Public investment in early care and education (ECE) is crucial, especially for children from low-income families. Yet all too often children who receive public subsidy cannot access top-quality programs. To address this concern, a growing number of states are raising reimbursement rates, revising eligibility policy, and making additional investment in program quality improvement. Indeed, states such as New Mexico and Vermont have recently made ground-breaking public investments in ECE.

However, boosting access to high-quality ECE requires more than money. In most states, child care centers and home-based providers that serve children whose families receive subsidy are required to use specific forms and automated systems to document enrollment, report daily attendance, submit invoices and much more. The impact of this additional work should not be minimized. “When a family goes to enroll in my program and I find out they are going to use child care subsidy … It is a lot of extra work for me,” reported a small home-based child care program owner in upstate New York. “I have to do a lot of special attendance tracking and bookkeeping. I do it because it helps the family, but it takes a lot of time. And I have to do that work at night or on the weekends, because I’m taking care of kids all day!”

In nearly every state, the administrative burden associated with serving children whose tuition is paid by government is significant. Thus, it is not surprising that child care program operators choose not to serve publicly funded children—even when public reimbursement rates are high—even if they can easily fill available seats with families who pay private tuition.

How is it possible to change this picture? How can the process used to track attendance, payment or other reporting be the same for all children, regardless of who pays for their care? Harnessing the power of modern technology is the key. Indeed, Iowa is at the forefront of a new approach to child care subsidy management that links billing and reporting for publicly funded child care to the automated Child Care Management Systems (CCMS) providers use every day to manage their businesses.

Providers are extremely enthusiastic about Iowa’s new approach. “It is basically a lifesaver,” reported a Sioux City child care center director. “I don’t know how we functioned before. We could have been doing things a lot easier a long time ago if we had gone to a child care management system … The time I have saved is amazing.”

The vision

The Iowa Department of Health and Human Services (HHS) approach is multi-faceted and designed to maximize the power of automation among providers as well as inside government. First, the state crafted a child care business coaching strategy aimed at strengthening business practices; what makes this effort so impactful is that Iowa is linking the coaching to the use of business software,
CCMS, giving providers the tools to implement best practice as they acquire new skills. Second, the state issued a Request for Proposal to purchase CCMS licenses, so that child care providers would have access to the software free-of-charge (state support was recently extended to fund licenses for up to two years). Two CCMS vendors (brightwheel and Playground) were selected. In addition to offering free CCMS licenses, these vendors were required to help market the software, partner with Financial Management Coaches to support providers with on-boarding, create data dashboards to share information on uptake and use patterns, and craft a data bridge (referred to as an Application Programming Interface, or API) between the CCMS and the Iowa Child Care Assistance Portal, KinderTrack (KT), used by HHS to track time and attendance and pay providers that serve subsidized children.

Iowa aligned efforts to boost use of CCMS with an initiative designed to expand access to local Shared Service Alliances. Two non-profits were selected, via competitive bidding, to launch regional Shared Service initiatives with business leadership and CCMS as a core service. Both grantees have focused on areas of high-need and new providers who are English Language Learners.

Additionally, HHS created a cross-agency team to collaborate on a robust, statewide early childhood data collection strategy. With the assistance of Iowa State University, this initiative is engaging staff from myriad agencies and is focused on building a statewide Operational Data Store (ODS) to hold and exchange child care-related data from multiple sources and government agencies.

“Harnessing the power of technology is crucial to the future of child care in our state,” commented Child Care Bureau Chief, Julie Allison. “We learned some hard lessons during the Covid pandemic, and quickly realized how important it was to build capacity to collect real-time data on child care supply and other key metrics.”

What is an Operational Data Store (ODS)?

An ODS is a secure, centralized data exchange that moves data in and out of multiple sources to provide comprehensive information to inform decision-making. For example, an ODS that integrates real-time child care availability data from ECE providers across a state can:

- Identify where child care vacancies exist by child age categories.
- Match open child care slots to families needing care for their children.
- Guide decision-making to ensure that child care supply meets the demand.

