iLookOut Research Protocol

OVERVIEW OF STUDY GOAL

This 5-year randomized controlled trial will evaluate the efficacy of *iLookOut* for improving childcare provider (**CCP**) reporting of suspected child abuse.

SPECIFIC AIMS

AIM 1: To evaluate the impact of *iLookOut* on the incidence of "High Yield" reports of suspected child abuse.

<u>Hypothesis 1</u>: **The incidence of "High Yield" CCP reports of suspected child abuse will be greater** for regions in which childcare providers have been recruited to complete *iLookOut*, where a "High Yield" report is defined as a report for which:

1. Child abuse was confirmed (i.e., substantiated or indicated);
   OR

2. Social services were recommended for the child/family.

Figure 1	Child Abuse *Confirmed*	Child Abuse *Not Confirmed*
Social Services Recommended	**High Yield**	**High Yield**
No Social Services Recommended	**High Yield**	**Low Yield**

AIM 2: To evaluate the impact of *iLookOut* on the costs to the state from "Low Yield" CCP reports of suspected child abuse.

<u>Hypothesis 2</u>: For state costs associated with "intake" and investigation of CCP reports of suspected abuse, **the proportion spent on "Low Yield"** (versus High Yield) **reports will be reduced** for regions in which CCPs have been recruited to complete *iLookOut*, as measured by:

1. The dollar cost to the state for intake calls and subsequent investigations related to "Low yield" reports

   –where "Low Yield" = any report for which child abuse was <u>not</u> confirmed (substantiated or indicated) *and* <u>no</u> social services were recommended;

   –where cost is calculated by taking the total OCFS expenditures on i) Intake Staff and ii) Investigations, dividing each of these amounts by the respective number of reports completed per year, and summing those totals;

2. Comparison of costs associated with "Low Yield" versus "High Yield" reports of suspected abuse.

   –where "costs" are calculated based on the dollars spent on *Intake* and *Investigation* of reports of suspected abuse.

PRIMARY OUTCOMES:

1) Child abuse confirmation rates among CCP-reported cases;

2) Rates of social services recommended for children/families who were reported; and

3) Costs associated with intakes and investigations of reports in which abuse is not confirmed *and* no social services are recommended.

SECONDARY OUTCOMES:

4) Changes in the number of CCP reports of suspected abuse;

5) Number of CCPs in each study arm who complete *iLookOut* and *Standard* training;

6) CCP knowledge and attitudes regarding reporting suspected child abuse; and

7) CCPs' evaluation of the *iLookOut* and *Standard* training.

Learning Program Data: The registration section will record learner demographics. Learners' knowledge about child abuse and their responsibilities as mandated reporters, along with attitudes about reporting suspected child abuse will be assessed at baseline (pre-test) and following completion of the online training, be it *iLookOut* or *Standard* (post-test). Additionally, learners will be asked to complete a questionnaire to evaluate the quality of the online training they complete.

STUDY ACTIVITIES:

Year 1 of the grant period will be spent establishing necessary infrastructure and completing development of study materials. During this year, the study team will:

1) Revise *iLookOut*'s learning exercises, written materials, and script, as well as re-film its video sequences –including follow-up materials to reinforce learning after completion of *iLookOut*.

2) Randomize all licensed childcare facilities in the study area to one of the 3 study arms (*iLookOut*, *Standard*, or *Control*), based on type of facility (family, center, or Head Start), rurality (urban/suburban vs. rural), number of children (>25, 11-25, ≤10), enrollment in *Maine Roads to Quality*, and the facility's official quality rating. The study area will include large parts of Androscoggin, Cumberland, Franklin, Kennebec, Knox, Lincoln, Sagadahoc, Somerset, and Waldo counties, and possibly one area of Piscataquis county (to be inclusive of Native Americans).

3) Work with Maine's Office of Child and Family Services (**OCFS**) to establish an intake protocol that OCFS staff will use with *every* report of suspected child abuse to identify whether a) the caller has worked (paid or volunteer) at a childcare facility within the past 3 years; b) if yes, where was the childcare facility located (geographically); c) has s/he received any training on mandated reporting of child abuse; and d) if yes, what was the training; and also whether the CCP has changed her name in the past 3 years.

