



Iowa Evaluation Year 3 Report

July 1, 2021 – June 30, 2024



Iowa Evaluation Year 2 Report

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Introduction

The goal of this report is to present the results of the SafeCare program in Iowa from July 2021 through June 30,2024. Between 2016-2017, the National SafeCare Training and Research Center (NSTRC) at Georgia State University partnered with 5 agencies in Iowa to implement SafeCare® with funds from grants from the Agency for Healthcare Research and Quality (AHRQ), and the Patient-Centered Outcome Research Institute (PCORI). NSTRC trained SafeCare Providers, Coaches, and Trainers at each agency, and, in 2020, NSTRC trained SafeCare Providers and Coaches at an additional two agencies. This report summarizes the SafeCare cases who received services between July 1, 2021 and June 30, 2024.

About SafeCare

SafeCare is a home-delivered, behavioral parent training program that targets risk factors associated with child physical abuse and neglect. It is designated for families with children 0-5 years old and addresses three areas of concern related to child neglect and abuse: Parent-Child/Infant Interaction, Home Safety, and Child Health.

The *parent-child/infant interaction* (PCI/PII) module promotes positive parent-child interactions and teaches parents to structure their interactions with their child. There are separate protocols for infants, 0 to 18 months (parent-infant interactions, or PII), and for toddlers and older children, 18 months through 5 years (PCI). Specific skills taught include behaviors such as talking, affectionate touching, use of attention, and positive reinforcers for desired behaviors. Parents are taught to use skills during routine daily activities such as mealtime, bathing, getting dressed, and free play; parents select activities for training that are the most problematic.

The *safety module* has a goal of improving environmental safety by reducing health hazards and promoting parental supervision. Parents are taught to make the home safer by eliminating or securing hazards, for example, by installing safety latches, removing trip or crush hazards, and cleaning bacterial hazards. Parents are also taught the importance of supervising children as some hazards may not be able to be eliminated and for when children are in different environments.

The *health module* focuses on teaching parents to (1) recognize symptoms and identify when children are sick or injured; (2) use a structured decision-making process to determine when to care for a child at home and monitor symptoms, see a doctor, or seek emergency services; and (3) take preventive action to keep their children healthy.

Past research on SafeCare

SafeCare was initially developed using methods of applied behavior analysis, which utilizes single-case research designs for the development and refinement of protocols.¹ Each of the SafeCare modules have had systematic expert validation of content and multiple single-case studies conducted to demonstrate its initial effectiveness. Uncontrolled group trials of SafeCare²⁻⁴ demonstrated very large and clinically significant changes in the behaviors targeted by SafeCare, and quasi-experimental evaluations of SafeCare suggested that it prevented child maltreatment recidivism compared to comparison samples.^{5,6}

Several randomized trials of SafeCare or variations have been completed, including a large statewide comparative effectiveness trial of SafeCare in the Oklahoma child welfare system that found a reduction in child maltreatment recidivism favoring SafeCare.⁷ Other randomized trial and quasi-experimental

evaluations of SafeCare have shown positive impacts on parenting behaviors,⁸⁻¹⁰ reductions in parental stress ¹⁰ and depression,¹¹ and improvements in children's adaptive functioning,⁸ as well as key child welfare outcomes, including decreased maltreatment reports⁵ and removals from the home.¹² Compared to other services, families receiving SafeCare reported higher levels of satisfaction, greater cultural relevance, and greater engagement and completion of service.^{13,14} Finally, Providers trained to deliver SafeCare reported lower job burnout than non-trained peers¹⁵ and, when coached, had lower job turnover than their peers.¹⁶

Roll out of SafeCare in Iowa

SafeCare has been disseminated formally since 2009 through the NSTRC and is currently being implemented in 23 U.S. states and 8 additional countries. SafeCare implementation in Iowa began in 2016 as part of a randomized trial of SafeCare that was funded by grants awarded to NSTRC from AHRQ and PCORI. As part of those research grants, five agencies in Iowa received training to begin SafeCare implementation that included training of Providers, Coaches, and Trainers to establish self-sustaining teams at each agency. The trial ended in 2018, and results found improvements in parenting skill and reductions in parenting stress among families receiving SafeCare compared to comparison families.¹⁰ Two additional agencies (Boys Town and Lutheran Services of Iowa) adopted SafeCare in 2020. This report includes results from all seven agencies, although one agency (Lutheran Services of Iowa) stopped delivering SafeCare at the end of Year 2 (June 30th, 2023). The other six agencies are fully accredited.

Currently, SafeCare is offered to families receiving services through the Iowa Department of Human Services. Families are offered SafeCare when they:

- have children aged 0-5 who experienced child abuse or neglect,
- identified as needing knowledge and skills related to child health, home safety, and/or parent-infant/parent-child interactions, and
- were referred by the DHS caseworker to a family-centered services (FCS) contractor who delivers SafeCare for the SafeCare program.

Goals of the evaluation

In 2021, Iowa DHS contracted with NSTRC to conduct a 5-year evaluation of SafeCare activities in Iowa. The goals of the evaluation are to determine (1) whether SafeCare is implemented and delivered as intended (i.e. the effectiveness of implementation and fidelity to the SafeCare model) and (2) examine improvement in family outcomes, including immediate behavioral outcomes, child safety and permanency, and child and adult wellbeing outcomes.