THE IMPACT

Iowa’s unique data bridge with the child care assistance program makes it possible for child care providers to use one automated system for all families, and push data from their CCMS directly into the KinderTrack Portal. Child care program directors report that the change has many benefits. “We now have ipads at the door, so every parent clocks their child in and out electronically every day. Every parent does the same thing, and the CCMS reports inform me who I bill as private pay and who has hours sent to HHS. The new system also means that parents are now doing attendance submissions—not the teachers—and the technology verifies exactly who is signing the child in at what time. This means parents no longer have to sign a form saying that the attendance data is correct (...that silly form that took so much time and who really looks at it anyway...)”

Another impressive feature of the data bridge between CCMS and the KinderTrack Portal is the capacity to quickly verify payments and catch errors. While HHS has been paying via direct deposit for some time, the agency still mails each provider a monthly breakdown of child care subsidy payment, specifying the exact amount paid and the corresponding KT number (a unique identifier) for each child who is authorized to receive state-subsidized child care. However, providers that use the API no longer need to wait for this paper form for verification of what payments were made and to reconcile family accounts. A child care center director that formerly logged into the state KinderTrack Portal to individually verify each child’s payments shared that she can now go into the family’s file on her Playground CCMS, click payment history, and the system populates the file with all state payments that have been made for this child. “I can see everything I need to know
From where we sit, the more providers that use CCMS, the better. We are super excited about this because we get timely and more accurate attendance.

—Michael Towey, Income Maintenance Supervisor

Providers report that the new system is not just making life easier but saving significant time—which translates into money saved on administrative staff. “There is a school-age child care program in our city that has about a dozen sites and a lot of kids that get child care assistance,” reported a provider interviewed for this article. “It was someone’s full time job to do the state child care assistance data entry. It wasn’t a quick process. And the system was slow. You couldn’t just type in what time a kid came you had all sorts of drop-down menus. If a child had a sibling—a family with four kids, you had to enter the data for each kid, four times over, kid by kid! For programs like this, CCMS could save a lot of money spent on administrative staff.”

Not surprisingly, a growing number of providers that participate in the Iowa Financial Management Coaching project report they are collecting more of their tuition and fees electronically from all families—not just those who receive subsidy—which is helping to strengthen overall cash flow and lower bad debt.

Staff in the HHS centralized child care assistance and payment unit are also pleased with the new approach. “From where we sit, the more providers that use CCMS, the better,” said Michael Towey, Income Maintenance Supervisor. “We are super excited about this because we get timely and more accurate attendance.” Provider uptake has not yet grown enough for HHS staff to see a difference in their work load, but Mr. Towey believes that there is potential for significant time savings. Towey reports that providers who do not use the HHS KinderTrack Portal at all, and elect instead to submit paper billing, require the most time and often have the highest number of errors. “Some providers who don’t take a lot of state subsidy kids just don’t want to learn how to use the portal. I get it—the portal is an old-school clunky system, that will time out if you get interrupted and requires you to enter every child separately. It is not easy to use. If we can teach all providers to use a CCMS for all their kids, and just send data to us via the API, it would help us so much.”

Modern technology that supports data transfer in ‘real-time’ and in one place can help to significantly reduce errors. “I used to have to write things in three different places, and then double-check everything so that I didn’t make mistakes,” reports a busy center director. “Now, when there are errors, they show up in brightwheel and you can go in and fix them right there. It was easy to learn how to fix errors. It now takes me maybe 5 to 10 minutes to find and fix errors.”

Child care programs led by individuals for whom English is a second language is another group that typically uses paper attendance tracking and often encounters high error rates. CCMS holds promise for this group as well. “If we can do it—and 80% of my staff is English language learners—then anyone can do it,” said a child care center director who is new to using brightwheel. “At least 50% of my parents speak languages other than English. And they are learning, too!”

Indeed, both center and home-based providers that participate in the Iowa project report that using CCMS technology has improved management overall. “Teachers now have tablets at their classroom—they use them to see when a child is marked absent, so they know what their ratios are for the day, can send a notice home to the parent, can note when kids eat, have a bottle, sleep, and more. They use the tablet to communicate directly with parents if need be. I [the director] have a tablet as well as a desktop … so I can see everything in real time—I know exactly what kids are where at any point in time.”

