

# Implementation Playbook: Digital Solutions for Medical Evidentiary Exam Documentation

---

Streamline communication and facilitate information sharing to optimize the response for victims of interpersonal violence

# Table of Contents

## INTRODUCTION.....3

### Stage I – PREPARE.....11

Step 1.....12

Step 2.....14

Step 3.....16

### Stage II – PILOT.....20

Step 4.....21

Step 5.....23

Step 6.....25

Step 7.....28

Step 8.....30

### Stage III – PROMOTE.....33

Step 9.....34

## APPENDICES.....37

Stakeholder Mapping.....38

Readiness Assessment.....39

Challenge Mapping.....41

Theory of Change Mad Lib.....42

Interview Guide Development.....43

Needs Prioritization and Evaluation Pt 1...44

Needs Prioritization and Evaluation Pt 2...45

Gantt Chart.....46

Process Evaluation.....47

End-User Inquiry.....48

Sustainability Usability Scale.....49



## Introduction

Hospital-based non-accidental injury reports and medical evidentiary exam documentation is a vital step in the medicolegal process for victims of interpersonal violence. Forensic documentation is often unstandardized and inconsistent. Subsequent communication of pertinent information to law enforcement agencies and victim service providers lacks efficiency and coordination. The absence of interagency collaboration leaves victims without the information, support, and services they need.

This playbook provides guidance and best practices around selecting and piloting a digital platform for the documentation of forensic evidence pertaining to victims of interpersonal violence. Such a systems change can be a time-, resource-, and labor-intensive effort. The complexity increases when the initiative needs to be implemented on an interagency level; however, there are opportunities to optimize and streamline processes, many of which are presented here. This playbook is intended to serve as a resource to communities seeking to enhance their communication and coordination of medical evidentiary information for victims of interpersonal violence.

This guide has been developed based on lessons learned from pilot programs implemented across four different counties in the state of California and by a multidisciplinary team specializing in systems change and criminal justice technology. Careful consideration has gone into the sequence of prescribed steps as well as the corresponding activities, derived from leading institutes and initiatives on systems change and design thinking.

## Developed By



## Disclaimer

This document was produced by RTI International under 2020-V3-GX-0045, awarded by the Office for Victims of Crime, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this document are those of the contributors and do not necessarily represent the official position or policies of the U.S. Department of Justice.

## Suggested Citation

Houston-Kolnik, J., Kudla, A., Maddur, S., Presler-Jur, P., & Ramos, S. (2023). *Implementation Playbook: Digital Solutions for Medical Evidentiary Exam Documentation*. Research Triangle Park, NC: RTI International.

Authors would like to thank partners and pilot counties for their dedication to this overall project along with team members Amanda Rose, Jim Redden, and Kristina Cooley for their contributions to this playbook.

# Breakdowns in medicolegal information sharing among interagency stakeholders can lead to an inefficient and ineffective response to reports of interpersonal violence.



**Cases of interpersonal violence require collaboration between different stakeholders, including forensic examiners, law enforcement, legal counsel, and victim service providers.**

More than 55,000<sup>1</sup> patients are treated in emergency departments (EDs) each year for injuries caused by physical or sexual assault, which is a dramatic 1,530% increase since 2006<sup>1</sup>. For many of these victims, the ED is the only place they will seek formal services—less than 10% of victims receive assistance from a victim service agency<sup>3</sup>. Effectively supporting victims of interpersonal violence with medical, legal, and additional supportive services requires collaboration between stakeholders.

**The lack of interagency collaboration often leaves stakeholders with incomplete or missing information that could assist them in better supporting victims through services or investigations.**

The current medical evidentiary exam documentation practices and the systems to report, manage, and transfer sensitive information are inefficient. In some cases, medical professionals are filling out forms by hand, which can be time consuming and laborious. Additionally, the process of documenting a medical evidentiary exam is unstandardized. For example, hospital systems may use various versions of forms. When these forms are completed, often on paper, they are transferred to law enforcement by email, fax, mail, or person-to-person handoff, without follow-up or a method of tracking next steps. With referrals to services, the onus is often on the victim to reach out to referral organizations once they are discharged from the ED. For sensitive crimes, such as sexual assault (SA) and intimate partner violence (IPV), victims are unlikely to reach out to organizations equipped to support them.

**Effective documentation and sharing of medical evidentiary exam information are vital to ensure that victims of interpersonal violence receive the medical care and legal support they need.**

Medical settings connect victims with community and criminal justice groups that can help them recover from victimization, ensure their safety, and prevent revictimization. For stakeholders to receive information in a timely manner and for a victim to gain access to support and resources, information collected from the hospital (e.g., a medical evidentiary exam, victim risk assessment) needs to be accurately captured and quickly relayed to the appropriate downstream recipients.

- More than 10 million adults experience domestic violence annually in the United States.
- 23% of women and 14% of men have experienced severe physical violence by an intimate partner during their lifetime.
- Female victims sustain injuries 3x more often than male victims.
- 1 in 5 female victims require medical care and legal services.
- 1 in 20 male victims need medical care, and 1 in 9 require legal services.



# Digital platforms that facilitate medicolegal information sharing can address the challenges of interagency coordination and collaboration.



**A digital platform can catalyze interagency collaboration and facilitate a warm handoff between agencies that support victims of interpersonal violence.**

A digital platform solution for medical evidentiary documentation can house all the activities and forms that need to be completed upon conducting an examination following an incident of interpersonal violence. The platform allows forensic examiners to send pertinent information to stakeholders within the continuum of care for victims, such as law enforcement and victim service providers. Such a tool can securely transmit reports to relevant parties and catalyze multidisciplinary collaboration so hospitals can initiate a warm handoff with victim advocates.

**A warm handoff opens channels of communication and enables interagency collaboration.**

A warm handoff makes referring supportive services to victims more efficient by requesting consent to share contact information of the victim to the receiving agency. This removes the burden of the victim having to initiate outreach themselves and provides the necessary information to victim services professionals to follow up and assess their support needs. In contrast, a cold handoff to victim services entails providing the contact information of the service providers to the victim and expecting them to reach out and request support. Due to varying circumstances, victims often do not seek support beyond the hospital, so it is imperative to foster a system wherein supportive service agencies are proactive about outreach.

**Collaboration is key to preventing future incidents as well as promoting healing for victims.**

A digital platform solution for communities would ensure that criminal justice representatives receive critical case information in a timely fashion so they may investigate and potentially prosecute the necessary parties, and that victims of interpersonal violence are connected to resources available to them to enable their healing journey.

Digital solutions can enable:



Security of sensitive information pertaining to the victim



Automated workflows and rapid exchange of information to enable swift action



Improvements in accessibility with cloud-based computing

A digital platform solution has key features that enable workflow integration across agencies to ensure the secure, standardized, and efficient transfer of medical evidentiary information.



**Security and privacy features** such as permissions-based design and multifactor authentication ensures secure access and transmission of sensitive information to protect victims' privacy and comply with regulations (e.g., HIPPA).



The ability to **create and add to existing reports** increases the efficiency and ease of use of required documentation to facilitate standardization and allow information updates in a single record.



**Body mapping** documents injuries and potential findings through a clickable interface and promotes standardization of medical examination documentation across forensic examiners and patients.



**Form validation** enables alerts, quality reviews, and report field locking, which provides safeguards to confirm that all necessary information has been filled out and that the form is complete.



**Report notifications** alert law enforcement, crime labs, victim service providers, and other key stakeholders of a new incident and provide the pertinent information to them.



The ability to **browse and search reports** enables easier access to information and establishes a paper trail.

Successful adoption and implementation of digital platform systems requires buy-in from many different stakeholder agencies and engagement from individuals across agencies.

### Champion(s)



Individual(s) who have the authority and motivation to make change

**Key Responsibilities:** Galvanize individuals across the multi-agency system, solicit buy-in, initiate the formation of the multi-agency working group, and oversee the path toward implementing a new software system; user(s) of this playbook

**Key Characteristics:** Leader(s) aligned with the values of the community to integrate insights across multi-agency system

### Stakeholder Agency



An entity, such as a department, agency, or group that is essential for systems change to occur

**Key Responsibilities:** Support the effort of systems change, and provide insights and recommendations on how a new software system would best serve the entity

**Key Characteristics:** Organized forms of communication, cohesiveness among members of the entity, trust

### Agency Representative



Individual(s) who act on behalf of a stakeholder to serve in the multi-agency working group

**Key Responsibilities:** Serve as the liaison between the multi-agency working group and stakeholder to promote change within their agency and advocate for its needs in working sessions

**Key Characteristics:** Leader committed to change with the ability to shape decisions for the agency

### Multi-agency Working Group



A coalition of diverse agency representatives committed to propelling systems change

**Key Responsibilities:** Collaborate to identify challenge and solution spaces, and motivate progression toward system-wide change

**Key Characteristics:** Organized, cohesive group with established meeting cadence, channels of communication, and ability to facilitate change

### Software Provider

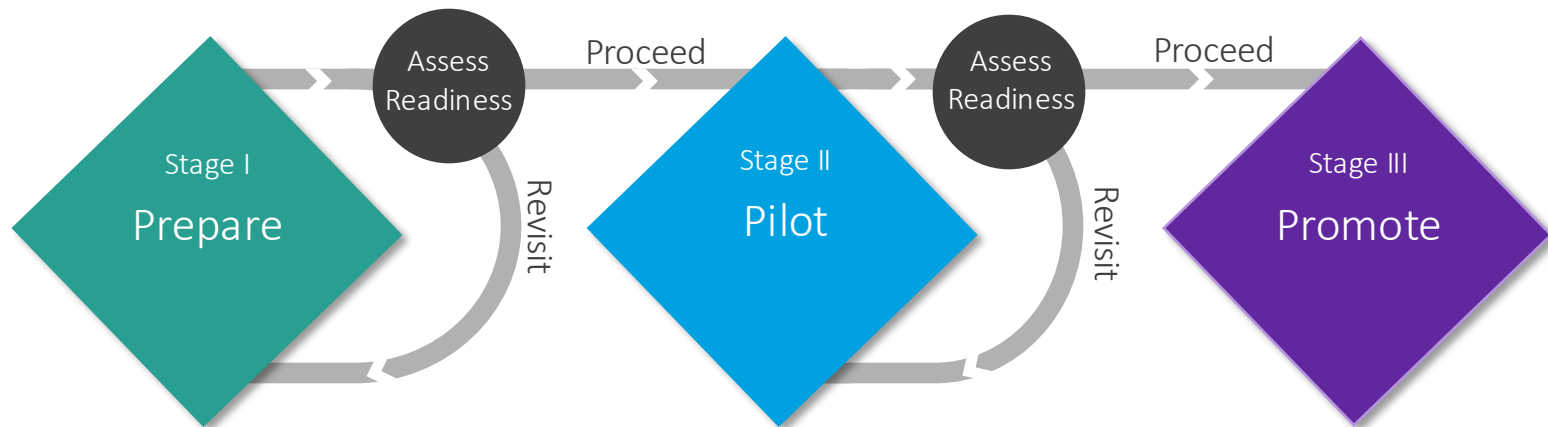


A third-party entity brought in to support pilot launch and implementation of digital platform

**Key Responsibilities:** Support the multi-agency working group to provide features that meet the needs of end users and facilitate the pilot by providing resources and personnel when needed

**Key Characteristics:** Technology provider understands the challenges and presents possible solutions to the multi-agency working group

This playbook can help agencies plan and execute the implementation of a digital platform for medicolegal information sharing.



