Iowa Evaluation Year 2 Report

July 1, 2021 – June 30, 2023

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Contents

Introduction

The goal of this report is to present the results of the SafeCare program in Iowa through June 30, 2023. 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. The SafeCare staff at these seven agencies served families throughout Iowa during year 2 of the evaluation. This report summarizes the SafeCare cases completed from July 1, 2021 through June 30, 2023.

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 SafeCare[2-4] 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 reports[5] 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 peers[15] 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). A second (Four Oaks) did not meet accreditation criteria and will be reassessed by NSTRC in three months. The other five 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 second-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). In subsequent years, the evaluation report will include data from the Iowa DHS data system and will report on child maltreatment recidivism and out-of-home placements.

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). 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 was unable to retain her. Four Oaks is currently discussing sustainability planning with NSTRC, including whether to train a Coach in Year 3 of the evaluation. Active certified Providers are expected to be monitored monthly. Sessions are scored by review of 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 most 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 data into the portal in either Year 1 or 2. 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 87 Providers, 18 Coaches, and 11 Trainers. The largest agencies are Families First and Family Access Center which have SafeCare workforces including 39 and 36 active staff, respectively, in various roles.

Table 1. SafeCare Providers, Coaches and Trainers by agency

Agency	Date began SafeCare	Active (inactive) Providers	Active (inactive) Coaches	Active (inactive) Trainers
Boys Town	6/20	3 (3)	0 (0)	1 (0)
Children & Families of Iowa	9/16	7 (23)	7 (0)	2 (0)
Families First	1/17	28 (24)	7 (0)	4 (0)
Family Access Center	8/16	32 (7)	1 (0)	3 (0)
Four Oaks	8/16	3 (5)	0 (0)	0 (0)
Lutheran Services of Iowa	6/20	5 (10)	2 (0)	0 (0)
Mid-Iowa Family Therapy Center	6/16	9 (8)	1 (0)	1 (0)
Total		87 (80)	18 (0)	11 (0)

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; about 37% of the data is missing. The SafeCare workforce in Iowa is primarily female (96%), white (91%), non-Hispanic (95%), and college educated (67% with BA or graduate degrees). Most of the workforce is employed full-time with their agency (78%), with some employed on a contractual basis (20%).

Table 2. Provider demographic overview

Provider Demographic Summary	N (%)
Gender	
Male	3 (3%)
Female	98 (96%)
Race	
White	91 (91%)
African American/Black	7 (7%)
Other	1 (1%)
Ethnicity	
Hispanic	4 (5%)
Non-Hispanic	77 (95%)
Highest Degree Completed	
Less than bachelor's degree	33 (32%)
Bachelor's degree	63 (61%)
Graduate degree	6 (6%)
Employment Status	
Contractor	20 (20%)
Part-time	2 (2%)
Full-time	79 (78%)

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, 153 providers received some coaching sessions since July 1, 2021, and the mean number of sessions scored for fidelity was 8.9. The overall mean fidelity for all providers was 92.5, well above the 85% threshold, and the overall percent of failed sessions was 9.4%. 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 Boys Town is among the newer agencies and has a

small number of providers, which may cause instability in their fidelity scores and performance. It may also be the case that their coach is a somewhat stricter scorer than other agency coaches. The key to coaching is that corrective feedback is provided so that performance improves.

Table 3. SafeCare fidelity by agency and overall

Agency	# providers*	# sessions scored Mean (sd)	Fidelity Mean (sd)	Percent failed sessions
Boys Town	10	11.00 (9.17)	87.28 (6.86)	34%
Children & Families of Iowa	34	12 (6.92)	93.52 (6.08)	5%
Families First	34	8.76 (6.84)	96.68 (3.70)	4%
Family Access Center	34	5.03 (3.77)	91.87 (7.92)	7%
Four Oaks	3	7.33 (5.69)	90.93 (4.42)	18%
Lutheran Services of Iowa	21	9.57 (6.52)	85.53 (12.76)	22%
Mid-Iowa Family Therapy Center	17	9.12 (5.70)	95.78 (2.09)	2%
All agencies combined	**153**	**8.92 (6.63)**	**92.55 (7.97)**	**9.4%**

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

Family data and outcomes

A total of 1506 families were entered into the SafeCare portal for FY 2022 and 2023 (July 1, 2021 – June 30, 2023). Of the 1506 cases, 1244 are closed and 262 are active and ongoing. We included all families that had any 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 data in FY 2022 and are not represented. They are excluded from the tables below displaying family data.