4) Work with OCFS to create new data fields within **MACWIS** (Maine Automated Child Welfare Information System) into which OCFS Intake workers can record callers' answers to the study-related intake questions.

5) Develop a quarterly report process with OCFS to track calls made by CCPs *and* their outcomes – i.e., whether they were screened out or investigated, whether child abuse was unsubstantiated or confirmed; and whether social services were recommended for the child/family.

6) Host a version of Maine's *Standard* online training that includes the same demographic items, pre-/post-test, and evaluation as used with *iLookOut*. (Hosted by CAIT vs. OCFS)

7) Create a workflow that allows linkage of the data from the following:

   a. Completion of online training (*iLookOut* or *Standard*)

   b. CCPs who reported suspected abuse

   c. Outcomes of CCP reports (unfounded, founded, social services offered)

   d. Respondents to post-*iLookOut* pings

   e. Results on post-test

   f. Participant demographics

8) Work with Maine Project Manager to:

   a. Establish a recruiting protocol for contacting childcare facilities (**CCF**) Directors and enrolling individual CCPs

   b. Develop a method for tracking (via CCF license #s) CCFs' enrollment rates

   c. Develop strategies for enlisting support of key stakeholders in Maine

   d. Develop thoughtfully worded FAQ to anticipate and address possible concerns about the nature and purposes of this study

   e. Develop informed consent form for CCPs

   f. Develop a training schedule for OCFS intake workers

   g. Create mechanism for disbursing gift certificates (limit = one per user)

9) Develop ping-ing plan:

   a. Work with Vendor to set up functionality and reporting –i.e., timing and sequence of pings, variation in kinds of pings (e.g., reminders, quizzes for badging, competitions for prizes, opportunities to discuss topical cases/issues and/or interact with OCFS staff).

   b. Work with Maine PM, OCFS, and National Workforce Registry Alliance to identify content and sequencing of pings; develop a question bank; establish best practices for ping-ing (time of day, frequency, type variation, etc.); identify criteria/process for granting professional development credit for higher level badges; and explore OCFS's interest in holding periodic discussion fora.

10) Work with *Research Matters* to validate knowledge-test and reasonable suspicion items.

11) Submit IRB protocol for validation study.

12) Work with IRB to approve full set of study materials.

13) Work with OCFS to adapt *knowledge test* so it accords with Maine law, and pilot test with CCPs.

14) Pilot test *iLookOut* online program.

15) Pilot test *Standard* online program.

Year 2 will mark the start of participant recruitment. During this year, the study team will:

1) Recruit Maine CCPs from CCFs randomized to either the *iLookOut* or *Standard* arms.

2) Monitor the participation rate for CCFs randomized to the *iLookOut* or *Standard* arms, and follow up with CCFs whose responses were low.

3) Monitor responses to pings, and revise content/protocol so as to optimize engagement.

4) Review quarterly reports of calls made by CCPs to OCFS *and* their outcomes.

5) Begin to develop "Grooming version" of *iLookOut* –**which will require supplemental funding**.

6) Create end-of-year surveys, and distribute to *all* CCFs within the study area.

7) Write manuscripts for publication on the development/deployment of the *iLookOut* program.

Year 3 will continue the existing protocol. During this year, the study team will:

1) Continue to recruit Maine CCPs from CCFs randomized to *iLookOut* or *Standard* arms, all of whom will now be incentivized to complete *iLookOut*.

2) Discontinue recruitment efforts for CCFs that close down (with NO attempt to enroll CCPs at CCFs that opened after the 6-month mark of Year 2).

3) Continue to monitor the participation rate for *iLookOut*/*Standard* arm CCFs, and follow up with CCFs whose responses were low.

4) Continue to monitor responses to pings, and revise content/protocol to optimize engagement.

5) Review quarterly reports of calls made by CCPs to OCFS *and* their outcomes.

6) Compile and analyze Year 2 reports made by CCPs to OCFS *and* their outcomes, and calculate costs associated with "intake" and investigation of CCP reports.

7) Complete development, and then pilot test "Grooming version" of *iLookOut*.

8) Distribute end-of-year surveys to *all* study CCFs (i.e., <u>not</u> to include CCFs that opened after the 6-month mark of Year 2).