During the Prepare stage, the champion and the multi-agency working group come together **to identify and define the challenge and solution space**, define success, assess readiness for change, and focus on a shared goal.

The Pilot stage is **to test change within a system on a smaller scale** and to evaluate whether broader implementation is the appropriate solution for the system and is feasible.

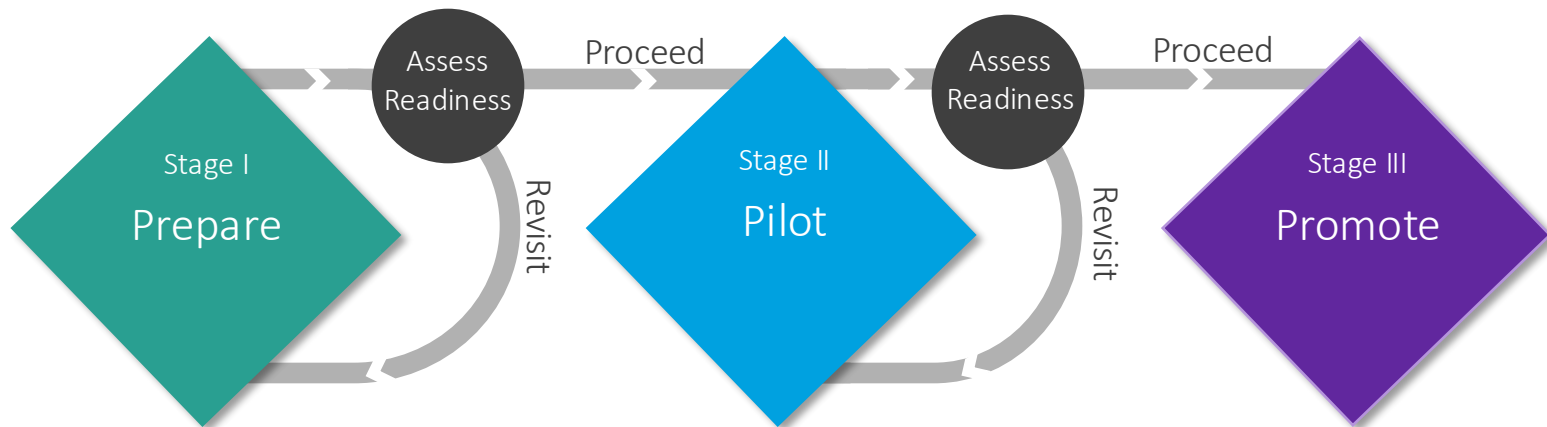
The Promote stage is focused on **scaling up**. It comes after the working group has evaluated the successes and shortcomings of its proposed solution and decided it addresses the needs of the broader system.

Assess  
Readiness

Each stage requires a massive amount of work, resources, and commitment across several stakeholders. It is important to pause and check for alignment between the problem and solution, and that all components are in place to be set up for success in the next stage. Be open and honest when evaluating readiness. **When necessary, it is reasonable and encouraged to go back and iterate on previous steps** to see whether the working group lands at a different place that is better positioned to move to the next stage.



Each stage in the playbook contains recommended steps and suggested activities for the champion and multi-agency working group to increase the likelihood of a successful implementation.



1	Form a Multi-Agency Working Group (pg. 12)	4	Determine User Needs & Requirements (pg. 21)	9	Sustain Change (pg. 34)
2	Assess Organizational Readiness (pg. 14)	5	Selecting a Software Platform (pg. 23)	Icons	 Best Practices
3	Align Goals & Define the Problem to Solve (pg. 16)	6	Plan the Pilot (pg. 25)		 Take Caution
		7	Manage the Pilot (pg. 28)		 Callout to Case Study
		8	Assess the Program (pg. 30)		

## Case Study: Best practices for transformational systems change presented here are rooted in lessons learned from a pilot software implementation program across four counties.

**RTI International responded to an OVC call to action to improve technologies for assisting victims of crime.**

The OVC FY2020 Advancing the Use of Technology to Assist Victims of Crime (OVCAT) project, led by RTI, had an overall goal to improve the support, care, and protection offered to victims of interpersonal violence by expanding and enhancing existing technology to enable multidisciplinary collaboration among health care providers, law enforcement, prosecutors, and victim service providers.

One of the OVCAT objectives was **to create a streamlined, digital system for completing and transmitting forms to address the issues around mandatory reporting and forensic examination documentation.** For this effort, RTI worked with several partners to create a secure online reporting platform. The goal of this platform was to provide forensic examiners with a single system that housed all the forms they needed and allowed them to send reports to other users (e.g., law enforcement and victim service providers).

**The software developed through the OVCAT project had several end users in mind.**

The system was designed to support seven user types across medical, criminal legal, and service organizations: (1) forensic exam team leads, (2) forensic examiners, (3) law enforcement officers, (4) victim service providers, (5) victim witness advocates, (6) hospital billing administrators, and (7) general health care providers. Forensic exam team leads were the point of contact for the developer and for the research team. The first phase of the study included scoping sessions with potential users to inform technology development. The second phase was an implementation evaluation.

**There was no one-size-fits-all solution across four counties in California.**

The software developed under the RTI OVCAT project was piloted in four counties in California. Through local and state stakeholder interviews, the team found that non-accidental and interpersonal violence reporting and forensic examination documentation received by law enforcement varied greatly across the state. Each county had its own system challenges, varying degrees of buy-in across stakeholders, reasons to implement a new software system, features it found essential, and ultimately, different degrees of willingness to adopt a new software.

# PREPARE

---

## Stage I

1

Form a Multi-Agency  
Working Group

2

Assess Organizational  
Readiness

3

Align Goals & Define the  
Collective Problem to Solve

# STEP 1: Establish a Multi-Agency Working Group

A multi-agency team requires stakeholder agency buy-in to galvanize system-wide change.

## Introduction

At its core, multi-organization systems change is a team effort that requires the insights and expertise from multiple agency stakeholders as well as open communication and sustained commitment from all involved to achieve success. From the onset, it will be important to establish a strong collaborative team comprising diverse members across the multi-agency system. This team needs to work collaboratively to identify pain points, potential solutions, make decisions, disseminate information, and monitor the rollout and implementation success of a chosen solution.

**It is important to know who within the system needs to be at the table helping lead the charge and making decisions.** For a new medical evidentiary exam documentation system, users of the system may include forensic examiners, law enforcement officers, victim witness advocates, victim service providers, and others working to improve outcomes for victims and increase public safety. Each of these potential users could be agency representatives.

## Why This Matters

*The success of implementation depends on the formation of strong collaboration and commitment at the onset. Representation from across a system is needed to fully understand the challenges of different stakeholders, agree upon a solution that meets the needs across the system, and ultimately invigorate a willingness to try something new.*

### Key Considerations

- ☐ Identify a **champion** to engage **stakeholders**.
- ☐ Determine the appropriate stakeholders, such as necessary agencies or departments (consider using the stakeholder mapping exercise).
- ☐ Obtain **buy-in** from these stakeholders.
- ☐ Decide on an **agency representative** to be a part of the multi-agency working group.
  - ☐ Once the working group is established, check in with agency representatives to ensure each is committed to propelling the effort forward and working as a liaison to their agency.
- ☐ Establish roles, responsibilities, and norms for the multi-agency working group.
- ☐ Agree upon channels of communication and develop a communication plan for the full range of vested stakeholders.
- ☐ Set meeting cadence and establish clear dates for goals and action items.
- ☐ Confirm each stakeholder's role within the system and ensure each stakeholder is aware of the role of every other stakeholder.



Soliciting buy-in from across a complex of social systems can be challenging. It may take a few attempts and reframing of the challenge to bring people on board. Identifying a champion who can involve stakeholders can help in this effort.

# STEP 1: Establish a Multi-Agency Working Group

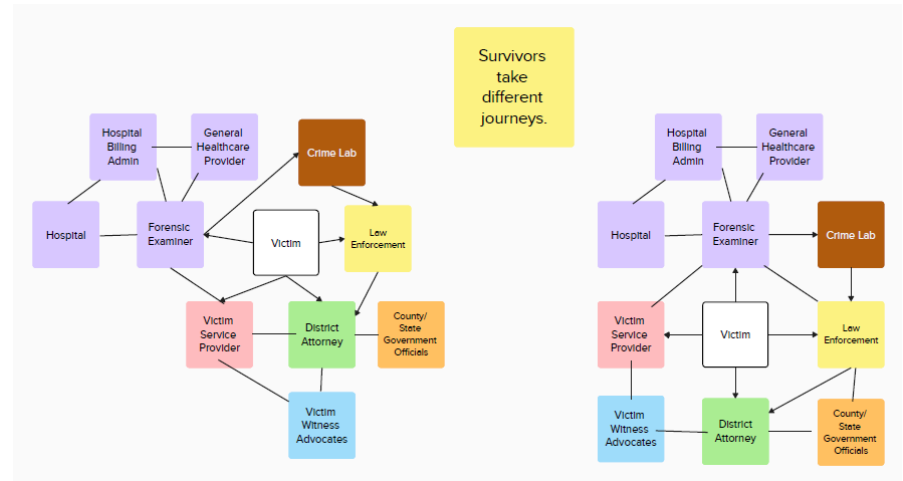
Draw a stakeholder map to identify key players and clarify where you need to generate buy-in to form the working group.