Table 4. Closed and Active cases by agency

Agency	Active cases	Closed cases	Total cases
Boys Town	36	105	141
Children & Families of Iowa	51	185	236
Families First	81	510	591
Family Access Center	19	100	119
Lutheran Services of Iowa	35	19	54
Mid-Iowa Family Therapy Center	40	325	365
Total	262	1244	1506

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 1506. 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 (76%), white (79%), non-Hispanic (92%), 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 (78%), 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 80% of the sample had completed a high school degree, and 20% had not. About half of the sample (44%) 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.

Table 5. Family demographic overview

Variable	N (%) or M (sd)
Caregiver Average Age, years	M = 28.4 (*sd* =6.9) range = 16 – 63, n = 1198
Target child Age	M = 1.72 (*sd* = 1.7), range 0 – 10, n = 1320
Caregiver Sex	
Female	994 (76%)
Male	321 (24%)
Caregiver Race	
White	999 (79%)
Other	262 (21%)
Caregiver Ethnicity	
Hispanic	97 (8%)
Non-Hispanic	1134 (92%)
Caregiver relationship to Target Child	
Biological parent	1256 (99%)
Not biological parent	17 (1%)
Caregiver Marital Status	
Married	140 (17%)
Unmarried	707 (83%)
Caregiver has romantic partner	
Has partner	593 (67%)
Does not have partner	291 (33%)
Caregiver lives with partner	
Lives with partner	407 (44%)
Does not live with partner	519 (56%)
Caregiver highest level of education	
Has not completed high school	98 (20%)
Completed high school or GED	404 (80%)
Caregiver Employment Status	
Working part-time	158 (17%)
Working full-time	357 (39%)
Not working	406 (44%)
Household Annual Income	
Under $15,000	186 (62%)
$15-$30,000	69 (23%)
$30-$50,000	36 (12%)
$50,000 or higher	7 (2%)

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 (51%). The next most common risk factor was the presence of violence between intimate partners (23%). Mental health issues (19%), including depression, were also commonly reported. Child behavior problems were reported in 5% of cases. Other risk factors which could be reported, including homelessness (4.6%), child disabilities (3.6%), parent intellectual disability (5%), and former incarceration (3.7%), were all uncommonly reported. Note that some risk factors may not be apparent 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	769 (51%)
Domestic intimate partner violence	339 (23%)
Parental depression	163 (11%)
Other parental mental health problem	284 (19%)
Child behavior problems	81 (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 = 1244) 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, 483 of the 1244 cases (39%) completed the three modules of SafeCare and the remaining 761 (61%) did not. The last column of Table 7 shows the mean number of sessions completed per family. Overall, the mean number of SafeCare sessions received was 11.7. Excluding

Lutheran Services, which enrolled only 19 families, the remaining agencies were fairly similar with regard to completion rates (32% - 42%) and number of sessions completed (10.6 – 12.0). The two largest agencies (Families First and Mid-Iowa) had the highest completion rates.

Table 7. SafeCare Program completion based on module completion.

Agency	**Number of closed cases**	**N (%) that completed SafeCare**	**sessions per family Mean (*sd*)**
Boys Town	105	34 (32%)	10.6 (6.6)
Children & Families of Iowa	185	60 (32%)	11.5 (6.3)
Families First	510	212 (42%)	11.9 (6.6)
Family Access Center	100	40 (40%)	11.7 (6.3)
Lutheran Services of Iowa	19	1 (5%)	7.6 (6.0)
Mid-Iowa Family Therapy Center	325	136 (42%)	12.0 (6.6)
All agencies	**1244**	**483 (39%)**	**11.7 (6.5)**

The module completion metric also allows us to examine the number of modules completed. 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 38% of families completed all three Modules, another 15% completed two Modules, and 18% completed one Module. Thus, 71% of clients had completed at least one SafeCare Module that may afford some benefit.