The findings from this evaluation will serve to inform the Iowa Department of Human Services (DHS) on whether the statewide implementation of SafeCare[®] is effective for reducing recurrence of child maltreatment and preventing foster care entry and/or re-entry in Iowa. Specifically, DHS aims to learn whether SafeCare increases parenting skills related to parent-infant/parent-child interactions, the child's health, and home safety among caregivers receiving SafeCare through DHS. This is the third-year evaluation of a five-year project, and includes data on the SafeCare workforce, provider fidelity, and family outcomes that are tracked as part of SafeCare delivery (completion, behavior change, satisfaction). NSTRC received data from the Iowa DHS data system for cases in which SafeCare was delivered to ascertain rates of recurrence with the Iowa child protection system. Our intent was to link those data to

the SafeCare portal data (which includes metrics of SafeCare completion and skill uptake). However, the data received from the Iowa DHS data system did not include the needed identifiers that could be used to link the data to the NSTRC portal data. Thus, we have simply summarized descriptively rates of recurrence and the types of service referrals to which families were referred. These results are found in the section Family Outcomes throughout FY 21-24.

Methods

Data sources

The data from this evaluation comes from the SafeCare Implementation Data Network (SIDNe), which includes a web-based portal and mobile applications that are used for tracking staff implementation of SafeCare (Providers, Coaches, and Trainers), and the data provided to NSTRC by the Iowa DHS child welfare data system. SIDNe tracks SafeCare training and implementation outcomes, as well as family outcomes. Training and implementation outcomes are entered by Coaches and Trainers as Providers progress through training and coaching. Family data are entered by providers, typically via the mobile app in real time as SafeCare is delivered. Family data can also be entered via the web portal if providers prefer to use paper forms during SafeCare delivery. It is important to note that NSTRC does not monitor entry of most provider data or family data into the app or portal; several large SafeCare sites have their own data systems and thus entry of family data into SIDNe is not strictly enforced. One agency (Four Oaks) did not enter family data, and thus families served by Four Oaks are not included in this report.

Key data elements

Several data elements are used in this report. At the provider level, we use demographics, sessions completed, and session fidelity scores. For caregivers enrolled in SafeCare, we report data on demographics variables, risk factors identified by providers, sessions received, modules completed, assessments conducted as part of SafeCare, and satisfaction with services.

Provider demographics. When Providers are first enrolled in training, they are asked to complete a demographic profile, including information about age, sex, race and ethnicity, type of position, and prior experience with parenting programs and serving the identified population.

Session Fidelity. NSTRC requires that SafeCare sites engage in ongoing coaching, which consists of fidelity monitoring with performance feedback, to ensure implementation with fidelity. Fidelity is monitored by certified SafeCare Coaches or Trainers (who are also certified Coaches). Each agency in Iowa has their own Coach(es) and/or Trainer(s) who conduct this function. The one exception, Four Oaks, lost their Coach part way through Year 1. They briefly rehired their previous Coach during Year 2 but were unable to retain her. Four Oaks has selected a Certified Provider to be trained as a Coach. That training is scheduled for August 28th and 29th, 2024. Active Certified Providers are expected to be monitored monthly. Sessions are scored by reviewing audio recordings of sessions made on the SafeCare App and uploaded to the web portal. Each session is scored for the key elements (27-32, depending on the session type), each of which is rated as being adequately performed or not. The fidelity score for the session is the percent of items scored as adequately performed.

Family demographics and risk factors. For each new case, providers can enter a set of demographic information about the family, including demographic information (age, sex, race, marital status, age of targeted child, education, income, work status, etc.), as well as the presence of several key risk factors

such as substance use, domestic violence, mental health concerns, disabilities, child behavior problems, and others.

Completion of SafeCare. Completion of SafeCare modules and of the SafeCare program is determined by provider reports on the final assessment for each module and information entered when a case is closed. More detail is provided in the Results section as data on each metric is provided.

Family behavior change. As part of SafeCare, providers complete behavioral assessments as the beginning (baseline) and end (end-of-module) of each module. Each behavioral assessment consists of observations of behaviors aligned with the skills targeted in training. For PCI and PII, providers observe a caregiver's interactions with their child in a range of everyday and play situations and count the number of SafeCare positive parenting target behaviors that caregivers use with their child during these interactions. For Safety, providers count safety hazards in three rooms in the home. For Health, providers present caregivers with common health scenarios in which their child may become sick or injured and score their responses for appropriate behaviors (monitor symptoms, call doctor, go to emergency room). More detail about each measure is given below in the Results section.

Family Satisfaction. At the end of each module, families are asked to complete a satisfaction survey consisting of 10 questions rated on a 5-point scale. Ratings are averaged to compute a satisfaction score for that module. Note that the satisfaction surveys are part of the SafeCare App; therefore, providers must allow families to enter them using the providers' device. Note that module satisfaction surveys (75% or higher) were not completed.

Data quality and completeness

As noted above, NSTRC does not typically monitor data entry across its many sites or enforce the use of the SafeCare Portal and App data entry features. One agency from Iowa (Four Oaks) did not enter family assessment data into the portal in Years 1-3. In addition, not all assessments were completed, and variations in numbers in the tables presented below are present because of small amounts of missing data.

Results

SafeCare workforce

Table 1 shows each of the seven agencies trained, when they began SafeCare, and the number of Providers, Coaches, and Trainers trained. The table also shows the number of Providers, Coaches, and Trainers that are considered inactive because they are on-leave, are no longer conducting SafeCare, or have not either submitted a family assessment form or had their fidelity assessed in the last 37 days. Note that including temporarily inactive staff in the inactive count means that some staff labeled as inactive may currently be available to serve families.

The current active SafeCare workforce across the seven agencies includes 50 Providers, 22 Coaches, and 11 Trainers. The largest agencies are Families First and Mid-Iowa Family Therapy Center which have SafeCare workforces including 31 and 14 active staff, respectively, in various roles.