Formally mapping the various stakeholders can help build understanding of who is involved in the system, define what they care about, and determine how much influence they have. Understanding who is involved helps to see the full landscape of people needed and how they influence the system. Defining what various stakeholders care about can help generate agency-specific benefits to be communicated when soliciting buy-in. Determining the amount of influence held by different stakeholders can help prioritize outreach efforts to individuals, without whom systems change would not be possible.

This exercise can be completed by the champion(s) before a working group has been established or after a small coalition has come together to identify any additional stakeholders whose buy-in is needed to implement change.

## Activity – Stakeholder Mapping

(See Appendix A for full instructions.)



### What is it?

A visual way to identify key players that influence the outcome of a project

### When to use it?

When generating an understanding of all levels of influence for an organization or system

### What do you get?

An understanding of who is involved and who interacts with whom, to brainstorm how to obtain buy-in



Although it may be tempting to pull in a software developer as a member of the working group, it is recommended that these voices are brought in later in the development of a solution. This way, the multi-agency working group can think through its system challenges and arrive at the best possible solution without a particular tool or approach shaping the identification of the needs of the group.



## STEP 2: Assess Organizational Readiness

A favorable outlook on readiness by key opinion leaders can be a predicator of implementation success.

### Introduction

Readiness can broadly be described as the **willingness** and **ability** for a system to support change. A system demonstrates readiness when there is agreement at all levels of the organization regarding the effort required to plan the implementation, resource availability to execute implementation, and acknowledgement of the impact contextual factors may have on both.

To implement a new system for medical evidentiary exam documentation practices for non-accidental injury, readiness should be evaluated across four dimensions at each participating organization within the multi-agency working group:

- (1) Infrastructure: Material, human, and informational resources
- (2) Institutional policy and practices: Cultural influences that foster change
- (3) Finance: Financial factors that may influence the scope of the change
- (4) Leadership buy-in: Support from executive personnel who are directly or indirectly impacted

### Why This Matters

*Securing the necessary resources will set the foundation for developing an effective solution to meet the needs of stakeholders while bringing value to victims of interpersonal violence. This is an important step toward cementing the collective resolve necessary to catalyze sustainable change.*

### Examples

#### Infrastructure

- ☐ High-speed internet access
- ☐ Desktops, laptops, tablets
- ☐ Forensic documentation transfer, including of images
- ☐ Dedicated resources

#### Institutional Policy and Practices

- ☐ Quality metrics of interest such as patient satisfaction
- ☐ Legal requirements such as HIPPA and liability assessment
- ☐ Existing protocols and standard operating procedures
- ☐ Established data-sharing agreements

#### Finance

- ☐ Budget allocations
- ☐ Revenue/reimbursement targets

#### Leadership Buy-In

- ☐ Executive management representatives
- ☐ County representatives and elected officials

## STEP 2: Assess Organizational Readiness

Complete a readiness assessment for each agency within the working group.

A prospective evaluation of a system's readiness potential should be performed before investing time and resources into solution development. It has been demonstrated that the perception of readiness by individuals within an organization can be a predictor of eventual outcomes. It is important to disseminate the assessment to individuals at all levels of the organization, from those in leadership roles and those who will be executing the systems change, to those who may be impacted downstream.

To complete the readiness assessment, an exercise established by the Information Technology Leadership Academy, solicit input from each agency partaking in the working group.

Encourage **honest** and **transparent** communication while ensuring the confidentiality of identities. Aggregate responses to inform the readiness potential.

## Activity – Readiness Assessment

(See Appendix B for full instructions.)

No.	Question	Score
<b>Infrastructure</b>		
1	Current processes and workflows related to documentation practices of the medical evidentiary exam for non-accidental injury are understood within each agency.	
2	Medico-legal documentation forms to be reviewed, revised as needed, and included in the project have been defined.	
3	IT support is available or will be made available to support implementation planning and execution efforts.	
4	Personnel impacted directly or indirectly by implementation planning and/or execution are equipped with the necessary infrastructure (e.g., internet access, laptops, phones, tablets).	
5	Assessments concerning potential liability concerns have been understood and documented at each agency.	
<b>Average Score</b>		

### What is it?

A survey distributed to individuals representing each participating agency

### When to use it?

After problem identification but prior to solution development

### What do you get?

An objective evaluation of the the perceived readiness for change implementation



An average score below 4.0 for any of these categories indicates that the agency is not demonstrating readiness in that area, and the team should spend efforts addressing that gap and/or building more support prior to proceeding with implementation.

# STEP 3: Define the Problem and Vision for Success

Develop an understanding of where the system is at present and where it should be.

## Introduction

The multi-agency working group must develop a comprehensive understanding of the current state of the system to develop a solution that is sustainable for stakeholders and brings value to victims of interpersonal violence. Once the norms of baseline operations have been established, the team can take the next steps toward problem space identification.

A root cause analysis is the process of dissecting a system into distinct characteristics to identify the fundamental gaps that are resulting in an unfavorable outcome. Gaps can take the form of **performance gaps**, wherein the system falls short of expectations, as well as **opportunity gaps**, wherein there is potential to innovate and add value. Understanding the impact of the gap on the overall system can help prioritize which ones to address first. Attempting to address them all at once may result in a dilution of results. Priority should be given to those where a change will result in the greatest value-add to victims as well as stakeholders of the system.

## Why This Matters

*Without a thorough root cause analysis led by a multidisciplinary group, there is a risk of developing a solution that does not result in meaningful change or value to the stakeholders or victims.*

## Measure of Success

Once the working group has established an understanding of the baseline state of operations as well as gaps within the system, it is important to articulate what the solution will improve and why we believe it will happen. Also known as a theory of change, it connects the dots between actions to be taken, potential outcomes, and systems change. This framework will help the working group understand how steps taken to streamline the documentation and communication of medical evidentiary examinations will have a positive impact on the treatment of victims of interpersonal violence. This exercise should be completed in consultation with stakeholders both directly and indirectly impacted to determine the feasibility and viability of the working hypothesis.

## Example



**Gap:** Victims of interpersonal violence do not or are not connected to support services after receiving medical support.

**Success:** Victims who consent to and want to be contacted are followed up with by supportive services within 24 hours.

## STEP 3: Define the Problem and Vision for Success

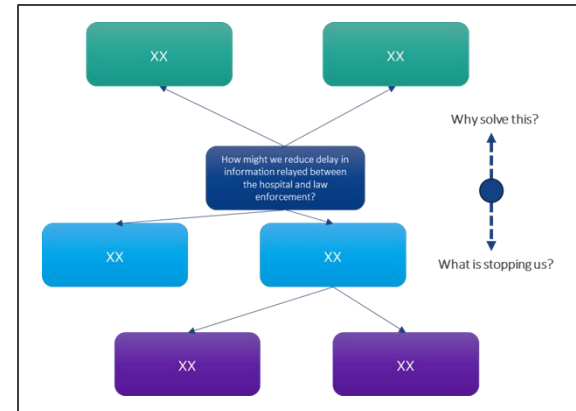
### Develop a collective organizational change sentiment through root cause analysis.

This two-part activity begins with challenge mapping—an exercise focused on understanding the interconnectedness of elements within a system that require change. Over the course of this activity, complicated processes are distilled down into discrete questions that encourage and facilitate dialogue. This allows stakeholders approaching a problem from a variety of perspectives to align around a shared understanding.

Once there is consensus around a particular area of focus, the group should author a collective organizational change statement summarizing the problem at hand and why it is important. This statement will serve as a guiding sentiment while the team seeks to explore solutions to overcome the challenge identified.

## Activity – Challenge Mapping

(See Appendix C for full instructions.)



### What is it?

A root cause analysis methodology that asks the questions of why a problem is worth solving and what might get in the way

### When to use it?

When you want to develop a shared understanding of a problem space in collaboration with multidisciplinary stakeholders

### What do you get?

A visual representation of the problem space in order to prioritize challenges for solution development



Attempt to ask “5 whys” to develop an in-depth understanding of the problem space. There are many exercises that help uncover root causes that may be complementary to the challenge map, such as a [fishbone diagram](#).

## STEP 3: Define the Problem and Vision for Success

Develop a collective organizational change sentiment through a theory of change exercise.

Using the organizational change statement as inspiration, the team can embark on developing a framework for their theory of change, an activity that will be referred to upon completion of a pilot program to evaluate success. The exercise is broken down into three hypotheses for **short-term change**, **mid-term change**, and **long-term change**.

A relationship is developed between discrete and incremental activities performed and the outcomes they illicit. Those activities may be inspired by the challenge mapping activity previously completed. The impacts of those outcomes are captured along with the corresponding ripple effects. With substantial impact along with ripple effects, it is possible to influence greater systems change. The mad lib exercise asks users to not only hypothesize a series of causes and effects, but also document logic-based rationales to support those claims.

## Activity – Theory of Change Mad Lib

(See Appendix D for full instructions.)

Short-term	If we do _____ [activities] then we will affect _____ [outcomes] because _____ [rationale]
Mid-term	If we create these outcomes, then we expect to have the following impacts on _____ [impact] because _____ [rationale]
Mid-term	If we have these outcomes and impacts, then we expect to see ripple effects on other aspects of the system such as _____ [ripple effect] because _____ [rationale]
Long-term	If we have these impacts and ripple effects, then we expect to see these fundamental changes to the system _____ [systems change] because _____ [rationale]

### What is it?

A framework for capturing the relationship between short-term changes and long-term impact on the system

### When to use it?

Once the team has identified select areas of focus on but prior to solution development and implementation

### What do you get?

A hypothesis for the change the team is seeking to catalyze through their solution development and implementation



The challenge mapping and theory of change exercises are intended to complement one another, the former taking a top-down approach and the latter a bottom-up approach to breaking down systems change into its most fundamental components. They serve as a system of checks and balances; if your theory of change exercise does not result in the systems change envisioned in the challenge mapping exercise, re-examine your assumptions and rationales.



# Assess Readiness

Complete the following readiness assessment prior to advancing to the Pilot stage.