ATTAINING SCALE

As the graphic on the following page exemplifies, CCMS uptake and use has grown exponentially as each step in the process was implemented. Early adopters were typically those who gravitated toward working with a Financial Management Coach at Mid-Sioux Opportunity, Inc., the agency that was awarded the statewide coaching contract. (Mid-Sioux also has a separate contract to provide Child Care Resource and Referral services in a twenty-three county area.) Uptake grew as the CCMS vendors began targeted outreach, via an Iowa-specific landing page on their website, webinars, email and snail mail, presentations at conferences and more. Meanwhile, HHS technology staff worked closely with staff at brightwheel and Playground to craft the necessary APIs, which were created in record time. In ten months uptake grew to 552 providers, and continues to steadily increase. It is important to note that the biggest bumps in
uptake correlate with implementation of the API data bridge with the HHS KinderTrack Portal, enabling easy reconciliation of subsidy payments directly in the CCMS and increased funding.

Positive experience with the child care subsidy data bridge, coupled with cross-agency planning for the ODS, has paved the way for deeper change. Providers and state-level staff have begun to explore ways that myriad ECE reporting requirements can be made electronic and linked to CCMS, including documentation required for child care licensing and the Child and Adult Care Food Program. Indeed, as child care providers become accustomed to paperless administration, they are enthusiastically pushing for change across the system. “We are about to have our licensing visit in a couple months ... so it will be interesting to see how they respond to electronic records,” reports one center director. “When our consultant comes in, I do not plan on pulling paper files. Typically, she spends 5 hours here just looking at paper. That means I am sitting with her for 5 hours. This time I am going to sit her in front of the computer and show her the screens. We are keeping the hard copy paper now, just because we aren’t sure. But ultimately, I want it all to be electronic.”

As the early care and education sector begins to embrace automation and work together to craft an ECE Technology Ecosystem, the result will be a triple win:

- State policymakers will have the information and data they need—in real time—to make smart, timely decisions.
- Providers will have access to the business tools they need to maximize revenue and use resources wisely.
- Parents will be able to search for available spaces, enroll children, pay for care electronically, and more.

“I can’t say enough good things about it,” reports an Iowa child care director. “I was very skeptical at first. I thought it would be good for centers with 200 kids, but not us, with only 36 kids. Boy….was I wrong. I would never want to go back. Even home-based providers who have only 2 or 3 kids—this is the way to go!”

### Provider Participation in CCMS

- Brightwheel subscriptions
- Playground subscriptions

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<thead>
<tr>
<th>October, 2022 (General Outreach)</th>
<th>January 2023 (Webinars, Presentations, Direct Mail)</th>
<th>March, 2023 (APIs Complete)</th>
<th>June, 2023 (Reconciliation feature added + $ for 2 yr licenses + tech grants)</th>
<th>July, 2023 (Weekly emails to deepen engagement + opportunities for data sharing)</th>
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**IOWA ROADMAP**

How Iowa successfully navigated a state technology modernization, including widescale provider adoption of stronger business practices via use of child care management technology

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<th>2</th>
<th>3</th>
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<tr>
<td>BUSINESS COACHING STRATEGY</td>
<td>RFP TO PURCHASE CCMS LICENSES</td>
<td>STATE-CONTRACTED CCMS VENDORS DEVELOP DATA BRIDGE</td>
<td>SUPPORT USE OF AUTOMATION</td>
<td>LINK TO STATEWIDE OPERATIONAL DATA STORE (ODS)</td>
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<tr>
<td>Strengthen provider business practices through consultation and automation.</td>
<td>Providers receive free access to CCMS license for up to two years.</td>
<td>Enable data exchange between Iowa HHS and Provider CCMS (attendance, payment).</td>
<td>Technology hardware grants + connectivity. CCMS vendors + business coaches support on-boarding, data dashboards, data sharing.</td>
<td>ODS will enable collection + exchange of real-time data from multiple sources, starting with desired/staff capacity + vacancies by age of child.</td>
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