Agency	Date began SafeCare	Active (Inactive) Providers	Active (Inactive) Coaches	Active (Inactive) Trainers
Boys Town	6/20	4 (0)	1 (0)	1 (0)
Children & Families of Iowa	9/16	5 (13)	7 (0)	2 (0)
Families First	1/17	17 (11)	10 (0)	4 (0)
Family Access Center	8/16	10 (0)	0 (0)	3 (0)
Four Oaks	8/16	2 (0)	0 (0)	0 (0)
Lutheran Services of Iowa*	6/20	0 (0)	0 (0)	0 (0)
Mid-Iowa Family Therapy Center	6/16	11 (7)	2 (0)	1 (0)
Total		50 (36)	22 (0)	11 (0)

Table 1. Current SafeCare Providers, Coaches and Trainers by agency

* Stopped delivery SafeCare as of June 30, 2023

When Providers are initially registered for SafeCare training, they are asked to complete a questionnaire to capture demographic data. Table 2 shows demographic characteristics of the SafeCare workforce. Note that this questionnaire is not mandatory, so the sample size below reflects only those Providers who voluntarily completed the questionnaire; a significant portion of the data is missing. The SafeCare workforce in Iowa is primarily female (96%), white (91%), non-Hispanic (97%), and college educated (69% with BA or graduate degrees). Most of the workforce is employed full-time with their agency (77%), with some employed on a contractual basis (20%).

Provider Demographic Summary	N (%)
Gender	
Male	4 (3%)
Female	115 (96%)
Other	1 (1%)
Race	
White	107 (91%)
African American/Black	6 (5%)
Other	4 (3%)
Ethnicity	
Hispanic	3 (3%)
Non-Hispanic	92 (97%)
Highest Degree Completed	
Less than bachelor's degree	37 (31%)
Bachelor's degree	71 (59%)
Graduate degree	12 (10%)
Employment Status	
Contractor	24 (20%)
Part-time	4 (3%)
Full-time	92 (77%)

Table 2. Provider demographic overview

Provider fidelity

A key part of the SafeCare implementation model is ongoing coaching of Providers to track and promote fidelity. Certified Providers who deliver SafeCare should be coached either monthly or quarterly, depending on their seniority as a Provider. Coaching includes fidelity scoring by a Coach or Trainer with a follow-up coaching session to review performance. Fidelity scores are entered into the SafeCare portal for tracking.

Table 3 below shows for each agency the number of providers, the average number of sessions per provider on which fidelity was scored, the average fidelity score, and the percent of sessions scored below 85%, which is considered the threshold for a 'passing' session. Overall, 187 providers received some coaching sessions since July 1, 2021, and the mean number of sessions scored for fidelity was 9.75 per provider. The overall mean fidelity for all providers was 93.1, well above the 85% threshold. The overall percent of failed sessions was 8.0%. There was some variation by agency in fidelity scores. Most notably, Lutheran Services and Boys Town had a larger percentage of sessions that did not meet the 85%

standard than other agencies. It is worth noting that Lutheran Services no longer implements SafeCare and no new data was entered in FY24. In addition, the percentage of failed sessions at Boys Town decreased 18% between the data reported in Years 2 and 3 of this evaluation.

Agency	# providers*	# sessions scored Mean (sd)	Fidelity Mean (sd)	Percent failed sessions
Boys Town	12	15.50 (12.46)	88.88 (6.47)	28%
Children & Families of Iowa	36	12.83 (9.06)	93.63 (6.02)	5%
Families First	51	10.12 (7.65)	97.19 (3.35)	3%
Family Access Center	44	5.36 (3.77)	92.08 (7.11)	5%
Four Oaks	4	6.50 (4.93)	93.19 (5.80)	13%
Lutheran Services of Iowa	19	9.26 (6.74)	84.32 (12.81)	24%
Mid-Iowa Family Therapy Center	21	10.52 (5.79)	94.95 (2.18)	3%
All agencies	187	9.75 (7.81)	93.12 (7.43)	8%

Table 3. SafeCare fidelity by agency and overall

*Includes all staff who received a fidelity score and may include SafeCare Provider, Coach, and/or Trainer.

Family data and outcomes

A total of 2166 families were entered into the SafeCare portal for FY 2022-2024 (July 1, 2021 – June 30, 2024). Of the 2166 cases, 1880 are closed and 286 are active and ongoing. We included all families that had <u>any</u> SafeCare session during this period. For example, a family that began SafeCare in March 2021 and completed their last session in July 2021 would be included.

Table 4 shows families served for each agency including total families and active and closed cases. Note that Four Oaks did not enter any family assessment data in FY 2024 and are not represented. They are excluded from the tables below displaying family data.

Agency	Active cases	Closed cases	Total cases
Boys Town	43	198	241
Children & Families of Iowa	50	295	345
Families First	85	801	886
Family Access Center	16	146	162
Lutheran Services of Iowa	35	15	50
Mid-Iowa Family Therapy Center	57	425	482
Total	286	1880	2166

Table 4. Closed and Active cases by agency

Table 5 shows the demographic characteristics of SafeCare families. All families (active and closed) were included in this analysis. Note that because of missing data, the numbers in the table do not always sum to the full sample of 2166. Additionally, some of the data reported may not be known to the provider and thus would not be completed.

Caregivers served by SafeCare were largely female (75%), white (80%), non-Hispanic (90%), and had a mean age of 28. Virtually all caregivers were biological parents. Children were 1.7 years old on average (or approximately 20 months). Most clients were not married (84%), but about two-thirds had a romantic partner and about half lived with a romantic partner. Educational status was largely unknown, but of the reported data, about 78% of the sample had completed a high school degree, and 22% had not. About half of the sample (45%) was not working, and the remaining participants were working either full- or part-time. Income was also largely missing, but, of the reported data, about two-thirds of the sample had an annual income of less than \$15,000 per year.