## Are you ready to move to the Pilot stage?

---

- ✓ Has each agency committed a representative from their organization to the working group?
- ✓ Has the working group established open channels of communication and working relationships?
- ✓ Does a technology-based solution address the problem?
- ✓ Can the challenge(s) identified be solved with something other than a technology-based solution?
- ✓ Are there non-tech alternative solutions that should be considered first?
- ✓ Has the multi-agency working group been equipped with the resources necessary for conducting a pilot program?
- ✓ Is there buy-in from essential leadership and key opinion leaders?
- ✓ Do all agencies exemplify signs of organizational readiness for change?
- ✓ Does everyone and every agency understand their motivation for change?
- ✓ Has the agency/county demonstrated success in implementing technology solutions in the past?
- ✓ Has the working group developed a joint statement of organizational commitment?

# PILOT

## Stage II

4 Determine User Needs & Requirements

5 Selecting a Software Platform

6 Plan the Pilot

7 Manage the Pilot

8 Assess Pilot Success & Learnings

# STEP 4: Determine User Needs and Requirements

Understand what is required of a software system to identify the best fit with end users and facilitate implementation.

## Introduction

Since the end users across the multi-agency system are the ones who will need to implement and eventually adopt the technology, it is important to prioritize their needs and requirements from a software. This will help to secure a software system that improves upon previous practices and is a product with capabilities end users are willing to implement. This effort will require gathering information from conversations with agency stakeholders across the system.

**Ideally, this step is taken before engaging with software companies.** Working through this step first will help avoid purchasing a software that does not meet the needs of the users or paying for features that are not needed. In this way, the multi-agency team can focus on finding the best-fit platform that ultimately addresses the pain points identified in the previous challenge mapping exercise and keeps the system and its people at the center.

## Why This Matters

*Talking directly to end users will ensure alignment between their requirements and the features of the software to be adopted. Bypassing this step introduces the risk of choosing a product that users will not fully use on a day-to-day basis.*

## Key Considerations

- ☐ Identify areas of misalignment between stakeholder agencies from the previous challenge mapping exercise.
- ☐ Determine history and comfort level with technology and openness to change of potential end users.
- ☐ Determine the kind of access various users will need—for example, access to specific patient records or agencies with whom to relay information.
- ☐ Decide on the essential features needed from an information-sharing platform, such as interface preferences, communication capabilities, security, and data storage.
- ☐ Identify platform dealbreakers that would preclude stakeholders from using it, such as being unable to turn off features for a particular user.
- ☐ Determine what the system does and does not need to do for users to adopt the system.



In the pilot project, two main types of users were identified: documentation generators and documentation receivers. Prior to implementation, the team found that it was important to determine whether a memorandum of understanding was needed to transfer information to any new documentation receiver.

## STEP 4: Determine User Needs and Requirements

### Activity – Interview Guide Development

Build an interview guide to structure conversations with future end users to understand required capabilities.

Soliciting input directly from end users will be a key component to homing in on the requirements for a new information sharing technology. This can be done through surveys or **interviews** to gather qualitative data to inform the decision on which software platform is the best fit for the system challenge. When possible, interviewing several stakeholders within each agency can help uncover patterns related to experiences and needs. However, talking to a representative of the agency that can share the broad needs of the members of the department will also help gather important information about the nuanced patterns and variations across agencies. Engaging in conversation with stakeholders across each agency will not only provide insights on the right software tool to adopt, but also build rapport and trust with members of the agency, who will appreciate that their voice is being taken into consideration during the decision-making process.

#### Example End-User Interview Questions

##### *Understanding Current Processes and Practices*

- Tell me about your current experience with your information sharing system?
- How do you currently file reports?
- How does information move within the system?
- How often do errors occur?
- How does your agency know they have received all the reports sent from the hospital?
- Is there information you do not receive that would assist you in reaching the victim?
- Are there any challenges or program being encountered related to receiving or accessing information on victim referrals made by hospital staff, health care providers or the forensic exam teams?
- What aspects of your current method would you keep? What are things that you would change?

#### What is it?

A tool with standardized questions to guide conversation and gather information needed for informed decision-making

#### When to use it?

When working, to identify the kinds of supports and features required by different users that could be met by a technology

#### What do you get?

Insights around the specific needs of users to help identify a best fit software to be adopted across the multi-agency system



Whether through an interview, a survey, or impromptu conversation, it is important to gather information while also being transparent with end users about the goals and hopes for implementing a new software system.

# STEP 5: Selecting a Software Platform

Identify a platform that can meet the needs of all stakeholders and bring value to victims of interpersonal violence.

## Introduction

It is important to pause and reflect on input gathered as a part of the exercise of collecting user needs and requirements before attempting solution development. At this juncture, the team may have a myriad responses representing various perspectives from across the continuum of care. It is up to the multi-agency working group to distill down the data gathered into what matters the most and prioritize needs.

Requirements may be evaluated for prioritization through various lenses, including but not limited to:

- **Accessibility** – improving access to resources for victims of interpersonal violence
- **Affordability** – working within budget for each agency while ensuring a custom solution to meet the unique needs of each stakeholder
- **Inclusivity** – including provisions to accommodate to the circumstances of minority groups
- **Efficiency** – improving workflow efficiencies on both an inter and intra agency level
- **Effectiveness** – enhancing the quality of care available to victims

## Why This Matters

*Digital solution implementation can be a costly endeavor. It is critical to carefully and objectively evaluate various software providers based on the features and services they offer to meet the needs of stakeholders.*

### Cross reference top priorities with options available to arrive at a selected service provider

Once results for user needs and requirements have been consolidated and prioritized, the team can isolate the most important one as criteria for selecting a software provider. The working group has the option of either creating a custom platform, implementing an off-the-shelf solution with some customization, or adopting an off-the-shelf solution as is. While there are pros and cons to each approach, developing a platform from scratch is likely to be more time and resource intensive.

#### Additional Resources

As an example, [this guide](#) outlines key considerations for buying versus building a solution for an evidence tracking system for sexual assault kits



In the pilot study, a software provider was selected as the preferred partner due to their previous experience creating electronic versions of state required forensic examination forms. They worked closely with forensic exam team leads to prioritize features that would help their examiners complete forms efficiently.



## STEP 5: Selecting a Software Platform

Rank user needs based on critical elements and use them as criteria to select a software provider.

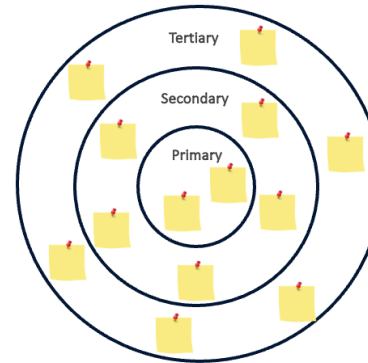
This two-part activity begins with a collaborative exercise in needs prioritization followed by an evaluation of potential solutions against the selected criteria. These are intended to aid the team in determining the scope of the solution and, by extension, the value that it will be adding to the system and stakeholders—most importantly, victims of interpersonal violence.

This can be used as a tool to bring everyone onto the same page and to ensure that the platform of choice meets all requirements set forth by the working group. Using a numerical system for ranking allows for an apples-to-apples comparison between different solution options and an insight into the thought process the team applies to arrive at a final decision.

These exercises should be done in the prescribed sequence to help the team align on what the solution sets out to accomplish.

## Activity – Needs Prioritization and Evaluation

(See Appendices F and G for full instructions.)



	Solution No. 1	Solution No. 2	Solution No. 3	Solution No. 4
Requirement No. 1	0	2	1	2
Requirement No. 2	2	1	1	1
Requirement No. 3	1	0	0	1
Requirement No. 4	1	0	0	2
Total	4	3	2	6

### What is it?

A series of activities to (1) rank user needs based on order of importance, and (2) compare available solutions

### When to use it?

Data from stakeholder interviews are available and the team is aware of software providers and their capabilities

### What do you get?

Insight into what stakeholders across the ecosystem value and the right partner to execute that vision



Limit the number of criteria that can be prioritized in the inner circle and keep in mind that needs that are placed in the secondary or tertiary category are still important but take a lower priority.

# STEP 6: Plan the Pilot

Establish a roadmap for software rollout and pilot launch.

## Introduction

Having made it this far and being so close to implementation could tempt teams to rush this step, but it is important that a well thought out plan is established first. This plan will serve as the **roadmap** for the successful launch of the pilot. Since the goal is to test the fit of the software with the needs of the multi-agency system, it is key to anticipate as many factors as possible that may influence the pilot. This will help ensure a fair evaluation of the software, rather than preparedness. At this step, it will be helpful to work with the software service provider to establish protocols, confirm alignment between the platform and user-needs, learn about software implementation best practices, and confirm that technical support will be provided if it is needed during the pilot.

Additionally, part of the evaluation of the software will involve **establishing a baseline** of how the system operates currently to be able to compare to when assessing the benefits of the software. Define reasonable **goals** to accomplish in this pilot that align to the metrics of success determined in Step 3.

## Why This Matters

*The success of implementing a new software across a multi-agency system is dependent on the planning that proceeds it. There are several stakeholders involved, multiple components to consider, and strategies that will need to be decided on prior to launch.*

### Key Considerations

- ☐ Establish a rollout strategy to identify who needs to be involved, when, and in what capacity.
- ☐ Provide clear channels of communication.
  - Review software approval requirements (IRB and organizational).
- ☐ Draft a timeline for software development needs.
- ☐ Define three to five goals for the pilot based on the metrics of success determined in Step 3 to establish how the pilot will be evaluated.
- ☐ Establish uniform definitions for the functionality of the software.
- ☐ Determine roles and responsibilities in the pilot:
  - ☐ Within the organization (e.g., a technology administrator personnel to manage rollout-related questions)
  - ☐ With the software provider (e.g., point of contact to troubleshoot unexpected hurdles)
- ☐ Determine the necessary trainings, SOPs, and post-launch technology support for users.
- ☐ Develop criteria and procedures to make changes based on feedback.
- ☐ Build an implementation protocol in written format and make this accessible to all agencies.
- ☐ Enroll individuals into pilot test.
- ☐ Ensure end-user readiness prior to pilot launch.

## STEP 6: Plan the Pilot

Organize tasks to prepare for pilot launch in a Gantt Chart.