Year 4 will continue the existing protocol. During this year, the study team will:
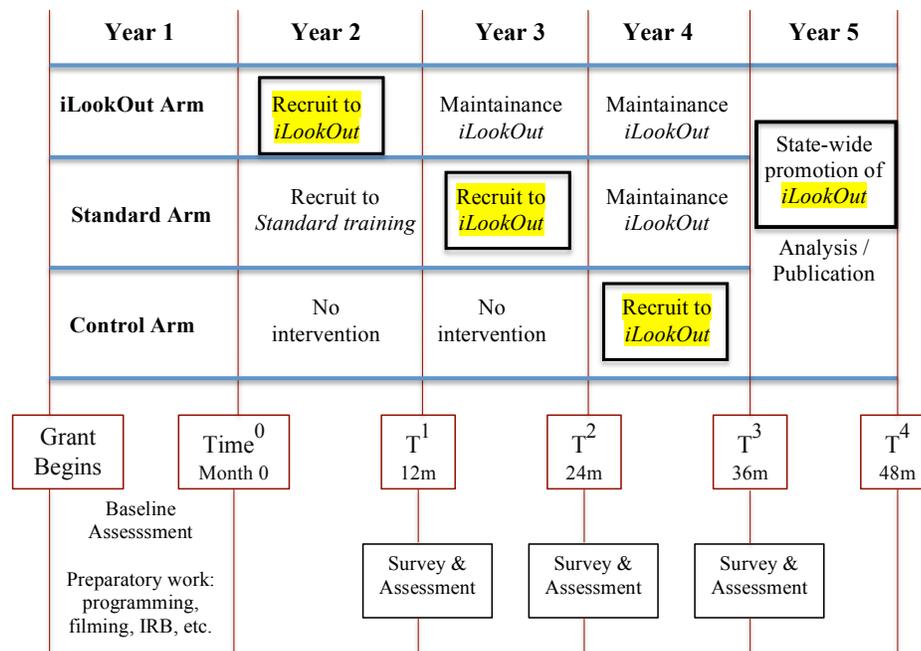
1) Continue to recruit all Maine CCPs who were randomized to a study arms (*iLookOut*, *Standard*, or *Control*), <u>all</u> of whom will now be incentivized to complete *iLookOut*.

2) Discontinue recruitment efforts for CCFs that close down (with NO attempt to enroll CCPs at CCFs that opened after the 6-month mark of Year 2).

3) Promote "Grooming version" of *iLookOut* for CCPs who have already completed the standard *iLookOut*.

4) Continue to monitor the participation rate for all active study CCFs, and follow up with CCFs whose responses were low.

5) Continue to monitor responses to pings, and revise content/protocol so as to optimize engagement.

6) Compile and analyze Year 3 reports made by CCPs to OCFS *and* their outcomes, and calculate costs associated with "intake" and investigation of CCP reports.

7) Explore with OCFS developing a State-based (i.e., non-Vendor) process for ping-ing CCPs.

8) Distribute end-of-year surveys to *all* study CCFs (i.e., not to include CCFs that opened after the 6-month mark of Year 2).

Year 5 marks the end of active recruitment, the analysis/publication of results, and the state-wide dissemination of *iLookOut*. CCPs will receive professional development credit for completing *iLookOut*, but not any financial incentive. During this year, the study team will:

1) Cease in-person recruitment of Maine CCPs.

2) Work with OCFS to disseminate *iLookOut* (standard and "Grooming") to all CCPs in Maine.

3) Continue to monitor responses to pings, and revise content/protocol to optimize engagement.

4) Work with OCFS to develop and pilot test a State-based (i.e., non-Vendor) process for ping-ing CCPs to be used after the completion of the study.

5) Compile and analyze Year 4 reports made by CCPs to OCFS *and* their outcomes, and calculate costs associated with "intake" and investigation of CCP reports.

