reauthorization allowed states to set rates based on an "alternative rate-setting methodology" such as cost-modeling however to date few states have elected this option.

A similar pattern exists in costs and prices for home-based child care. Family child care providers make significantly less money when they elect to serve children under the age of three. As in centers, best practice and licensing regulations for family child care require lower staff: child ratios for infants and toddlers than for preschool or school-age children—so the unit cost is higher. Providers who seek to earn a decent living must limit the number of infants and toddlers they serve. And unless they are located in a very high-income area and can charge top dollar, home-based providers simply cannot raise their prices high enough to cover this loss of income. Thus, while family child care may be considered a more appropriate setting for infants and toddlers,[9] and families often prefer these small and intimate settings, the financial reality is that serving babies is a loss leader in home-based care as well.

The number of home-based child care options has dropped steadily over the past 10 years. Nationwide, the number of licensed small family child care homes fell by 35% between 2011 and 2017.[10] In some states the decline has been even more dramatic. In Wisconsin, for example, licensed family child care fell by 61% between 2007 and 2016.[11] Suggested reasons for this decline vary from the economy (which offers better, competing jobs), low enrollment, changing demographics and increased regulatory requirements placed on licensed family child care.[12]

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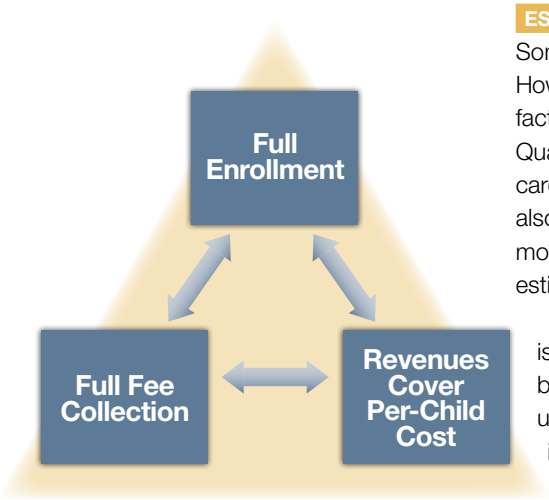


SUSTAINABILITY CHALLENGES: THE IRON TRIANGLE

Ensuring sufficient and stable revenue in a center- or home-based child care business is about more than the tuition or public reimbursement rate. Consistent cash flow is crucial—which means programs must have stable, predictable enrollment and full fee collection. These factors–referred to as the Iron Triangle of ECE Finance–can at times be more important than the per-child cost, and will be explored in more detail below.

ESTIMATING DEMAND

Some might find it puzzling that child care centers and homes are not fully enrolled. However, consistently full enrollment is perhaps the most significant, and often overlooked, factor in early care and education sustainability. Indeed, the National Early Childhood Quality Center identifies low enrollment as a potential reason for the decline in family child care.[13] How is it possible for the research community to identify child care "deserts" and also have ECE programs that are not fully enrolled? The answer to this question lies in a more careful analysis of what is meant by the term demand. One cannot assume that estimates of the need for child care will effectively predict consumer demand.

Outside of public PreK classrooms and Head Start, child care in the United States is not free—even for families that receive a government subsidy. Thus, what child care businesses (and planners, advocates and others) need to measure when estimating actual use of child care (likely enrollment) is what economists refer to as *effective demand*—a real intention to purchase by people with the means to pay.[14] This sort of demand data is not easy to gather. But first steps, and better proxy measures, are possible.

TRACKING ENROLLMENT

Reporting supply data by age of child is a good start. Augmenting age-based capacity data with information on actual enrollment would be even better. As noted above, few jurisdictions collect comprehensive supply data by age of child, however those that do appear to be reporting an adequate supply of slots for preschool-age children and a severe shortage of slots for infants and toddlers. This means that providers are likely to have vacancies for 4 year-olds (and often 3 year-olds)—the children most likely to help balance their budget—and have either no available slots, or a few very expensive slots, for infants and toddlers. Meanwhile, price-sensitive parents are struggling to navigate a complex system, seeking affordable care that meets their needs with limited information on the full array of options in both public and private settings. Collecting comprehensive data on child care supply and enrollment—by age of child, regardless of program auspice or funding—could go a long way toward helping child care programs better understand effective demand and maintain consistently full enrollment and supporting services (such as Child Care Resource and Referral) designed to help families find care. Moreover, comprehensive, age- and location-based data on both capacity and enrollment could help prevent new or expanded child care spaces in markets and among age groups where supply is sufficient.