Variable	N (%) or M (sd)		
Caregiver Average Age, years	M = 28.43 (<i>sd</i> =6.9), range = 16 – 63, n = 1635		
Target child Age	M = 1.70 (<i>sd</i> = 1.7), range 0 – 10, n = 1798		
Caregiver Sex			
Female	1384 (75%)		
Male	453 (25%)		
Caregiver Race			
White	1356 (79%)		
Black	255 (15%)		
Other/multiple races	99 (16%)		
Caregiver Ethnicity			
Hispanic	163 (10%)		
Non-Hispanic	1544 (90%)		
Caregiver relationship to Target Child			
Biological parent	1761 (99%)		
Not biological parent	22 (1%)		
Caregiver Marital Status			
Married	189 (16%)		
Unmarried	969 (84%)		
Caregiver has romantic partner			
Has partner	818 (68%)		
Does not have partner	387 (32%)		
Caregiver lives with partner			
Lives with partner	570 (45%)		
Does not live with partner	690 (55%)		
Caregiver highest level of education			
Has not completed high school	141 (22%)		
Completed high school or GED	512 (78%)		
Caregiver Employment Status			
Working part-time	207 (16%)		
Working full-time	483 (38%)		
Not working	566 (45%)		
Household Annual Income			
Under \$15,000	219 (59%)		
\$15-\$30,000	93 (25%)		
\$30-\$50,000	47 (13%)		
\$50,000 or higher	12 (3%)		
אסטייסט אווצוובו	12 (5/0)		

Table 5. Family demographic overview

Providers also reported common risk factors for families involved in child welfare systems. These are shown in Table 6 below. By far, the most commonly reported risk factor was parental substance abuse (49%). The next most common risk factor was the presence of violence between intimate partners (21%). Mental health issues (28%), including depression, were also commonly reported. Child behavior problems were reported in 5% of cases. Other risk factors which could be reported, including homelessness (4.8%), child disabilities (3.5%), parent intellectual disability (5.5%), and former incarceration (3.8%), were all uncommonly reported. Note that some risk factors may not be apparent or reported to the provider; thus, these numbers may be underestimates of actual risk factors.

Table 6. Major risk factors for clients enrolled in SafeCare.

Risk Factor	N (%)
Parent substance abuse	1056 (49%)
Domestic intimate partner violence	457 (21%)
Parental depression	216 (10%)
Other parental mental health problem	392 (18%)
Child behavior problems	104 (5%)

Parent outcomes: Program completion and behavior change.

Two primary outcomes available for analyses from the portal data are (1) caregiver completion of SafeCare and (2) uptake/acquisition of SafeCare skills (behavior change). In examining SafeCare completion data, analyses are restricted only to closed cases (n = 1880) as active cases may or may not complete SafeCare. In examining skill acquisition or behavior change, all cases (closed and active) are included because data are collected at the end of each Module and available for any client that completed that particular Module. We also examine client-rated satisfaction for each of the SafeCare Modules.

Program completion

Program completion was computed in two ways that yield slightly different pictures of SafeCare completion. First, a measure of SafeCare completion was computed based provider's recording of the behavioral assessments at the beginning and end of each Module ("module completion metrics"). All clients who had baseline and end-of-module assessments were considered to have completed the Module, and we summed the number of modules completed to assess fully completing the program. Second, when closing a case, providers completed a single question that indicated a reason for closing the case, and one of the options is that the family completed SafeCare ("closed case metric").

Table 7 shows completion rates by agency and for all agencies based on module completion metric. Based on this metric, overall, 841 of the 1880 cases (45%) completed the three modules of SafeCare, an increase of 15% from Year 2 report. The remaining 1039 (55%) did not complete three modules. The last column of Table 7 shows the mean number of sessions completed per family. Overall, the mean number of SafeCare sessions received was 11.3. Excluding Lutheran Services, which enrolled only 16 families, the remaining agencies were fairly similar with regard to completion rates (36% - 48%) and number of sessions completed (11.0– 12.2). The three largest agencies (Families First, Family Access Center, and Mid-Iowa) had the highest completion rates.

Agency	Number of closed cases	N (%) that completed SafeCare	sessions per family Mean (<i>sd</i>)
Boys Town	198	88 (44%)	12.0 (6.4)
Children & Families of Iowa	295	107 (36%)	11.0 (6.5)
Families First	801	378 (47%)	12.1 (6.6)
Family Access Center	146	70 (48%)	12.2 (6.4)
Lutheran Services of Iowa	15	1 (7%)	8.2 (6.7)
Mid-Iowa Family Therapy Center	425	197 (46%)	12.0 (6.6)
All agencies	1880	841 (45%)	11.9 (6.5)

Table 7. SafeCare program completion based on module completion.

The module completion metric also allows us to examine the <u>number of modules completed</u>. This could be important because even if families do not complete all of SafeCare, they may benefit from partial completion. Table 8 shows the number of modules completed by agency and for all agencies. The table shows that while 45% of families completed all three, or four, Modules, another 13% completed two Modules, and 18% completed one Module. Thus, 76% of clients had completed at least one SafeCare Module that may afford some benefit.

Table 8. Number of modules completed overall and by agency.

Azonai	# of modules completed, N (%)				
Agency	3 (or 4)	2	1	0	
Boys Town	88 (44%)	24 (12%)	40 (20%)	46 (23%)	
Children & Families of Iowa	107 (36%)	45 (15%)	59 (20%)	84 (28%)	
Families First	378 (47%)	98 (12%)	140 (17%)	185 (23%)	
Family Access Center	70 (48%)	21 (14%)	29 (20%)	26 (18%)	
Lutheran Services of Iowa	1 (11%)	05 (33%)	4 (27%)	5(33%)	
Mid-Iowa Family Therapy Center	197 (46%)	59 (14%)	67 (16%)	102 (24%)	
All agencies	841 (45%)	252 (13%)	339 (18%)	448 (24%)	

We also examined the completion rate for the three specific modules: PCI/PII, Safety, and Health. Table 9 below shows the completion rate for each Module. The Module most likely to be competed was PCI/PII at 63%, followed by Health (62%) and Safety (54%). Note that PCI and PII are considered together because families are offered either PCI or PII depending on the age of their child. We caution against overinterpretation of the differences in completion rates for PCI/PII vs. Health or Safety as it is likely that the variation in completion rates by Module reflect the order in which the modules were offered, rather than differences in engagement or interest in the content of the modules.