6) Analyze and write up results for publication, comparing baseline and post-intervention outcomes for each of the 3 study arms, and over time.

iLookOut R-01 Study Timeline

Figure 2. *Stepped-wedge design* entails sequential enrollment until all study arms receive target intervention

STEPPED WEDGE DESIGN

Sequential enrollment until all study arms receive the target intervention (i.e., the stepped wedge design) is intended to assess for accrued changes over time in CCPs' reporting behavior. We anticipate that by changing individual CCPs' awareness, knowledge, and attitudes, *iLookOut* will change the culture within childcare facilities, fostering greater vigilance as well as open discussion about child protection. To capture this community effect, it is important to evaluate for changes in reporting behaviors not only pre- to post- completion of *iLookOut*, but also over time. For childcare facilities recruited to the *iLookOut* study arm, the time-frame for this change will be 3 years, in the *Standard* arm it will be 2 years, and in the *Control* arm it will be just 1 year (see *Timeline*, Figure 2 above). In our analysis, then, we will compare the changes in reporting behaviors between study arms, *and* over time.

POST-INTERVENTION REINFORCEMENT

To reinforce learning after completion of *iLookOut*, the study team will augment existing case discussion exercises, tips, and best-practice guidelines. But in particular it will create an extensive bank of messages that will be sent (ping-ing) to both remind CCPs about key learning points, and engage and challenge them with game-ified questions, quizzes, and cases for reflection and discussion. These follow-up message pings(*Vendor to be determined*) will be sent to CCPs after they complete *iLookOut*, such that CCPs in the *Innovation* Arm will receive them during Years 2-4, CCPs in the *Standard* Arm will receive them during Years 3&4, and CCPs in the *Control* Arm will receive them only during Year 4. CCPs will be incentivized to respond to these prompts by being offered opportunities to earn professional development credit, as well as badges, and small prizes. During Year 5 (open enrollment to *iLookOut*), such follow-up electronic messaging will be sent to all CCPs in Maine who complete *iLookOut*.

STANDARD TRAINING

The intervention used to educate *Standard* arm CCPs will be Maine's current online training –which is neither specifically targeted nor tailored for CCPs. CCPs in the *Standard* arm will be directed to a website hosted by CAIT, where they will be asked to complete: a registration section and pre-test that is identical to *iLookOut*'s; Maine's existing training on reporting suspected child abuse; the post-test; and an evaluation of the online training. By having a study-specific website that hosts Maine's online training, data can be gathered securely without having to alter Maine's website.

Measures and Data-Gathering: Data will be collected (see Table 1) from two sources: individual CCPs and Maine's Office of Child and Family Services (OCFS).

1) Individual CCP Data will be fully link-able across multiple sources. These sources will include:

  a) Demographics gathered in the registration process for the *iLookOut* and *Standard* trainings

  b) Pre-/post-Test results for the respective training modules

  c) Evaluations of the respective training modules

d) Responses to pings

e) Surveys from CCPs at the end of Years 2-4 –which will identify the percentage of CCPs in each of the 3 study arms who have i) heard about, and ii) completed *iLookOut* and *Standard* training.

2) OCFS Data will be collected from MACWIS (Maine's Automated Child Welfare Information System), which will be adapted in Year 1 to record data gathered by OCFS Intake Workers. Intake staff who will ask *every caller* i) whether they worked (paid or volunteer) in any form of childcare facility in the past 3 years, ii) what community they reside in, and iii) whether they have had training on reporting child abuse (and if yes, which). Additionally, OCFS will cross-check names of CCPs who have completed training (*iLookOut* or *Standard*) against individuals who have reported suspected abuse. OCFS will subsequently provide the research team:

a) Number of CCP reports of suspected abuse

b) Reporting rate among CCPs –at baseline, and annually for CCPs in study area

c) Number of screened-out CCP reports (i.e., judged by OCFS to *not* warrant an investigation)

d) Number of confirmed CCP reports (i.e., investigations resulting from CCP reports in which child abuse was substantiated or indicated)

e) Number and kinds of social service referrals (i.e., CCP reports for which a social service such as therapeutic services, nutritional assistance, etc. were recommended by OCFS)

f) Demographic data for each CCP report (including location, exposure to *iLookOut* and *Standard* training, age of child, type of abuse, etc.)

g) Aggregate data on cost –calculated using average costs to OCFS for I) the intake process for handling reports of suspected abuse, and II) investigating reports of suspected abuse

<u>OCFS data will include:</u>

- All reports from CCPs, irrespective of whether the child being reported is cared for at a childcare facility or elsewhere in the community.
- CCP reports that concern a child for whom investigation is already underway, even though the CCP report, itself, did not trigger the investigation.
- Children for whom an investigation was conducted, or a social service referral made, within 3/6 months of a CCP report having been made.