In family child care, where the loss (or gain) in enrollment of even one child can have a significant financial impact, careful understanding of child care market demand and management of the Iron Triangle is extremely important. Staffed Family Child Care Networks, especially those that support marketing and billing and use technology to help providers manage operations, can not only help home-based providers maintain consistent cash flow, but can also begin to gather the provider-based enrollment data needed to better understand trends and make necessary shifts in staffing and operations.

Attendance matters as well, and unfortunately many child care voucher or certificate programs pay providers based on the child's attendance. This is yet another departure from the financing systems designed for preschool-aged children (e.g. Prek and Head Start) which generally award funds as contracts that require service providers to focus on full attendance but do not penalize them unless average attendance falls below 85%. Once again, this is an area where infant and toddler care (which is largely funded by portable CCDF vouchers rather than more stable contracts) is on unequal footing.

Staffed Family Child Care Networks can also help level the playing field for families that need public subsidy for infants and toddlers by offering the stability of contracts and the flexibility of vouchers. Public and private funders could contract with a home-based provider

> "Most child care programs either **elect not to serve infants and toddlers at all** or accept babies at a loss in order to fulfill their mission or keep slots for older-age siblings full.

network "Hub" to serve a specified number of children and families each year. The Hub could manage parent intake, billing and reporting, and a host of pedagogical leadership and staff support functions on behalf of participating center- and home-based providers. Families could choose among programs that participate in the network.

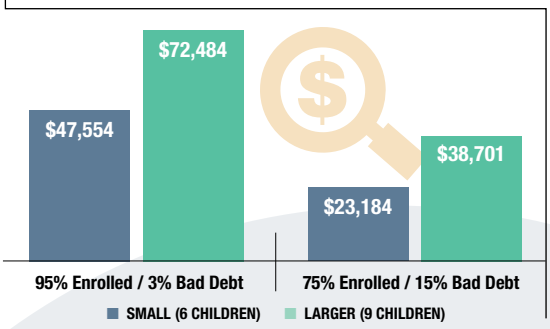
REVENUE COLLECTION

The primary source of revenue for market-based child care centers and homes is parent tuition or portable child care vouchers paid on a per-child basis in lieu of tuition. Thus, to stay solvent, centers and homes must set tuition prices close to the per-child cost, ensure full enrollment (every seat, every day) and actually collect the full amount owed for each child—in full and on time.

As noted earlier, the child care reimbursement rates established by government agencies rarely cover of the full cost of infant/toddler care. CCDF subsidy requires a co-payment for most families and in many states these fees eat up a significant portion of the parents' take-home pay. To make matters worse, centers and homes that serve children with CCDF subsidy often charge the parent a 'second co-payment' to cover the gap between the reimbursement rate and their market price. While some providers generate donations to help fill gaps, collecting full tuition for low-income families often requires multiple transactions.

Parents are often shocked, and sometimes angry, when they learn the price of child care. Many are already stressed financially; figuring out how to pay for child care becomes an added challenge. As a result, collecting 100% of tuition owed is extremely difficult—if not impossible—for many child care programs. Program directors often face a Hobson's choice: lower tuition to boost enrollment or raise tuition and risk vacancies. Given that infants and toddlers are the most expensive to serve, and the least likely to receive any form of third party subsidy, the easiest option is often to just cease serving this age group.

Family Child Care Effect of Enrollment and Bad Debt
(NE Urban Tuition, focus ages 0-3)



Most child care centers—and all family child care homes—are small, and the staff responsible for collecting fees often have personal relationships with the parents and strong attachments to the children they serve. While these relationships can strengthen the quality of care, they can also make it difficult to collect money—especially when the price is high and families are financially stretched. As a result, the level of uncollected tuition (bad debt) in child care is often high—and rarely acknowledged. In a 2018 North Carolina survey family child care providers that struggled to collect fees reported that they were able to collect, on average, only about 54% of family co-payments. Center-based providers reported lower bad debt, but some still reported that almost 30% of fees owed were not collected.[15]

The chart (at left) uses cost modeling to demonstrate the potential financial impact of bad debt and low enrollment on the finances of both small and larger family child care homes. The example underscores that effectively managing the Iron Triangle of ECE finance is crucial to ensuring that home-based providers earn a living wage.

> **Collecting data on child care supply and enrollment—by age of child—could go a long way** toward helping child care programs better understand effective demand and maintain consistently full enrollment.

NEW SERVICE DELIVERY MODELS

Examining data on child care availability and cost by age of child, and using these data to guide policy decisions, is the first step toward addressing the shortage of care for infants and toddlers. However, given that best practice for infants and toddlers requires one caregiver for every three or four children, costs can easily exceed $25,000 per child—and significantly more for children and families that need additional support. To this end, new service delivery models that have the potential to maximize resources should be explored. Potential strategies—among others—include Shared Services and automated business supports, Micro-Centers and Staffed Family Child Care Networks, all of which can:

- More carefully parse the unit cost of care and employ strategies to narrow the cost gap;
- Boost revenue with stronger fiscal management; and
- Attain efficiencies via automation, economies of scale, and shared leadership, deploying maximum resources to teacher compensation.