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

Agency	**# of modules completed, N (%)**			
	3 (or 4)	**2**	**1**	**0**
Boys Town	34 (32%)	12 (11%)	22 (21%)	37 (35%)
Children & Families of Iowa	60 (32%)	36 (19%)	40 (22%)	49 (26%)
Families First	212 (42%)	66 (13%)	88 (17%)	144 (28%)
Family Access Center	40 (40%)	20 (20%)	24 (24%)	16 (16%)
Lutheran Services of Iowa	1 (5%)	4 (21%)	6 (32%)	8(42%)
Mid-Iowa Family Therapy Center	136 (42%)	51 (16%)	52 (16%)	86 (26%)
All agencies	**483 (39%)**	**189 (15%)**	**232 (18%)**	**340 (30%)**

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 68%, followed by Health (56%) and Safety (53%). 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.

Table 9. Completion rate for each Module

Agency	**N**	**PCI or PII**	**Safety**	**Health**
Boys Town	105	74 (70%)	50 (48%)	45 (43%)
Children & Families of Iowa	185	98 (53%)	98 (53%)	104 (56%)
Families First	510	390 (76%)	275 (54%)	268 (53%)
Family Access Center	100	69 (69%)	56 (56%)	66 (66%)
Lutheran Services of Iowa	19	10 (53%)	2 (11%)	7 (37%)
Mid-Iowa Family Therapy Center	325	200 (62%)	179 (55%)	205 (63%)
All agencies	**1244**	**841 (68%)**	**660 (53%)**	**695 (56%)**

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 – almost 54% -- compared to the module completion metric's (which was 39%). 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 (41%) and that the agency terminated SafeCare because the client needed a different service (23%). Client refusal and loss of contact (excluding moving), captured in three categories, accounted for 24% of non-completion.

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

Variable	N (%)
SafeCare Completion	
Completed SafeCare	679 (54.71%)
Did not complete SafeCare	562 (45.29%)
Reasons for not completing SafeCare (n=562)	
Agency terminated SafeCare for administrative reason (e.g., funding, closed child welfare case)	223 (18%)
Agency terminated because client needed a different service (e.g., substance use/domestic violence/mental health)	115 (9%)
Client refused services – said longer interested or did not need service	98 (8%)
Lost Contact with client (e.g., several messages left, disconnected phone)	88 (7%)
Client moved to an area that is not served	38 (3%)

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-of-module skill assessment.

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 63.6% of target behaviors being performed in daily routine and play activities prior to service participation to 96.6% of behaviors performed, a 51.8% increase. A t-test confirmed this was a statistically significant change. Scores on the PCI daily activity checklist (DAC) decreased by 26%, 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 71.9% at baseline to 97.9% at the end of the Module, representing a 36% increase in skills, which was statistically significant. The DAC for PII decreased by almost 26%, 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 12.8 to 3.2, a 75% 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 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 75.1% to 95.9%, a 29.6% increase in health skills, which was statistically significant.

Table 10. Behavior change metrics for SafeCare modules.

Module	Baseline Mean (*sd*)	End of Module Mean (*sd*)	% change*	t (df), p-value
PCI skill	63.8 (24.8), n = 569	96.4 (10.9) n = 503	↑ 51.1%	t (489) = 28.6, p < .01
PCI DAC	1.7 (0.56), n = 566	1.3 (0.50), n = 209	↓ 23.5%	t (203) = 11.5, p < .01
PII skill	72.0 (23.1), n = 576	98.0 (7.7), n = 511	↑ 36.1%	t (501) = 24.4, p < .01
PII DAC	1.6 (0.61), n = 575	1.2 (0.46), n = 249	↓ 25.0%	t (246) = 9.9, p < .01
Safety hazards	12.0 (13.15), n = 885	2.6 (4.80), n = 699	↓ 78.3%	t (688) = 25.0, p < .01
Health	76.6 (21.5), n = 1124	96.6 (10.0), n = 1094	↑ 26.1%	t (1056) = 30.7, p < .01

* 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 39% to 88%; PII skill increases range from 32% to 64%. Reductions in safety hazards range from 67-88%. Finally, increases in health skills range from 15% to 36%. 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; some agencies may have more "room to move" than others based on baseline scores.