Of note, *NO INDIVIDUALLY IDENTIFIABLE DATA regarding any child or family will be collected for this research study.*

Table 1: Measures

SOURCE	MEASURE	PRE-	POST-	FOLLOW-UP / TIMING
CCP				
	Demographics	√		
	Knowledge	√	√	
	Attitudes	√	√	
	Evaluation of Training		√	
	Ping messages/questions	N/A	N/A	After completing *iLookOut*
	Familiarity with *iLookOut* & *Standard* training	N/A	N/A	End of Y2, Y3, Y4
OCFS				
	Identification of reports from CCPs*			
	Completion of *iLookOut* or *Standard* training*			
	Number of reports from CCPs			Baseline, End of year (Yrs 2-4)
	Reporting rate from CCPs			Baseline, End of year (Yrs 2-4)
	Screen-out rate of CCP reports			Baseline, End of year (Yrs 2-4)
	Confirmation rate of CCP reports			Baseline, End of year (Yrs 2-4)
	Social service referral rates			Baseline, End of year (Yrs 2-4)
	Cost of intake/investigation of CCP reports			Baseline, End of year (Yrs 2-4)

CCP = Childcare Provider   OCFS = Office of Child and Family Services

* Information to be recorded in MACWIS, but de-identified for study purposes.

PARTICIPANTS AND STUDY ARMS

The **target population** for this study is individuals in Maine who work as employees or volunteers at a licensed or certified facility that provides care to children ≤5 years-old –which includes childcare centers, family childcare programs, nursery schools, Head Start, and public pre-K programs.

The **study area** will include large parts of Androscoggin, Cumberland, Franklin, Kennebec, Knox, Lincoln, Sagadahoc, Somerset, and Waldo counties, and (to be inclusive of Native Americans) one area of Piscataquis county. Childcare facilities (CFFs) in the study area will be randomized to one of the 3 study arms (*iLookOut*, *Standard*, or *Control*) based on type of facility (family, center, or Head Start), rurality (urban/suburban vs. rural), number of children (>25, 11-25, ≤10), enrollment in *Maine Roads to Quality,* and the facility's official quality rating.

RECRUITMENT

Initially, a letter describing the study will be sent to the Directors of all licensed CFFs within the study area, along with a document that provides answers to *Frequently Asked Questions* regarding the purpose and rationale of the study, its sponsors, and its core team of investigators. The Maine Project Manager (PM) will travel in-person to childcare facilities in the study region to speak with Directors, hand out written materials, and answer questions related to the study. Additionally, the Maine PM will work with organizations in the childcare field to promote enrollment in the study. During Years 2&3

of the study, the Maine PM will recruit CCPs at CCFs assigned to the *iLookOut* and *Standard* arms, and during Year 4 will recruit from childcare facilities in all 3 study arms.

CCPs recruited to recruit either the *Standard* or *iLookOut* training will receive a "study code-card" with a site-specific log-in code (such as the license number for the CFF where the CCP works) that allows them to register for, complete, and revisit the online training, and receive: a) professional development credit; b) a $10 gift certificate; and c) ongoing opportunities for reinforcement learning.

Only those CCPs who receive a pre-programmed log-in code will have access to the respective online trainings. CCPs in the *Standard* arm will be given one study code-card during Year 2 that provides access to the *Standard* training, and then during Year 3 will receive a study code-card that provides access to *iLookOut*. CCPs in the Control arm will not receive any study code-card until Year 4, at which time they will one that provides access to *iLookOut*.

At the beginning of Year 3, the Maine PM also will distribute surveys to CCPs in all 3 study arms, to gauge: a) participation rates, b) inadvertent exposure (i.e., cross-arm contamination), and c) general awareness of the online training interventions.

ABBREVIATIONS:

CCP	Childcare provider
CCF	Childcare facility
MACWIS	Maine automated child welfare information system
OCFS	Office of Child and Family Services
PM	Project manager