A **Gantt Chart** is a project management tool that displays tasks and activities along an axis of time. This will be a helpful way to organize the planning process and ensure that all the necessary pieces are in place prior to rollout. The Gantt Chart is a helpful visual that can

- exhibit all the tasks that need to be accomplished,
- show how different tasks relate to one another,
- track progress toward a goal,
- determine whether that progress is happening according to the planned schedule,
- communicate a plan across a large team,
- display who is responsible for what tasks,
- create a sense of accountability,
- increase transparency, and
- support time management.

## Activity – Make a Gantt Chart

Tasks	Week 1							Week 2						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	●	●	●	●	●	●	●							
2							●	●	●	●	●	●		
3									●	●	●	●	●	●
4									●	●	●	●	●	●
5												●	●	●
6						●	●	●	●	●	●	●	●	●

### What is it?

A project management tool to show what tasks need to be done and when

### When to use it?

Once necessary tasks to be accomplished are established to organize them along a timeline

### What do you get?

A visual representation of the necessary tasks that need to be taken prior to the rollout



As part of the pilot project, a critical decision ahead of implementation was determining who would be the **System Administrator (SA)**. The SA made sure that each participant created and set up a user account and encouraged additional participants to create accounts at different stages of the pilot. They also managed access permissions on the platform and provided a point of connection to ensure system adoption. The multi-agency working group should determine how many SAs they will need and collaboratively decide who will fill the SA role.

## STEP 6: Plan the Pilot

Process evaluation addresses *how* an outcome or change is achieved.

Establishing a method to **evaluate the process** of implementing a new software system will help the multi-agency team and stakeholders understand **how** change was achieved. Process evaluation differs from outcome evaluation in that it focuses on **understanding the path** to getting to change, whereas the latter addresses how effective a solution is at producing change. The difference between outcome versus process can be seen in the phrasing of questions:

**Outcome evaluation:** *Did the software decrease the amount of time between a victim of interpersonal violence's hospital visit and law enforcement response?*

**Process evaluation:** *What trainings or resources were established to facilitate software adoption?*

Planning to collect feedback in an organized way and setting up systems to keep track of the resources disseminated and procedures implemented will make process evaluation easier and enable longitudinal data collection.

## Activity – Establish a Method and the Data to Collect for Process Evaluation

Process Evaluation Research Questions	Data Sources	Example Measures
What are the processes, staffing, and oversight for the use of the technology for hospital-based staff?	<ul style="list-style-type: none"><li>Document review</li><li>Administrative data</li><li>Leadership and staff interviews</li></ul>	<ul style="list-style-type: none"><li>Team meeting minutes and notes</li><li>Manuals or standard of practice documents</li></ul>
What measures and procedures (e.g., continuous quality improvement) are used to measure how hospital-based users are using the platform and if it is improving past practices?	<ul style="list-style-type: none"><li>Document review</li><li>Administrative data</li><li>Leadership and staff interviews</li></ul>	<ul style="list-style-type: none"><li>Training materials</li><li>Program memos, reports</li></ul>

### What is it?

A way to prepare for the process evaluation to assess a new software, program, or project

### When to use it?

In preparation for evaluating the implementation of a system during the plan the pilot phase

### What do you get?

A plan to evaluate implementation processes, procedures, protocols, and communication



It is key to lay the groundwork for a process evaluation early to understand the successes and setbacks of implementing the pilot and the software. Although a thorough outcome evaluation won't occur until after the pilot is complete, gathering data throughout the pilot and assessing as it progresses will provide insights into the various factors that either promote or hinder the use of a new software system technology.

# STEP 7: Manage the Pilot

Maintain awareness of how the pilot is progressing and respond to end-user feedback.

## Introduction

The pilot has launched! Now, for the duration of the trial period, it's time to keep the pilot afloat and gather insights into how it's working. To effectively manage the pilot, it will be important to maintain the established **channels of communication**. These will be necessary to receive ongoing **feedback** to provide support in real time. It's unlikely that the pilot will run without any challenges, so being responsive to issues as they arise is key to sustaining the pilot.

These channels will also be important to collect data to track key success metrics and monitor the impact of the software system. In the feedback received, it will be important to note **who** provided it, **where** it came from in the system, and **when** during the process it was provided. Although a lot of feedback may focus on the things that are *not* working, especially at first, it will also be important to keep a pulse on the things that *are* working. This might require surveying end users on their experiences every few weeks and requesting both a positive and a negative.

## Why This Matters

*Oversight of the pilot is required to sustain and monitor its progress. This is important to ensure that end users feel supported in their effort to use the software and ultimately affect system change.*

### Key Considerations

- ☐ Collect feedback systematically and often, capturing the Who, Where, and When, to understand what could be helpful to encourage adoption.
- ☐ Update protocols and procedures based on user feedback.
  - ☐ Refine platform configuration, features, and workflow as needed.
- ☐ Provide ongoing trainings to keep end users up to speed on any modifications made to the software system.
- ☐ Track progress of key success metrics to monitor the ability of software to provide solutions to system challenges.
- ☐ Document changes and keep track of why they were made.
- ☐ Be prepared for unexpected software glitches and fail points.
  - ☐ Communicate glitches to end users when they occur.
  - ☐ Actively work with the software developer to identify a solution.
- ☐ Expect some end users to need time to get used to the software and potentially to give up if they feel discouraged.
  - ☐ Provide support (additional training, Q&A sessions, help line).
  - ☐ Check in with users to ensure they have what they need.
  - ☐ Build in time to give users a chance to adjust to the newness.



## STEP 7: Manage the Pilot

Perform an end-user inquiry to understand how the pilot is progressing in the environments it is used in.

A discussion with the end user while the pilot is in progress provides an opportunity for an inquirer, someone from the multi-agency working group, to understand end-user engagement with the software being implemented. During this time, the inquirer can ask about a user's experience with the goal of learning what is and is not going well. Approaching a situation without any preconceived notions and with a **learner's mindset** allows the inquirer to **openly receive insights**, both the pros and the cons, of a user's experience with a technology.

The benefits of engaging in this way can

- elucidate benefits and limitations that would not arise without first-hand engagement,
- deepen an inquirer's empathy for others,
- challenge an inquirer's assumptions, and
- build credibility between those in charge of implementation and the end user.

## Activity – End-User Inquiry

Template for End-User Inquiry Research	
Research Objective ( <i>What do you want to learn from the end user?</i> ):	
Date:	Inquirer(s):
Time:	Participant(s):
Location:	
Greeting and Introduction	
Question Prompts <i>What is your overall experience with the software?</i> <i>What is your experience logging in to the software portal?</i> <i>What is your experience with X, Y, Z feature(s) of the platform?</i> <i>What aspects of your workflow have and have not been improved with the software?</i> <i>What has been the biggest hurdle to using the software?</i> <i>If you could make an improvement on the software, what would it be?</i>	
Notes	

### What is it?

An ethnographic research method to gain insights into the experience of end users

### When to use it?

When wanting to obtain objective observational data on how end users experience a new system

### What do you get?

First-hand insights into what is and is not working about a system, through active listening



Stay positive and express appreciation! Provide end users with encouragement and thanks that emphasizes awareness of the effort going into implementing a new system and how challenging it can be.

## STEP 8: Assess the Program

Evaluate the pilot, platform, and problem by soliciting and analyzing feedback.

### Introduction

At the conclusion of the pilot exercise, participants may be left with perceptions about their experience that could have ramifications on long-term buy-in and adoption. It is important that the working group assess the feedback as a whole while drawing correlations between an individual's experience and the layer of the program that it corresponds with—**the pilot, the platform, or the problem space**. The questions that need to be answered through these activities include:

- What went well and what didn't go well with the execution of the pilot?
- How will the usability of the platform impact long-term sustainability?
- Did the software platform address the problem(s) it was intended to?

The three-prong exercise detailed on the next page will help the working group obtain a comprehensive overview of effectiveness, efficiency, and satisfaction.

### Why This Matters

*Taking time to pause and reflect on the execution of the pilot will allow the group to determine what went well and what may need to be reworked prior to scaling the solution.*

### Key Considerations

Should the results of the process evaluation indicate that there were areas of concern with respect to the effectiveness, efficiency, and satisfaction of the solution or pilot implementation, consider the following steps to gain a better understanding:

- ☐ Gather a small focus group of three to five individuals for detailed feedback on what went well and opportunities for improvement.
- ☐ Relay solicited feedback to the appropriate parties, including the software provider if applicable.
- ☐ Set up a designated time for the multi-agency working group to discuss results.
- ☐ Develop a roadmap for addressing concerns.
- ☐ Repeat elements of the pilot execution as necessary to pressure-test modifications that were made based on feedback.

## STEP 8: Assess the Program

### Activity – System Usability Scale (SUS)

#### Perform Process Evaluation

To **assess the success of the pilot**, pull together the essential questions established, and the materials identified during Step 6 and outlined in Appendix I to perform the process evaluation. Guided by the essential questions that evaluate how the process was implemented, review the protocols, end-user inquiry notes from Appendix J, data collection plans, training materials, and any other documents to see whether their intended use and rollout plan align with the implementation goals.

#### Revisit Theory of Change

To **evaluate whether the platform developed indeed addressed the problem** at hand, revisit the theory of change activity completed during Step 3 and outlined in Appendix D. Curate objective evidence to support whether the short-term and mid-term hypotheses for change were realized. If they were not, evaluate what transpired that led to an alternative outcome. Based on existing outcomes, determine whether the anticipated long-term system change remains viable or whether it needs to be reworked.

(See Appendix K for full instructions.)

	Strongly Disagree				Strongly Agree
1. I think I would like to use this system frequently.	1	2	3	4	5
2. I found the system unnecessarily complex.	1	2	3	4	5
3. I thought the system was easy to use.	1	2	3	4	5
4. I think I would need the support of a technical person to be able to use this system.	1	2	3	4	5
5. I found the various functions in this system were well integrated.	1	2	3	4	5
6. I thought there was too much inconsistency in this system.	1	2	3	4	5
7. I would imagine that most people would learn to use this system very quickly.	1	2	3	4	5
8. I found the system very cumbersome to use.	1	2	3	4	5
9. I felt very confident using the system.	1	2	3	4	5
10. I needed to learn a lot of things before I could get going with this system.	1	2	3	4	5

#### What is it?

An established method to evaluate usability of the platform, administered as a survey

#### When to use it?

Upon completion of the pilot with participants who used the software platform

#### What do you get?

An evaluation of the platform's usability and a predictor of continued use



The System Usability Scale (SUS) exercise was developed as an efficient, effective way of evaluating the usability of a system or process. Despite the score calculation methodology, outlined in detail in Appendix K, the scores do not represent percentages. Instead, the process is intended to normalize scores.