Agency	Ν	PCI or PII	Safety	Health
Boys Town	198	128 (65%)	111 (56%)	113 (57%)
Children & Families of Iowa	295	156 (53%)	143 (48%)	171 (58%)
Families First	801	544 (68%)	432 (54%)	489 (61%)
Family Access Center	146	96 (66%)	88 (60%)	97 (66%)
Lutheran Services of Iowa	15	9 (60%)	2 (13%)	5 (33%)
Mid-Iowa Family Therapy Center	425	248 (58%)	233 (55%)	295 (69%)
All agencies	1880	1181 (63%)	1009 (54%)	1170 (62%)

Table 9. Completion rate for each Module

The second way we can determine program completion is via the "closed-case metric", a single question each provider completes when closing a case in the app/portal. When closing the case, providers select one of several options to indicate why the case was closed. As is shown in Table 10, the closed-case metric showed a higher completion rate for SafeCare – more than 54% -- compared to the module completion metric's (which was 45%). Examining reasons for closed cases that were not completed shows that the most common reasons were that the Agency terminated the case for administrative reasons (39%) and that the agency terminated SafeCare because the client needed a different service (21%). Client refusal and loss of contact (excluding moving), captured in three categories, accounted for 34% of non-completion.

Variable	N (%)
SafeCare Completion	
Completed SafeCare	1018 (54.24%)
Did not complete SafeCare	862 (45.76%)
Reasons for not completing SafeCare (n=859)	
Agency terminated SafeCare for administrative reason (e.g., funding, closed child welfare case)	335 (18%)
Agency terminated because client needed a different service (e.g., substance use/domestic violence/mental health)	180 (10%)
Client refused services – said longer interested or did not need service	155 (8%)
Lost Contact with client (e.g., several messages left, disconnected phone)	138 (7%)
Client moved to an area that is not served	51 (3%)

Table 10. SafeCare completion and reasons for non-completion from closed cased metric.

Behavior change

The second outcome to be analyzed was skill acquisition or behavior change for each SafeCare Module. Recall that each SafeCare Module begins with a baseline skill assessment and ends with an end-ofmodule skill assessment. These baseline- and end-of-module assessments form the basis for gauging skill acquisition.

For PCI and PII modules, the skill assessments are observations of parent-child interactions across different scenarios including two daily activities and one play activity. For each activity, the provider observes and scores each of the desired behaviors as occurring or not. Using those scores, a percentage is computed representing the percent of positive parenting behaviors that occurred, and then those percentages are averaged across the different activities. The behavior change metric for PCI and PII thus represents the percentages of positive behaviors occurring across activities.

In PCI and PII, caregivers also complete the "Daily Activities Checklist" in which they review a set of normal daily activities (sleep time, feeding, bathing, shopping, etc.), and rate each on a 4-point scale to indicate the degree of problem with the activity, so higher numbers indicate more problems with the activity. (Activities rated as being more problematic are used in training sessions). We can examine the overall mean from this scale at baseline and end-of-module to determine the extent to which PCI or PII has resulted in a reduction in perceived problems.

For the Safety module, the baseline and end-of-module assessment consists of an observational assessment conducted by the provider of safety hazards in the home. The provider chooses three rooms most commonly used by the child, typically the kitchen, living room, and bath or bedroom, and counts the safety hazards using the Home Accident Prevention Inventory (HAPI). The HAPI includes ten

categories of home safety hazards (e.g., fall/activity restriction, fire, poison, drowning, sharp objects, projectile weapons), and rules for counting those hazards. The provider counts the hazards in three or more rooms and the counts are averaged at baseline and at the end of the Module. Those metrics thus represent the average number of safety hazards per room at baseline and as end-of-module.

For the Health module, skill acquisition is assessed via a set of standardized health scenarios that assess the caregivers' knowledge and behaviors regarding how to address common instances of injury and illness. Parents are presented with selected health scenarios and asked to identify symptoms, state what actions they would take, and role play those actions (e.g., call the doctor, fill out the Health Recording Chart). Each scenario includes a predetermined number of correct steps for each scenario. The caregiver is credited with a 'check' for each correct step taken. Scores for each scenario are generated by computing the percentage of steps correctly taken, and then those percentages are averaged across the scenarios for baseline and for end-of-module.

Table 10 below shows the behavior change metrics across the SafeCare modules. The table displays scores at baseline and end-of-module, the percent increase or decrease in the targeted behaviors, and t-tests comparing baseline means and end-of-module. All metrics showed statistically significant changes in the expected direction, indicating uptake of SafeCare targeted behaviors.

For PCI, caregiver skill acquisition rose from 65.0% of target behaviors being performed in daily routine and play activities prior to service participation to 96.3% of behaviors performed, a 48.2% increase. A ttest confirmed this was a statistically significant change. Scores on the PCI daily activity checklist (DAC) decreased by 26.8%, indicating a reduced degree of caregiver perceived problems with their child across activities. For PII, an identical pattern was seen. Skill acquisition measures showed an increase in skills from 73.0% at baseline to 98.2% at the end of the Module, representing a 34.6% increase in skills, which was statistically significant. The DAC for PII decreased by almost 27.3%, indicating fewer perceived problems for caregivers of infants. These findings suggest that parents were using more positive parenting skills and perceived fewer daily challenges during routine activities with their young children after completing the PCI/PII module.

Analysis of the safety metrics showed the mean number of hazards per room decreased from 11.7 to 2.5, a 78.8% decrease, which was statistically significant, suggesting that the homes these children live in were much safer with reduced risk for child unintentional injury upon the completion of Safety.