Each approach will be described in more detail below.

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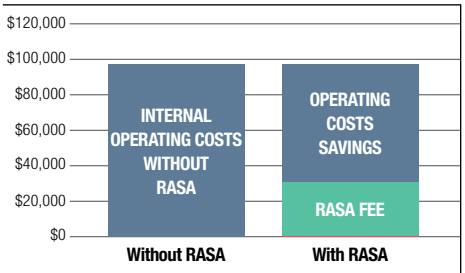

408 labor hours saved	**$52K** direct cost savings
13%-0% decrease in collections after one month	**2 months** to realize RASA financial benefits

St James Children's Center Self Study.
RASA membership fee varies based on organization size and needs.

SHARED SERVICES

A key challenge to early care and education sustainability is scale. Most ECE programs are just too small to support skilled administration and also offer classroom teachers even decent compensation, much less wages at the level needed to attract and retain qualified staff. Serving infants and toddlers—where the cost vs. tuition gap is significantly larger than for preschool-age children—makes sustainability even less attainable. To address this challenge, ECE leaders across the US are crafting new approaches to business management that make it possible for a network of providers to share a "back office"—either in person or virtually. These new leadership strategies aim to free up time for site directors to lead teaching and learning, increase the percentage of personnel budgets spent in classrooms, and make it possible to deliver high-quality services for infants and toddlers at a more affordable cost.

The Richmond Area Shared Services Alliance (RASA) is one example (see box, left). The Director of Saint James Children's Center, a small child care center that participates in RASA, reports that joining the Alliance not only saved money but also increased overall revenue and strengthened cash flow (due to skilled fiscal leadership and automated systems). Even more important, RASA support made it possible for the center director to spend 17 more hours a week working with teachers in classrooms, offer wage increases and better health insurance and a retirement plan for teachers. The center is now on sound financial footing and plans to open another toddler classroom.

The Richmond example underscores the power of automated child management systems as a transformational strategy for the ECE sector. Narrowing the cost vs. price gap in infant/toddler care will not be easy. In other industries, unit costs can be lowered via scale, particularly by replacing labor with technology. ECE is a unique industry and no one wants to replace teachers with robots! But we can use technology strategically, to streamline many administrative and fiscal tasks, as well as to generate much-needed data to track trends and establish performance benchmarks.

The financial and human resource cost of purchasing and implementing computer software can be overwhelming for a small child care center but becomes manageable when small providers create networks to share costs and leadership. This is at the heart of the ECE Shared Services work. A host of provider networks are popping up across the US, and many are beginning to use automated Child Care Management Systems (CCMS) to strengthen fiscal and program administration. This work holds great promise for industry-wide data on a host of issues including provider costs and enrollment. Shared Service Alliances are also encouraging new data systems like Alliance CORE, a CCMS that links to public subsidy and licensing systems in Colorado, and childcarenashville, a parent-facing portal that includes algorithms to help identify sites with available slots, and also helps to electronically schedule tours, obtain information on published rates, quality rating, educational philosophy, and more.

STAFFED FAMILY CHILD CARE NETWORKS

Shared Services is a broad concept that covers a range of strategies aimed at helping businesses attain scale. A Staffed Family Child Care Network (SFCCN) is a type of Shared Service uniquely structured to meet the needs of home-based child care businesses. Research indicates that SFCCNs strengthen provider attachment to the field and hold promise as a strategy to help stem the decline in supply[17] As noted earlier in this issue brief, SFCCNs can also play a key role in enabling small, home-based providers to effectively market their services, stay fully enrolled, lower bad debt, tap and efficiently manage public funding for low-income children, and boost quality.

The Erikson Institute has identified over 150 SFCCNs that are currently operating in the US, however very few reported that they offer business and administrative services and almost none track business sustainability as an outcome. The authors, Bromer and Porter, underscore the challenge: "Family child care providers who cannot sustain their programs may leave the field due to the stress of balancing program revenues and expenses. Such stress may also shape a provider's capacity to offer responsive and sensitive care to children."[18]

Public and private investment focused on ensuring that SFCCNs include targeted business supports is key to expanding the supply of care for infants and toddlers. The number of licensed family child care homes will continue to decline if providers cannot earn a decent living, and these home-based providers will not elect to care for babies unless doing so is a viable financial

> **The level of uncollected tuition** (bad debt) in child care—from public sources as well as parents—**is often high and rarely acknowledged.**

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option. Business supports could include help managing the Iron Triangle of ECE Finance (enrollment, fee collection, pricing) as well as accessing third party funding from sources such as Early Head Start and the Child and Adult Care Food Program, providing tax preparation services so home-based providers maximize their earnings through use of business deductions, and more.