# Assess Readiness

Complete the following readiness assessment prior to advancing to the Promote stage.

## Are you ready to move to the Promote stage?

---

- ✓ Is there sufficient evidence of success to warrant investing in a broader rollout of the solution to the community?
- ✓ Is there buy-in from essential leadership and key opinion leaders for scaling the solution?
- ✓ What gaps remain to be filled prior to broad rollout?
- ✓ Are there structural barriers to adoption that need to be addressed before scaling the solution?
- ✓ Does the multi-agency working group have the resources necessary for scaling the solution to additional users?
- ✓ Are the stakeholders required for scaling the solution committed to the change?
- ✓ Is there a desire to continue using the piloted technology in a broader context?
- ✓ Is there a clear return on investment and value proposition for the piloted technology?
- ✓ What is the opportunity cost of broader implementation of the solution, and is that acceptable to everyone?

# PROMOTE

---

Stage III

9

Sustain Change

# STEP 9: Sustain Change

Considerations to support the integration of a software solution into a multi-agency system workflow.

## Introduction

Even when a system seems like it is functioning by all quantitative measures, it may be failing to meet the needs of those it was created to serve. Systems changes challenge long-held assumptions and practices; however, intentional and incremental improvements can bring about monumental behavioral modifications. The key is to work with and within the culture that has been created, rather than against it.

Should the multi-agency working group decide to scale the software platform broadly after a successful pilot program, certain elements are critical to optimizing the rollout. Getting change to stick can be tricky, but steps can be taken to ensure it sustains.

The working group is now tasked with inspiring a larger audience to adopt the practices piloted and finding areas of cultural alignment to catalyze that change.

### Why This Matters

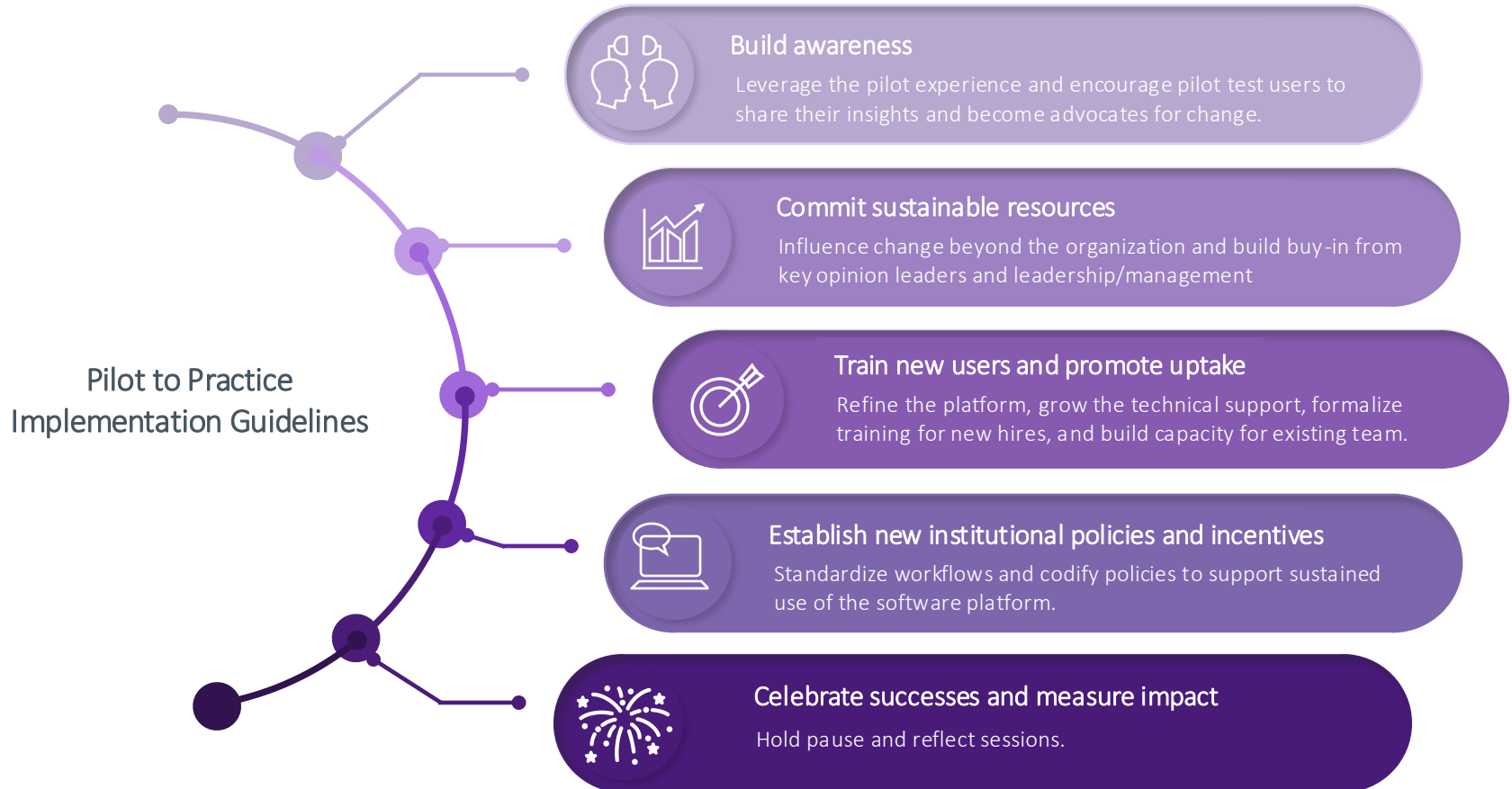
*The mechanisms and requirements to execute a controlled pilot exercise and large-scale implementation are different. Rollout introduces more actors into the platform yet decreases oversight. The infrastructure to support more users must be established with resources at the ready before issues arise.*

### Key Considerations

- ☐ **Create a sense of urgency:** Spread the message rapidly and repeatedly until it starts to gain familiarity and acceptance within the organization.
- ☐ **Form a strategy:** Implement the necessary infrastructural modifications to enable success including behavior modeling and Q&A sessions.
- ☐ **Enlist volunteer support:** Recruit volunteers to the initiative, especially those who are influential within the organization.
- ☐ **Enable action by eliminating barriers:** Be receptive to criticism and work collaboratively with team members to hear and respond to their concerns.

## STEP 9: Sustain Change

The following building blocks for performance are elements necessary to enable and sustain long-lasting systems change.





This playbook was created to equip changemakers with resources and tools to explore how technology systems can foster collaboration, catalyzing systems change to improve response for victims of interpersonal violence.

For more information, please contact:

Paige Presler-Jur  
Research Public Policy Analyst  
Workforce Wellbeing and Effectiveness Program  
[pjur@rti.org](mailto:pjur@rti.org)

Dr. Jaclyn Houston-Kolnik  
Community Research Psychologist  
Victimization and Response Program  
[jkolnik@rti.org](mailto:jkolnik@rti.org)

Dr. Stefany Ramos  
Behavioral Health Researcher  
Mental Health, Risk and Resilience Research Program  
[sramos@rti.org](mailto:sramos@rti.org)

Shwetha Maddur  
Innovation Advisor  
[smaddur@rti.org](mailto:smaddur@rti.org)

Dr. Anna Kudla  
Innovation Analyst  
[akudla@rti.org](mailto:akudla@rti.org)

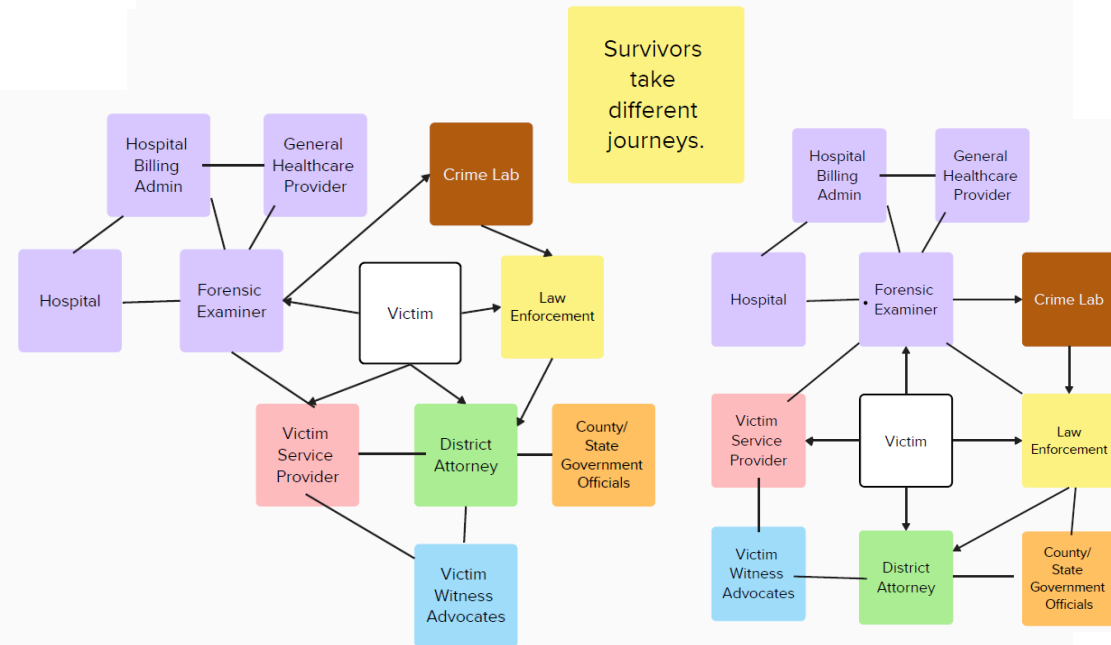
# Appendices

---

# Appendix A: Stakeholder Mapping

## How to use it

1. Bring together a diverse group of collaborators.
2. Define the topic to focus on.
3. Brainstorm a broad list of stakeholders.
4. Determine the primary stakeholders.
5. Represent the primary stakeholders as different shapes or colors.
6. Label these stakeholders with their role or title.
7. Draw a speech bubble around each stakeholder to summarize their mindset on this topic.
8. Draw arrowed lines to connect stakeholders.
9. Write labels on these arrowed lines to define relationships.
10. Circle and label related groupings.