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

Agency	PCI skills	PII skills	Safety (Hazards)	Health skills
Boys Town	↑ 88%	↑ 64%	↓ 88%	↑ 36%
Children & Families of Iowa	↑ 39%	↑ 32%	↓ 80%	↑ 36%
Families First	↑ 42%	↑ 35%	↓ 85%	↑ 15%
Family Access Center	↑ 46%	↑33%	↓ 82%	↑ 38%
Lutheran Services of Iowa	↑ 80%	↑ 35%	↓ 85%	↑ 19%
Mid-Iowa Family Therapy Center	↑ 66%	↑ 34%	↓ 67%	↑ 32%

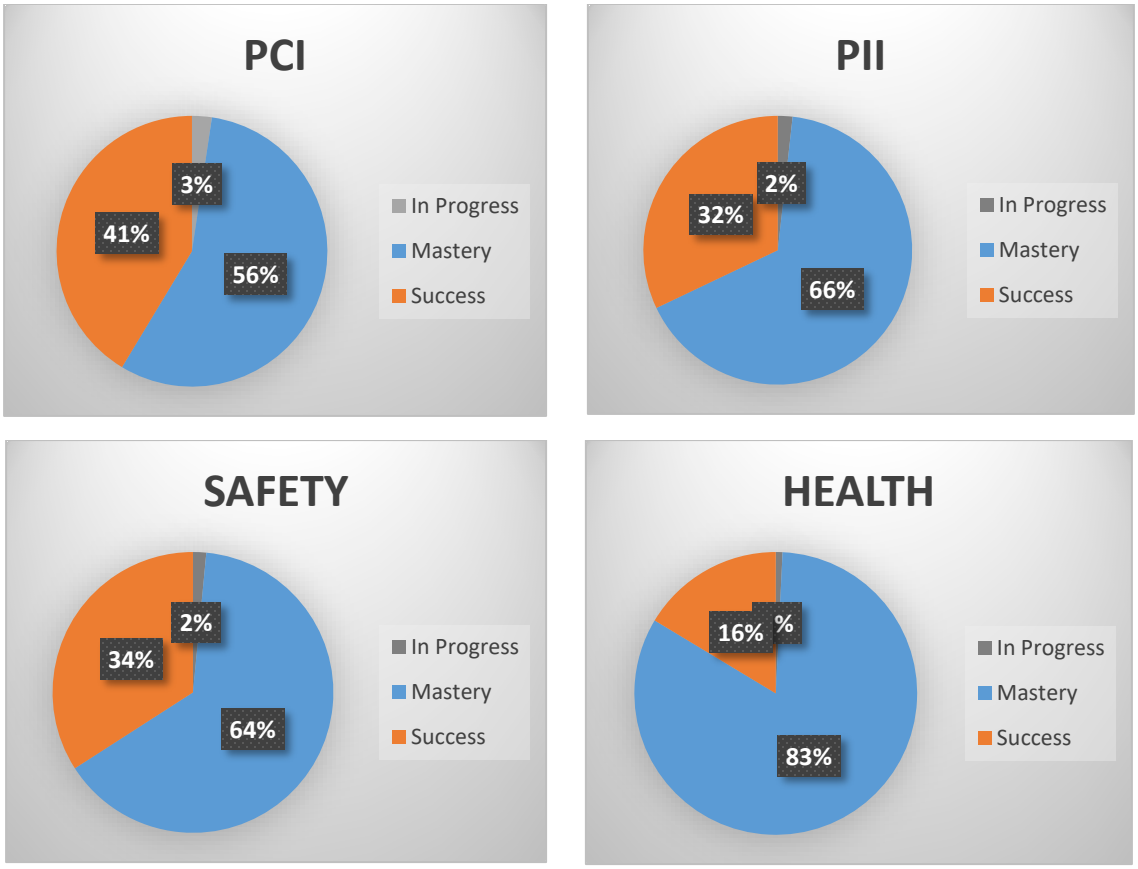
*Note increased skills in PCI/PII and Health, and decreased hazards in Safety are the desired direction.