Parent health decision making skills pertaining to child health showed substantial improvements, with scenario response correctness for appropriate ways to manage a sick or injured child increasing from 77.4% to 96.4%, a 24.6% increase in health skills, which was statistically significant.

Module	Baseline Mean (<i>sd</i>)	End of Module Mean (<i>sd</i>)	% change*	t (df), p-value
PCI skill	65.0(24.42), n = 821	96.3 (10.67) n = 726	↑ 48.2%	t (710) = 35.24, <i>p</i> < .01
PCI DAC	1.7 (0.54), n = 816	1.3 (0.48), n = 308	↓ 26.8%	t (302) = 14.90, <i>p</i> < .01
PII skill	73.0 (22.81), n = 847	98.2 (6.92), n = 748	↑ 34.6%	t (716) = 28.92, p < .01
PII DAC	1.6 (0.58), n = 842	1.2 (0.41), n = 353	↓ 27.3%	t (349) = 13.10, <i>p</i> < .01
Safety hazards	11.7 (13.42), n = 1319	2.5 (5.54), n = 1056	↓ 78.8%	t (1042) = 24.17, p < .01
Health	77.4 (21.39), n = 1641	96.4 (10.1), n = 1606	↑ 24.6%	t (1554) = 35.80, p < .01

Table 10. Behavior change metrics for SafeCare modules.

* Note: increased skills in PCI/PII and Health, and decreased hazards in Safety are the desirable direction.

For simple comparative purposes across agencies, Table 11 below shows the percent increase or decrease for each Module for each agency. There was variation in the changes in skill acquisition by agency for each Module. Increases in PCI skills range from 41% to 80%; PII skill increases range from 32% to 52%. Reductions in safety hazards range from 73-85%. Finally, increases in health skills range from 15% to 37%. We caution in overinterpreting these apparent differences for several reasons. First, all agencies are showing changes in the desired direction. Second, there are large sample size differences between agencies and agencies with fewer clients are likely to have less precise estimates. Finally, scoring on the items may vary between agencies. Baseline scoring affects the change metrics provided below; agencies that tend to score clients lower at baseline have more "room to move" than those who score clients higher at baseline.

Agongy	PCI skills	PII skills	Safety (Hazards)	Health skills
Agency	F CI SKIIIS	FII SKIIIS	(118281 03)	
Boys Town	个 75%	个 52%	↓ 80%	个 29%
Children & Families of Iowa	↑ 40%	↑ 32%	↓ 83%	个 35%
Families First	↑ 41%	个 34%	↓ 80%	↑ 15%
Family Access Center	个 47%	个 35%	↓ 85%	个 37%
Lutheran Services of Iowa	↑ 80%	↑ 36%	↓ 85%	↑ 17%
Mid-Iowa Family Therapy Center	↑ 58%	↑ 32%	↓ 73%	个 31%

Table 11. Skill acquisition changes by Module for each agency.

*Note increased skills in PCI/PII and Health, and decreased hazards in Safety are the desired direction.

At the completion of each Module, providers indicate whether the caregiver's change in skills reached Mastery level, Success level, or were considered In-Progress. Mastery, Success, and In Progress ratings have specific definitions for each module, but conceptually represent the providers' judgment about the

proficiency of ALL of the skills presented. For example, in PCI, caregivers rated for Mastery means that the caregiver demonstrated each skill consistently and with ease; Success is rated when the caregiver demonstrates each skill but not completely or not consistently. Typically, caregivers rated as In-Progress in Session 6, receive additional training in the module. However, this is not always possible.

Figure 1 below shows the percent of caregivers rated for Mastery, Success, or In-Progress. Mastery ratings ranged from 59% of caregivers for PCI to 81% for Health, suggesting most caregivers achieved mastery of all the skills taught. Very few caregivers were rated as still In-Progress for each Module, no higher than 3% for each Module.

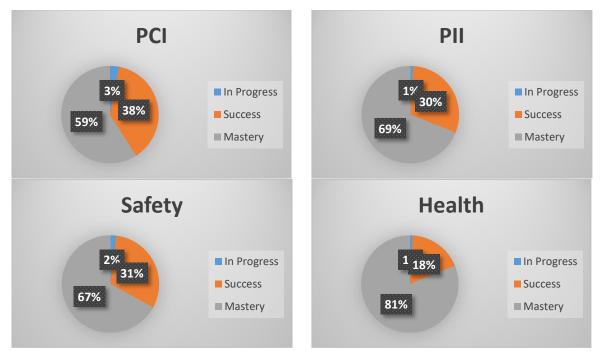
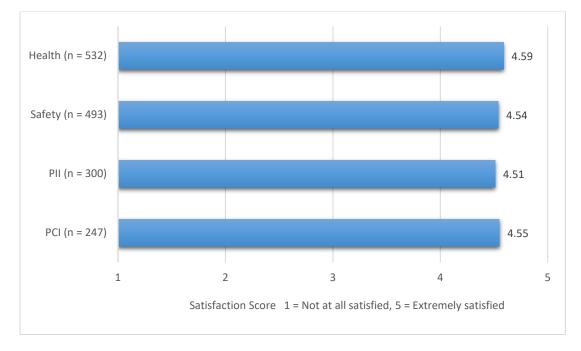
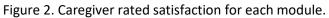


Figure 1. Caregiver status upon completion of the module

Last, caregiver satisfaction is assessed at the end of each Module. Caregivers rate satisfaction with the module via the Module Caregiver Satisfaction Survey on a scale of 1 to 5, with 5 indicating the highest level of satisfaction with services. Results are displayed in Figure 2. As shown, satisfaction was high for each module, with virtually no variation across modules. Note that less than half of the families that competed each module completed the satisfaction survey; they may have refused or not been offered the opportunity to complete it.





