

An Interoperable Social Care Sector

A Vision for the Future of Healthcare



Introduction

The Social Care Sector in the United States is made up of nonprofit organizations, government safety net programs, and in some cases, for-profit organizations providing their services at free and reduced cost.

The breadth of these services vary from things that are simpler to deliver, like food and cash assistance, to more complex services such as subsidized counseling.

Organizations or CBOs) in the Social Care Sector provide meaningful services to people in need. These services include but are not limited to the services outlined in the Open Eligibility Project's Taxonomy. Service Providers use Systems of Record (SoR) to manage their day-to-day operations. These SoRs may include both manual and electronic processes for screening applicants for services, scheduling appointments, storing a history of interactions with clients, communicating with clients, calculating benefits delivery, and other business critical functions.

The complexity of the SoR can vary and can include paper-based files, commercial case management software, electronic health records (EHRs) or Homeless Management Information Systems (HMIS). Regardless of complexity, most organizations that accept funding in the social care sector must incorporate SoR for reporting purposes. As to which SoR they use, how they implement them within their organization, and whether their systems talk to other.





Core Principles

This document is guided by the following core principles:

- Service Providers should be able to work within their chosen systems of record.
- Service Providers should be able to choose which systems they want to integrate with.
- Service Providers should have control over who has access to see their data.

The purpose of this whitepaper is to outline a vision, according to these three guiding principles, for a more connected Social Care Sector through interoperability as it relates to the user experience of the service provider.

Core Principles

We understand that a vision towards an interoperable social care sector will not be accomplished immediately and involves tens of thousands of stakeholders including governments, hospital systems, health plans, service providers, software vendors, and collaborations. However, before we align on the details of data exchange, it's our goal to align the sector on a few key principles.

Service Providers & Systems of Record

We believe Service Providers should be able to receive and respond to referrals from their own systems of record. This means, in principle, if they operate within another SoR for case management, referral management, EHRs, care coordination or other functions, they should be able to receive and respond to referrals without leaving those systems.

Service Providers & Integration Choice

We believe Service Providers should be able to decide if they want to integrate with other systems. A Service Provider should be able to tell other systems whether or not they want to receive referrals, and if so, where referrals should be sent.

Service Providers & Ownership of Data

We believe Service Providers should own their own data, and should have control over who sees their data and for how long. Service Providers should be able to see who has access to their data at all times and they should be able to remove access at any time.

Forced Monopolies Discourage Innovation

An approach that has been tried in our sector is a Forced Monopoly. In a Forced Monopoly situation, all parties have to agree to use the same system. Forced Monopolies discourage innovation, push Service Providers into privacy policies and data sharing agreements that do not serve the person-in-needs' interests, and give far too much decision making authority to for-profit vendors.

Some believe that if 100% of the referral activity within a region is in one system, there is more data available to evaluate the impact of social service delivery on health outcomes. Although this could be true, especially if enough users in a region adopt the platform, the unintended consequences, including mistrust, are not worth the extreme financial cost.



Unintended Consequences of Forced Monopolies

When an insurance company or a State or Federal Government attempts to force usage of one system, it leaves little opportunity for innovation, drives up pricing, leads to poor adoption, and compromises privacy concerns.

Opportunity for Innovation

Forcing usage of a system gives little opportunity for innovation as the users of that system (either through legislation, directive, or payment structure) have no other alternatives. with the imperfections.

If Service Providers don't like the system, they have no alternative recourse and have to live with the imperfections. If Service Providers disagree with the privacy implications of the system, they can only lobby to change the rules. Switching to another vendor in the market is not an option, which of course is the forcing function for any other non-monopolistic marketplace.

The Service Provider, usually a nonprofit, will just have to deal with it if they want the money. This concept is not new to our sector — nonprofits have had to navigate different systems at the request of funders for decades. Given that there's precedent, that doesn't make it right.

Monopolistic Pricing & Poor Accountability

With no alternatives, for-profit companies can raise pricing without short-term fear. The only forcing factor, perhaps, is the fear of losing a large state contract that is usually geared toward a three to five year horizon. In a monopolistic situation, the product or system's consumer does not have a choice other than to pay up or be non-compliant.