## Additional Resources

- LUMA Resource on how to create a [Stakeholder Map with Templates and Examples](#)
- LUMA [quick guide and helpful hints](#) to get started on Stakeholder Mapping
- [Stakeholder Map template](#) from Mural
- Example of a [stakeholder mapping grid](#) exercise
- [Alternative step-by-step guide](#) from Enterprise Design Thinking from IBM

# Appendix B: Readiness Assessment

## How to use it

For each statement, determine a score based on the following scale. Calculate the average for each category once all line items have been scored:

- 1=Strongly Disagree
- 2=Disagree
- 3=Neutral
- 4=Somewhat Agree
- 5=Agree
- 6=Strongly Agree

No.	Question	Score
<u>Infrastructure</u>		
1	Current processes and workflows related to documentation practices of the medical evidentiary exam for non-accidental injury are understood within each agency.	
2	Medico-legal documentation forms to be reviewed, revised as needed, and included in the project have been defined.	
3	IT support is available or will be made available to support implementation planning and execution efforts.	
4	Personnel impacted directly or indirectly by implementation planning and/or execution are equipped with the necessary infrastructure (e.g., internet access, laptops, phones, tablets).	
5	Assessments concerning potential liability concerns have been understood and documented at each agency.	
<u>Average Score</u>		
<u>Finance</u>		
1	Financial resources for solution development at each agency have been allocated and are sufficient to cover implementation, piloting, and scaling efforts.	
2	Financial resources for solution development at each agency have been allocated and are sufficient to cover continued maintenance (e.g., licensing, cloud-based record retention).	
3	Revenue and/or reimbursement targets for the initiative are understood and agreed upon by leadership and the working group.	
4	Dedicated resources/staff have been made available for the duration of the program planning and implementation.	
5	Time has been allocated for broad staff training on the solution.	
<u>Average Score</u>		

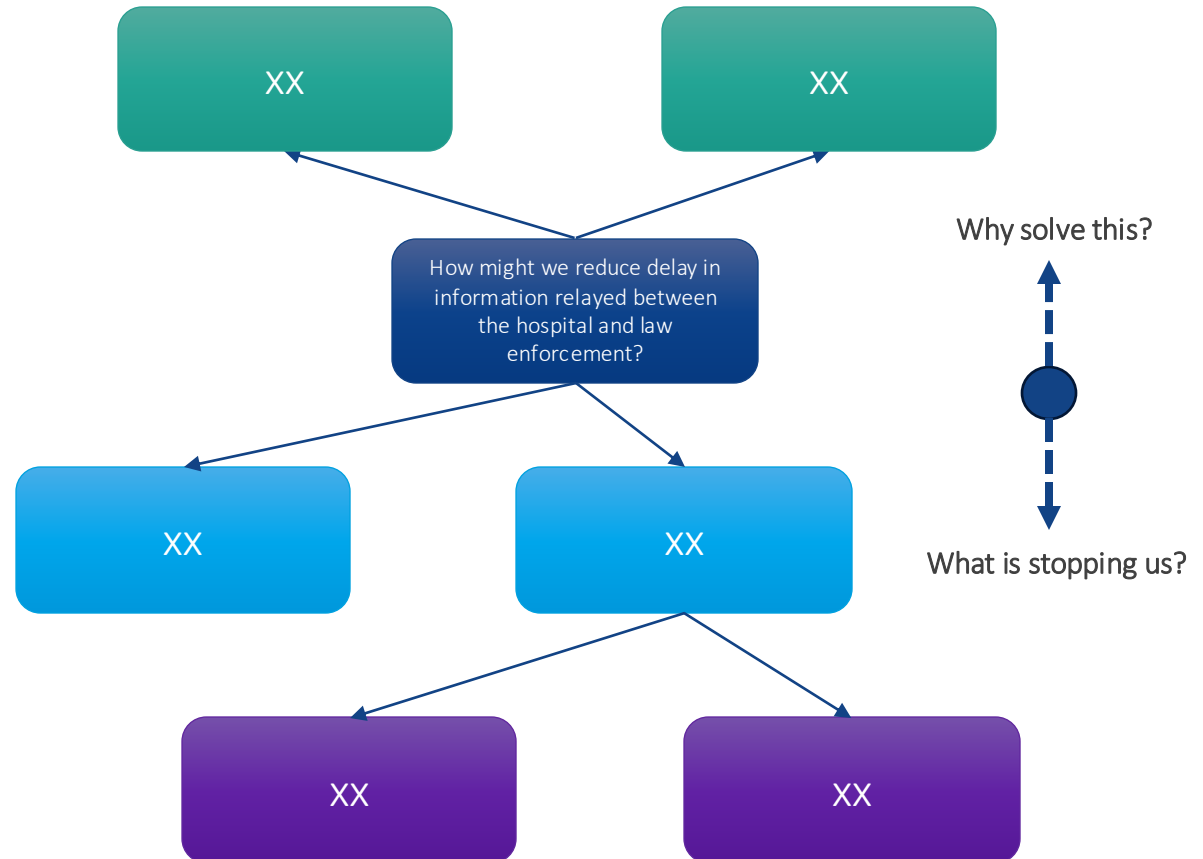
## Appendix B: Readiness Assessment Continued

No.	Question	Score
<u>Average Score</u>		
<u>Institutional Policies and Practices</u>		
1	System level agency change has historically been managed effectively and successes celebrated.	
2	Compliance to required medicolegal policies, such as HIPPA, are understood.	
3	Applicable standard operating procedures at the organizational level and county at large are understood.	
4	Applicable quality metrics are understood (e.g., timeliness of victim examination, availability of resources).	
5	Mechanisms for training personnel impacted directly or indirectly by the implementation are in place or will be established.	
<u>Average Score</u>		
<u>Leadership Buy-In</u>		
1	Leadership has the necessary authority over the people, processes, and systems to authorize and fund change initiatives.	
2	Stakeholders hear a consistent and unified message from various executive levels.	
3	Tactics have been developed for understanding and responding to resistance to change.	
4	Leadership is committed to resolving issues and making decisions about the change in project schedule, scope, and resources.	
5	A representative is committed from every participating agency.	
<u>Average Score</u>		

# Appendix C: Challenge Mapping

## How to use it

1. At the center of your challenge map, pose a question focused on the challenge at hand in a “how might we...” format to encourage an open-minded discussion.
2. Draw arrows upward from the central question to probe at why the solution should be solved.
3. Draw arrows downward from the central question to probe at existing barriers that are preventing progress.
4. Continue to expand the map in both directions using “how might we...” statements.
5. Identify 2–3 challenges to focus on for solution development.



# Appendix D: Theory of Change Mad Lib

## How to use it

1. In collaboration with members of the working group, begin filling out the mad lib from the top to the bottom.
2. Consult with stakeholders and key opinion leaders to ensure the feasibility and viability of the framework.
3. Ground the framework in evidence-based rationale.
4. Solicit input from unbiased third-party reviewers for feedback on the exercise.
5. Create a Theory of Change mad libs for each critical change/activity.
6. Revisit as often as needed to update based on learnings.

Short-term

If we do \_\_\_\_\_  
[activities]  
then we will affect \_\_\_\_\_  
[outcomes]  
because \_\_\_\_\_  
[rationale]

Mid-term

If we create these outcomes, then we expect to  
have the following impacts on \_\_\_\_\_  
[areas impacted]  
because \_\_\_\_\_  
[rationale]

Mid-term

If we have these outcomes and impacts, then  
we expect to see ripple effects on other aspects  
of the system such as \_\_\_\_\_  
[ripple effect]  
because \_\_\_\_\_  
[rationale]

Long-term

If we have these impacts and ripple effects,  
then we expect to see these fundamental  
changes to the system \_\_\_\_\_  
[systems change]  
because \_\_\_\_\_  
[rationale]



# Appendix E: Interview Guide Development

## How to use it

1. Identify the **core research question** that captures the motivation behind the interview. This may differ among agencies, for example:
  - What do medical examiners need to accurately, comprehensively, and confidentially capture information from a victim of interpersonal violence?
  - How do police departments interpret, manage, and use medical evidentiary documentation in their investigations?
2. Generate questions that help answer the research goal, and formulate these as *How*, *What*, and *Why* questions.
3. Focus on questions that address **experiences** rather than hypothetical situations.
4. Give the interviewee an opportunity to elaborate on their answer, feel free to ask some open-ended questions.
5. Work to remove biases and presumptions in the line of questioning as well as during the interview.

## Example End-User Interview Questions

### *Understanding Current Processes and Practices*

- Tell me about your current experience with your information sharing system?
- How do you currently file reports?
- How does information flow between agencies?
- How often do errors occur?
- How does your agency know they have received all the reports sent from the hospital?
- Is there information you do not receive that would assist you in reaching the victim?
- Are there any challenges related to receiving or accessing information on victim referrals made by hospital staff, health care providers, or the forensic exam teams?
- What aspects of your current method would you keep? What are things that you would change?

### *Proposed Solution*

- What would it mean for your group to have referrals/information sent electronically?
- Would having access to these reports electronically create any new efficiencies?
- What kinds of data protection and security functionalities would you need from a software system?
- Why might there be hesitancy in adopting a new technology system in your department?
- What changes to your current processes would you anticipate?
- How might this management system hinder it?