Recurrence of services for SafeCare cases, FY 21-24

Description

The State of Iowa provided data on the case recurrence for families who were referred for SafeCare services. The datafile included case identifiers, dates of original referrals, dates of SafeCare services, out of home placements and reunifications, whether the case was re-referred for services within the year after exiting SafeCare, and the type of services for which the case referred.

The data file received includes 1670 unique cases that received SafeCare between the dates of July 1, 2020 and June 30, 2023. There were a total of 1855 events in the dataset, but several of the events were for cases who had been referred to SafeCare services more than once. Thus, from the 1670 cases, there were a total of 1855 SafeCare events, for a mean number of events (SafeCare referrals) of 1.1 events per client (range of 1 to 4 events). Because some cases had multiple SafeCare events, we aggregated information for cases with multiple referrals for purposes of reporting. Specifically, we used the initial SafeCare start data, and the final SafeCare exit date for all date-related reports. We summed the total number of days in SafeCare across events and considered each event when determining whether any particular post-SafeCare recurrence happened.

The average number of days from the time of the Solution-Based Casework (SBC) to beginning SafeCare was 71.3 days (sd = 120.1, range = 0 to 765 days). The mean number of days spent in SafeCare was 147.9 days (sd = 91.3, Range = 0 to 604 days).

Among all 1670 cases, 43.89% (733) included some period in which the child was placed out of the home during the time that they were receiving SafeCare services (either SafeCare started when the child was out of the home or the child was removed during SafeCare delivery). Of those cases, 313 cases (18.74%) had the child removed from home while receiving SafeCare. There were 81 cases (4.85%) in which the child began out of the home and was reunified with the caregiver in the SafeCare period.

In the year following receipt of SafeCare (note, the data provided do not indicate whether SafeCare was completed or not), 35.99% (601 cases) had a new service recurrence within the subsequent year, and 64.01 did not have any service recurrence. Cases with recurrence spent more total days in SafeCare (M = 158.2, sd = 98.2) than cases with no recurrence (M = 142.1 sd = 86.7) and had more instances of starting SafeCare services (M = 1.20, sd = 0.47) than cases with no recurrence (M = 1.06, sd = .24). The types of services that occurred in the year after SafeCare are shown in Table 12. (Note that only 601 cases indicated a recurrence, but 617 cases include a post-SafeCare service.) The most common post-SafeCare service type was an out-of-home placement that was not a formal foster care, followed by SBC services, then adoption, and foster care placement.

Type of service		%
Out of home placements, not formal foster care	189	30.6%
SBC Services	167	27.1%
Adoption	136	22.0%
Foster care placement	125	20.3%
Total	617	100%

Table 12. Service type for clients with recurring services within one year of SafeCare exit.

The specific type of services received are displayed in Table 13. The most common services were preadoption subsidy, solution-based casework (SBC), relative placement, and family foster care.

Type of service	Ν	%
Pre-Adoption subsidy	104	16.86%
Solution-Based Casework (SBC)	95	15.40%
Relative Placement	93	15.07%
Family Foster care	88	14.26%
Supervision	67	10.86%
Subsidy	36	5.83%
Non-relative placement	30	4.86%
Shelter CA	28	4.54%
Detention	26	4.21%
Trial home	18	2.92%
Group care	15	2.43%
Runaway	14	2.27%
Hospital	12	1.94%
SafeCare	11	1.78%
State Institution of Mental Health	6	0.97%

Table 13. Specific services for clients with recurrent referral within one year of SafeCare exit.

In sum, about 36% of clients were referred for new services after exiting SafeCare, and among those referred, the most common referral types were out of home placement, SBC services, and formal foster care. A range of specific services was provided with the most common being pre-adoption subsidy, SBC services, and various types of placements.

Summary and conclusions

This report summarizes data from Years 1-3 (FY 22-23) of this 5-year evaluation. We can draw the following conclusions:

1. *Excellent SafeCare Workforce*. There is a strong and robust SafeCare workforce in Iowa. Six agencies in Iowa have certified SafeCare Providers and will continue to deliver SafeCare into FY25. Five out of six agencies have Trainers, so they can expand and sustain their workforce independently to meet demand.

Five out of six agencies are fully accredited. Four Oaks is technically on hold with accreditation until they can meet ongoing fidelity requirements. They are actively working towards accreditation and will be accredited retroactively for 2023-2024 once fidelity requirements are met. Four Oaks will have a Coach trained in August of 2024. This will reestablish consistent coaching at the agency.

- 2. High Quality SafeCare Implementation. Fidelity to the SafeCare model is very good. Over all sessions scored for fidelity, mean scores were over 93%, indicating that almost all the key elements of SafeCare are delivered at each session. One agency showed lower than expected fidelity, but the low number of Providers and relatively short length of implementation at that agency suggest that their scores may be less stable than others. It is also possible that fidelity scoring is simply more rigorous at that agency. Providers at one agency, Four Oaks, did not receive consistent coaching by a trained SafeCare Coach. They will train a new Coach in FY 25, and we anticipate an improvement in coaching consistency in the next year.
- 3. Average Family SafeCare Completion. SafeCare completion rates were either 45% or 54% depending on the metric. In addition, 76% of families completed at least one SafeCare module, and may gain some benefit, even if not completing the entire program. It should also be noted that an overall completion rate of 45% is not atypically low. Many high performing SafeCare sites around the U.S. report rates lower than 50% and still demonstrate benefit. For example, the overall completion rate for SafeCare in the randomized trial in which five Iowa sites participated found improvements in parenting skill and reductions in parenting stress, but the completion rate for SafeCare was only 23%.¹⁰ Likewise, the completion rate for the Colorado implementation of SafeCare that found reductions in out-of-home placements favoring SafeCare was just under 27%.¹² There are certainly system-level drivers of completion rates such as the rigor with which a mandate to services is enforced. The statewide trial of SafeCare in Oklahoma that showed reduced recidivism favoring SafeCare to usual care had completion rates close to 90% for both SafeCare and usual care clients.
- 4. Excellent Family SafeCare Skill Acquisition. Behavior change metrics show excellent skill acquisition. Each of the behavior change metrics computed demonstrated large and statistically significant changes in the direction expected, indicating caregivers are able to demonstrate the skills taught during SafeCare. Provider's ratings of skill acquisition showed that the majority of caregivers that completed a module mastered the skills taught in the module. Those that did not showed success in improving their skills.