Similarly, incentives to address Service Providers' needs are diminished if there are no other options available in the marketplace.

Poor Service Provider Adoption

In a monopolistic situation, there is a temptation to suggest that if a Service Provider does not adopt a system and sign a contract, then they are foregoing their right to be paid for their services. This comes across as "bullying" in the market; it discourages adoption and encourages resentment towards policy makers or those given directives. Ultimately, this

hurts adoption which means that policy makers, although well-intended, will not see the outcomes they were hoping to see. Poor adoption by service providers leads to fractured engagement and missed opportunities.

Compromised Privacy Concerns

In some cases, the Service Providers, should they choose to comply in a monopolistic arrangement, must give up ownership of certain data about the people they are serving. These Service Providers, depending on the rules of the system, cannot control who is able to see highly sensitive information about the people they serve, or their staff's notes about the people they serve.

In some networks the rules are such that consents are "all-in" consents, meaning, that when someone in need applies to receive services, they must agree to allow their referral history to be seen by every registered user. Many Service Providers simply disagree with this approach due to privacy concerns. If the system's use is mandated, either outright, or through funding policies, the power is in the hands of the influencer (government or insurance companies). Therefore, the Service Provider's only recourse is to forego the funding.

Ethical Dilemmas

Lastly, and this may only apply to government mandated Forced Monopolies, the government official supporting the program may be put in a challenging ethical position. Choosing one vendor and asking them to satisfy the many needs of hundreds of disparate organizations in communities is a tall order. For example, if a hospital system prefers to work with a vendor not chosen by the state because they have a stronger network (and can meet their needs at a more economical cost), there may be a temptation by a project sponsor, whether that be a state government official or other person affiliated with the project, to interfere with the procurement process of a private entity. This can be a messy situation and presents ethical dilemmas.



Actionable Areas for Interoperability

Fortunately, there are three areas in which an interoperable framework can allow Service Providers to continue to use their SoRs for these functions, and allow Service Providers the ability to control who has access to their data.

To start, this paper outlines these three areas for interoperability, and they include:

⊘ Referral History

⊘ Tracking Outcomes

Assessment history

Electronic Referrals

Electronic Referrals are a way to put a client in contact with a Service Provider through a digital system. These systems can include Social Care Network Providers, such as <u>findhelp.org</u>, Findhelp's Referral Platform and other commercial software applications.

Inbound & Outbound Referrals

Inbound Referrals are referrals received by a Service Provider. These referrals are sent by other Service Providers who are navigating on behalf of a client, or these referrals are sent by the client themselves.

Outbound Referrals are referrals made by a Service Provider to another organization, or to another program within the same organization.

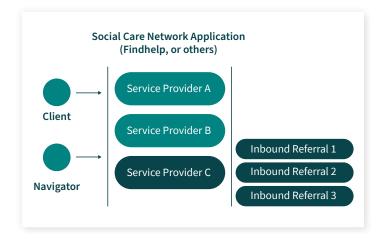


Figure 1.1: Inbound Referrals (to a service provider)

Why is interoperability important for Referrals?

Outbound referrals are made through several different software applications. However, Service Providers work within their own SoRs and do not have a way of receiving inbound referrals from different software applications that send referrals. Since Service Providers desire to work within their chosen SoR (core principle), they need a way to receive referrals from other systems so that they can access referrals from their SoR.

Standards for exchanging referrals allow clients, Service Providers, and other organizations to send and receive referrals, regardless of which SoR they use; just like how people can make a phone call to anybody with a valid phone number, regardless of which mobile phone providers the receiving party uses. An agreed upon set of standards allows for a more efficient and effective referral process for both the client and the person helping them. It also promotes innovation in the long run and deters monopolies from forming.

Example: Cell Phones work across multiple networks. An AT&T customer can call a Verizon customer seamlessly. The reason that different technologies on different networks can still communicate is because both organizations agreed to operate on a set of standards.



Tracking Outcomes

Funders, program managers, and other interested parties desire more transparency into how services are delivered to clients. More often there is an emphasis put on outcomes rather than outputs to help show what services might be making the biggest impact. Service Providers want to provide this information to those interested. In addition to providing interested parties with this information, Service Providers can use the outcome of a referral to assist a returning client in tracking the efficacy of their program, or this information can be aggregated to better tell the story of needs within a community.