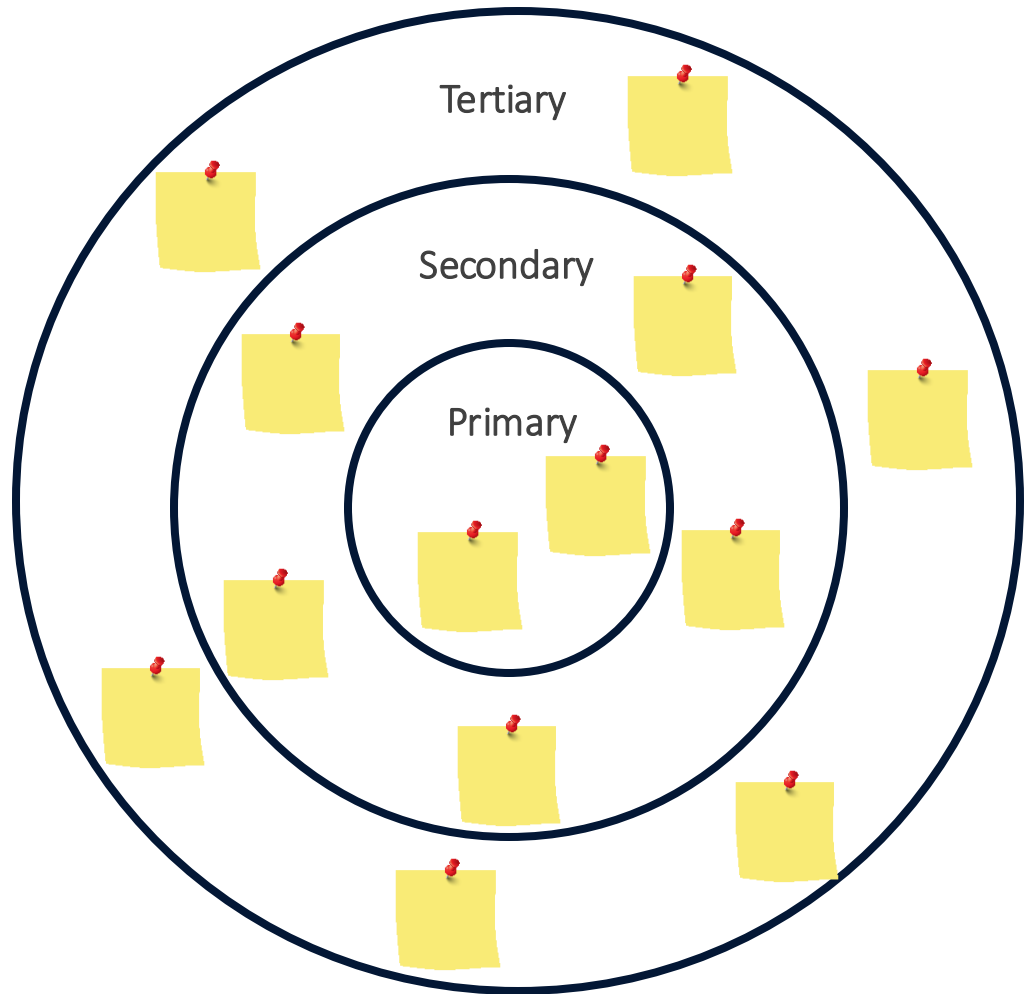
## Additional Resources

- [Mural interview template from LUMA](#) to organize plan and insights from end users
- [Deeper insights](#) on types of interviews, interview outputs, and information synthesis from The UX Research Field Guide

# Appendix F: Needs Prioritization and Evaluation Part 1

## How to use it

1. Draw three concentric circles on a poster or white board.
2. Label the inner most circle primary and the next two secondary and tertiary.
3. Gather data solicited from stakeholder interviews and combine similar responses such that there is a sticky note to represent every need discussed.
4. Engage in a discussion and after reaching consensus, place the sticky notes in one of the three circles based on priority, with the primary group indicating the highest priority.



# Appendix G: Needs Prioritization and Evaluation Part 2

## How to use it

1. Populate the top row of the table with available solutions and corresponding software providers.
2. Populate the first column, in no particular order, with primary requirements from Part 1 of the Needs Prioritization and Evaluation exercise.
3. (optional) Assign a weight to each requirement in the second column based on further prioritization of importance between each requirement.
4. Using the scale detailed below, assign a score for how well each software provider's solution meets each requirement.
5. Add up the scores of each column to determine which solution to pursue.

Scale:

0: Does not meet requirement

1: Meets requirement

2: Exceeds requirement

	(Optional) Weight	Solution No. 1	Solution No. 2	Solution No. 3	Solution No. 4
Requirement No. 1	x	0	2	1	2
Requirement No. 2	y	2	1	1	1
Requirement No. 3	z	1	0	0	1
Requirement No. 4	x	1	0	0	2
Total	-	4	3	2	6

# Appendix H: Pilot Planning Gantt Chart

## How to use it

1. Define the pilot project timeline.
  - Determine the start and the end targets.
2. Divide the project into manageable pieces.
  - Start with the largest key components.
  - Break these components down into tasks and subtasks.
  - Consider making tasks that are part of a larger component the same color.
3. Estimate the resources needed to accomplish these tasks, including personnel.
4. Estimate the duration of the task.
5. In Excel or a Gantt chart software, put tasks along the vertical axis and time along the horizontal axis.
6. Define a path.
  - Illustrate the tasks that cannot be started without the completion of another.
7. Add milestones.
  - Document important accomplishments that mark progress toward the goal and help with visualizing those achievements.

Tasks	Week 1							Week 2						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	●	●	●	●	●	●	●							
2							●	●	●	●	●	●		
3									●	●	●	●	●	●
4									●	●	●	●	●	●
5												●	●	●
6						●	●	●	●	●	●	●	●	●

## Additional Resources

- [What is a Gantt Chart?](#)
- More details on [how to make a Gantt Chart](#)
- [Gantt Chart templates](#) from Microsoft
- [Gantt Charting: Definition, Benefits, and How They're Used](#)

# Appendix I: Process Evaluation Design

## How to use it

1. Determine essential process questions that relate to **how** the software was implemented toward its intended outputs.

**TIP:** Think about the following:

**Consistency** – How frequently are end users engaging with the software to the degree it was intended to be used?

**Participation** – How many end users are accessing the software?

**Quality** – To what extent does the software meet the requirements of users?

**Intent** – How closely does/did implementation follow the plan outlined?

2. Identify the data and resources that will be used to answer the process questions.
3. Decide how frequently data will be collected to understand implementation process success.

## Additional Resources

- [Process Evaluation vs. Outcome Evaluation](#)
- [Guide from 3ie](#) on how to design and use a process evaluation
- [Community Toolbox Framework for Program Evaluation](#)

Example Process Evaluation Questions, Data Sources, and Measures

Process Evaluation Research Questions	Data Sources	Example Measures
What are the processes, staffing, and oversight for the use of the technology for hospital-based staff?	<ul style="list-style-type: none"> <li>Document review</li> <li>Administrative data</li> <li>Leadership and staff interviews</li> </ul>	<ul style="list-style-type: none"> <li>Team meeting minutes and notes</li> <li>Manuals or standard of practice documents</li> <li>Training materials</li> <li>Program memos, reports</li> </ul>
What measures and procedures (e.g., continuous quality improvement) are used to measure how hospital-based users are using the platform and if it is improving past practices?	<ul style="list-style-type: none"> <li>Document review</li> <li>Administrative data</li> <li>Leadership and staff interviews</li> </ul>	
What trainings and operating procedures guide teams, including forensic examiners, law enforcement, and victim service providers, using the technology?	<ul style="list-style-type: none"> <li>Document review</li> <li>Administrative data</li> <li>Leadership and staff interviews</li> </ul>	
What procedures and metrics are used to measure how are using the platform and if it is improving past practices?	<ul style="list-style-type: none"> <li>Document review</li> <li>Administrative data</li> <li>Leadership and staff interviews</li> </ul>	
How do examiners, recipients, and, most importantly, victims experience and perceive the impacts of the technology?	<ul style="list-style-type: none"> <li>Leadership and staff interviews</li> <li>Recipient interviews</li> <li>Victim surveys</li> </ul>	<ul style="list-style-type: none"> <li>Evaluation and data collection plans, measures, and reports</li> <li>Patient-victim perception of examiner's use of technology</li> <li>Stakeholders and staff perception of the technology, its processes, and its impacts</li> </ul>

# Appendix J: End-User Inquiry

## How to use it

1. Identify end user(s) with whom to talk.
2. Obtain consent from the end user for the discussion and be clear as to the purpose of the activity.
3. Complete any necessary paperwork to be cleared for discussion with the end user.
4. Prepare questions to ask the end user and consider framing them as, “What is your experience...?”
5. Meet with the end user.
6. Provide an introduction of what the inquiry’s goal is and provide an opportunity for the end user to ask questions and gain clarity around the aim of the discussion.
7. Work through question prompts that work to elucidate the research objective.
8. Ask questions at the appropriate moments and listen to the end user’s experience from the lens of a novice.
9. Record findings.
10. Thank the participant.

Template for End-User Inquiry Research	
Research Objective ( <i>What do you want to learn from the end user?</i> ):	
Date:	Inquirer(s):
Time:	Participant(s):
Location:	
Greeting and Introduction	
Question Prompts <i>What is your overall experience with the software?</i> <i>What is your experience logging in to the software portal?</i> <i>What is your experience with X, Y, Z feature(s) of the platform?</i> <i>What aspects of your workflow have and have not been improved with the software?</i> <i>What has been the biggest hurdle to using the software?</i> <i>If you could make an improvement on the software, what would it be?</i>	
Notes	
Conclusion	Screenshots, Photos

# Appendix K: Sustainability Usability Scale

## How to use it

1. Give the participants a printed or online form and explain how it should be completed.
2. Tell them to mark the center point if undecided.

## Scoring

1. For odd items: subtract one from the user response.
2. For even-numbered items: subtract the user responses from 5.
3. This scales all values from 0 to 4 (with four being the most positive response).
4. Add up the converted responses for each user and multiply that total by 2.5. This converts the range of possible values from 0 to 100 instead of from 0 to 40.

## Interpretation

A SUS score above a 68 is considered above average and below 68 is below average.

		Strongly Disagree				Strongly Agree
1.	I would like to use this system frequently.	1	2	3	4	5
2.	I found the system unnecessarily complex.	1	2	3	4	5
3.	I thought the system was easy to use.	1	2	3	4	5
4.	I think I would need the support of a technical person to be able to use this system.	1	2	3	4	5
5.	I found the various functions in this system were well integrated.	1	2	3	4	5
6.	I thought there was too much inconsistency in this system.	1	2	3	4	5
7.	I would imagine that most people would learn to use this system very quickly.	1	2	3	4	5
8.	I found the system very cumbersome to use.	1	2	3	4	5
9.	I felt very confident using the system.	1	2	3	4	5
10.	I needed to learn a lot of things before I could get going with this system.	1	2	3	4	5