5. *High Family Satisfaction with SafeCare Services*. Families reported satisfaction with SafeCare modules is high for each module. All ratings were well above 4 on a 5-point scale.

Improvements for future reports

This report is the Year 3 report of a 5-year evaluation project. The dissemination of the new versions of the SafeCare Portal and App is planned for September 2024 and will be harnessed to improve the quality of data entry. The dissemination process will include thorough training on the new system for all Providers, Coaches, Trainers, and Administrators. NSTRC has already engaged Trainers to update user statuses in the portal and will encourage further quality assurance measures. These will include Coaches and Trainers more closely reviewing family assessment data completion as well as entering module completion and satisfaction which are frequently missing. The new SafeCare Portal will also include automated notifications to SafeCare trainees to complete their demographic survey. NSTRC will also be meeting with Trainers at the end of September to reinforce best practices and answer any questions that they may have about the new system. We anticipate that having consistently functioning web-based portal and mobile apps in addition to these measures will have a combined effect of improving the consistency and completeness of data entry. In addition, data analysis coding will be revised, as needed, to match the new server data tables.

With the training of a well-qualified Coach Candidate at Four Oaks in FY25, we expect entry of family assessment data to occur consistently.

With Iowa DHS permission, a summary of this evaluation report can be shared with agency leaders who will be encouraged to use these results to inform and strengthen their implementations. They will also be shared with NSTRC training, accreditation, and Trainer certification maintenance staff who can use the report to provide relevant support, especially as it relates to fidelity monitoring and missing data.

References

- 1. Kazdin AE. *Single-case research designs: Methods for clinical and applied settings.* Oxford University Press New York; 1982.
- 2. Gershater-Molko RM, Lutzker JR, Wesch D. Project SafeCare: Improving Health, Safety, and Parenting Skills in Families Reported for, and At-Risk for Child Maltreatment. *Journal of Family Violence.* 2003;18(6):377-386.
- 3. McFry E. An Examination of Parental Skill Acquisition Resulting From a State-Wide Dissemination of SafeCare[®] [Masters of Public Health]. Atlanta, GA: School of Public Health, Georgia State University; 2013.
- 4. Rogers-Brown JS, Self-Brown S, Romano E, Weeks E, Thompson WW, Whitaker DJ. Behavior change across implementations of the SafeCare model in real world settings. *Children and Youth Services Review*. 2020;117:105284.
- 5. Gershater-Molko RM, Lutzker JR, Wesch D. Using Recidivism to Evaluate Project SafeCare: Teaching Bonding, Safety, and Health Care Skills to Parents. *Child Maltreatment*. 2002;7(3):277-285.
- 6. Lutzker JR, Rice JM. Using recidivism data to evaluate project 12-ways: An ecobehavioral approach to the treatment and prevention of child abuse and neglect. *Journal of Family Violence*. 1987;2(4):283-290.
- 7. Chaffin M, Hecht D, Bard D, Silovsky JF, Beasley WH. A Statewide Trial of the SafeCare Home-Based Services Model with Parents in Child Protective Services *Pediatrics*. 2012;129:509-515.
- 8. Carta JJ, Lefever J, B., Bigelow K, Borkowski J, Warren SF. Randomized Trial of a Cellular Phone-Enhanced Home Visitation Parenting Intervention. *Pediatrics.* 2013;132(Supplement 2):S167-S173.
- 9. Lefever JEB, Bigelow KM, Carta JJ, et al. Long-Term Impact of a Cell Phone–Enhanced Parenting Intervention. *Child Maltreatment.* 2017;22(4):305-314.
- 10. Whitaker DJ, Self-Brown S, Hayat M, et al. Effect of the SafeCare[®] intervention on parenting outcomes among parents in child welfare systems: A cluster randomized trial. *Preventive Medicine*. 2020;138:106167.
- 11. Silovsky J, Bard D, Owora AH, Milojevich H, Jorgensen A, Hecht D. Risk and Protective Factors Associated with Adverse Childhood Experiences in Vulnerable Families: Results of a Randomized Clinical Trial of SafeCare[®]. *Child Maltreatment*. 2022:10775595221100723.
- 12. Beachy-Quick K, Lee C, McConnell L, Orsi R, Timpe Z, Winokur M. *SafeCare Colorado Program Evaluation Report 2014-2017* Denver, CO: Colorado Office of Early Childhood; 2018.
- Damashek A, Bard D, Hecht D. Provider Cultural Competency, Client Satisfaction, and Engagement in Home-Based Programs to Treat Child Abuse and Neglect. *Child Maltreatment*. 2012;17(1):56-66.
- Silovsky J, Bard D, Chaffin M, et al. Prevention of child maltreatment in high risk rural families: A randomized clinical trial with child welfare outcomes. *Children and Youth Services Review*. 2011;33(8):1435-1444.
- 15. Aarons GA, Fettes DL, Flores LE, Sommerfeld DH. Evidence-based practice implementation and staff emotional exhaustion in children's services. *Behaviour Research and Therapy.* 2009;47:954-960.
- 16. Aarons GA, Sommerfeld DH, Hecht DB, Silovsky JF, Chaffin MJ. The impact of evidence-based practice implementation and fidelity monitoring on staff turnover: evidence for a protective effect. *Journal of Consulting and Clinical Psychology*. 2009;77(2):270-280.