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.

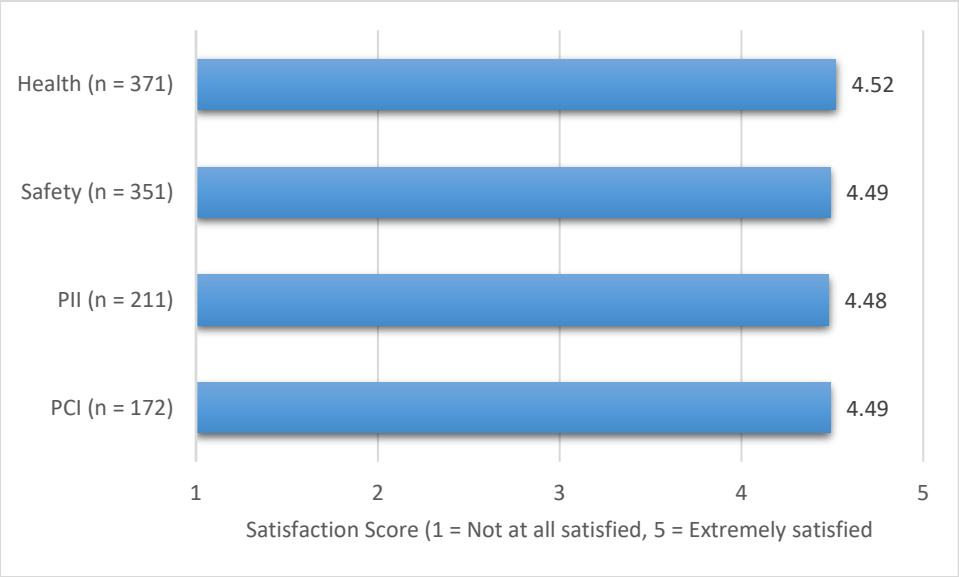
Figure 1 below shows the percent of caregivers rated for Mastery, Success, or In-Progress. Mastery ratings ranged from 56% of caregivers for PCI to 83% for Health, suggesting most caregivers achieved mastery of all the skills taught. Very few caregivers were rated as still In-Progress for each Module, 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 only about half of families that competed each module completed the satisfaction survey; they may have refused or not been offered the opportunity to complete it.

Figure 2. Caregiver rated satisfaction for each module.



Summary and conclusions

This report summarizes data from Year 2 (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. Five agencies in Iowa have certified SafeCare Providers and are fully accredited and will continue to deliver SafeCare into FY24. All five agencies have Trainers, so they can expand and sustain their workforce independently to meet demand.

   One agency, Lutheran Services of Iowa, will not continue delivering SafeCare in Year 3. Their active cases will be covered by Families First. In addition, one agency, Four Oaks, was not reaccredited this year. NSTRC is pursuing a reactivation plan and will reassess Four Oaks in three months.

2. *High Quality SafeCare Implementation.* Fidelity to the SafeCare model is very good. Over all sessions scored for fidelity, mean scores were over 92%, 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.

3. *Average Family SafeCare Completion.* SafeCare completion rates were either 39% or 54% depending on the metric. In addition, 71% 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 39% 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 2 report of a 5-year evaluation project. Leading into Year 3, we will provide technical assistance to sites in a few different areas. First, sites will be given refresher trainings on how to use the SafeCare portal and app to ensure that all data are entered properly. There was notable data missing for several classes of variables, including caregiver status and demographics, module completion, and module satisfaction. We will work with sites to ensure that all understand how to enter the data and that a state-wide evaluation is ongoing. Site-level data will also be reviewed regularly for completeness of data entry.

NSTRC anticipates improvements in the SIDNe system during Year 3 with developments that enhance the current platforms. Training and training materials will be provided to ensure Provider competency when using the new platforms. In addition, data analysis coding will be revised, as needed, to match the new server data tables.

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.

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