A MICRO-CENTER NETWORK

Another emerging Shared Services strategy is a network of one-classroom child care 'centers' located in an existing public or charter school, hospital, office building, community center or the like—referred to as Micro-Centers. Ideally the space and related facility costs (e.g. maintenance, janitorial, utilities) as well as furnishings, are donated by the school or private-sector sponsor—keeping overhead costs to a minimum. Each micro-center is staffed to provide top-quality care under the leadership of a Network Hub. A single qualified individual, employed by the Hub, serves as "director" for the network of micro-centers and is responsible for supervision, coaching, and instructional leadership of classroom teachers as well as overseeing curriculum, child assessment, parent engagement and other pedagogical leadership tasks. All administrative services (enrollment, billing and fee collection, grants management, licensing and quality rating liaison, etc.) are provided by the Hub central staff. Teachers in the micro-centers are employees of the Hub.

The micro-center approach can be used for children of all ages, including mixed-age groups, however the approach holds particular promise for infant/toddler care, and can support:

- Lower administrative costs (as a percentage of direct services) so that maximum dollars are spent on classrooms, to boost compensation and improve working conditions;
- Hub management of the Iron Triangle of ECE Finance to ensure full enrollment, full fee collection, and cost data that informs public and private rates;
- Public subsidy rate increases based on top-quality services;
- Ability for Hub to negotiate contracts for a 'block' of child care subsidy slots (to be allocated among the network classrooms, based on parent choice);
- Hub leadership for, and coordination of, third party fundraising for unique needs not covered by tuition.

> **Public and private investment** focused on ensuring that Staffed Family Child Care Networks include targeted business supports **is key to expanding the supply of care for infants and toddlers.**

TOWARD A MORE EQUITABLE ECE SYSTEM

Leaders in our field have underscored the importance of understanding the difference between equality (treating everyone the same), and equity (giving everyone what is needed to be successful) and have wisely pushed us to name and address inequity, even when doing so is uncomfortable. This challenge is also relevant to early care and education focused on infants and toddlers. Without awareness, careful attention, and support for the unique needs of infants and toddlers, well-meaning policy will, at best, have unintended consequences and, in the worst case, further erode supply and quality.

Many states are currently engaged in important ECE system planning and implementation, funded in part by the new federal Preschool Development Grants, aimed at building systems to track early care and education supply, demand, cost and quality. Ensuring that this inquiry gathers and examines data by age of child and includes information on both capacity and enrollment is crucial to success.

Addressing the need for more affordable, high-quality care for infants and toddlers will require new approaches to policy and finance. Increased funding is clearly needed however without significant changes in policy these dollars are not likely to produce the intended result. Recommended changes noted in this brief include:

- Public reimbursement rates based on cost modeling rather than market prices;
- A willingness to address historic inequity via targeted rate increases to infant and toddler slots and higher-quality settings, rather than implementing across-the-board rate increases for children of all ages;
- Supply and demand estimates that include enrollment data, to ensure that all available slots are counted (regardless of auspice or funding) and high-quality settings kept fully enrolled;

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> Addressing the need for more affordable, high-quality care for infants and toddlers will require **new approaches to policy and finance.**

- Contracts that enable financial stability and payment based on enrollment rather than attendance;
- Support and start-up funding for center- and home-based provider networks that include automated child care management systems, shared administrative staff, and other innovative management approaches;
- Funding for Staffed Family Child Care Networks that include business supports aimed at improving enrollment, collections and per-child cost;
- Micro-Center Pilots as well as other alternative staffing strategies aimed at streamlining the cost of delivering high-quality child care.

In addition to the recommendations noted above, policy and finance strategies aimed at helping families care for their own children must be added to the equation. This includes public support for **paid family leave**—which is beyond the scope of this paper but nonetheless an essential step. Paid leave, along with high-quality part-time jobs and affordable health insurance that continues even when a parent is on leave, are important ways to help families stay at home with their children for as long as possible, therefore defraying the high cost of infant/toddler care.

Addressing the 'crisis' in infant/toddler care will not be easy. Effective responses are multi-faceted and many require deep change in previously held assumptions about how dollars are allocated and ECE programs operate. However, change is possible—if we make babies a priority, look for the story behind the statistics, and honestly commit to exploring new finance and service delivery options.

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