A Referral Outcome is a one-time recording of the status of an inbound or outbound referral. This allows the originator of the referral to see and understand what happened, allowing them to better assist the client. On an aggregate basis, this allows interested stakeholders to have a better understanding of referral & outcome patterns and can be a very powerful tool when tied with other outcomes datasets. When combined, organizations can get a better understanding of what social care interventions correlate to improved health, education, workforce, or other outcomes.

Why is interoperability important for Outcomes Tracking?

Most often, the outcome of the Social Care received is locked in the Service Provider's SoR. With this information locked away in one system or on paper or in someone's head, it's challenging for this information to be reported back to interested parties.

If the Social Care Sector agrees to a standard way of reporting outcomes, software providers can incorporate those standards into their application and allow Social Care Providers the ability to securely share this information with any interested parties with appropriate permissions.

Outcomes can be shared in two primary scenarios: **as a function of reporting or through a real-time mechanism** (when outcomes become known to the SoR).







Scenario 1: Reporting

In this use case, a funder or other interested parties may want to better understand specific details of referral outcomes. In this scenario, funders can receive reports from Service Providers at an agreed-upon cadence.

System interoperability isn't as crucial so long as a Service Provider has access to the referral outcomes and can report on them effectively.

In an effort to standardize outcomes data, there are several initiatives. However, standards around how outcomes are reported are being developed by the Gravity Project (for healthcare) and additional information and research can be found through the National Council of Nonprofits' Evaluation and Measurement of Outcomes website. With standards around what to report through standard reporting mechanisms, technology can play a role in simplifying this information so that it is not a burden that falls on service providers to compile and share.

In Scenario 1, a service provider can work with their funders to give them the data necessary to make decisions and effectively run their programs. This is an administrative discussion, not much different than the types of questions that are pervasive throughout the nonprofit sector in the US today.





Scenario 2: Real-Time Referral Status Update

In the following scenario, another system would like to know what happened after a referral was made to a Service Provider. In this scenario, the originating SoR that was involved in sending the outbound referral would like to receive referral outcome information in near real-time.

In this scenario, the SoR that receives a referral needs a mechanism for giving the originating referrer the details contained in the referral outcome.

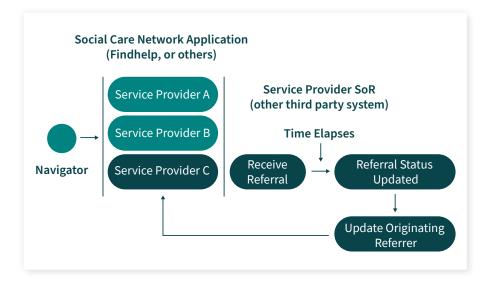


Figure 1.2: Real-Time Referral Outcome Updates

Example: Joe Seeker is working with his local hospital system and a social worker refers Joe to a local affordable housing program. The affordable housing program uses an off the shelf case management system for tracking their inbound referrals, and assisting the client while he's in their programs. Once Joe fills out his application to get into an affordable housing unit and a decision is made, the affordable housing program's SoR should have a way of letting the originating system know that Joe's referral was received and his application for a unit was accepted.

In the example above, the affordable housing program's SoR needs to know what to tell the originating referrer's SoR, and also needs a mechanism for telling the originating referrer's SoR.





Intake Assessments

Service providers often use their SoRs to ask prospective clients questions about their situations. These assessments are used to collect a wide array of information, including demographic details, annual income, household relationships, and social care needs. This information is helpful to Service Providers as they have the details they need to assist the client.

In practice, service providers conduct multiple assessments over time and, if available, historical access to this information allows service providers to help measure progress.

Why is interoperability important for Assessments?

Clients are often asked the same questions from different Service Providers, or by multiple employees of the same Service Provider. If the Service Provider who is filling out the assessment in their SoR on behalf of a client can pull this information from somewhere else (through an interoperable framework), it saves the Service Provider time (not asking repeated questions) and saves the client time (not answering repeated questions).

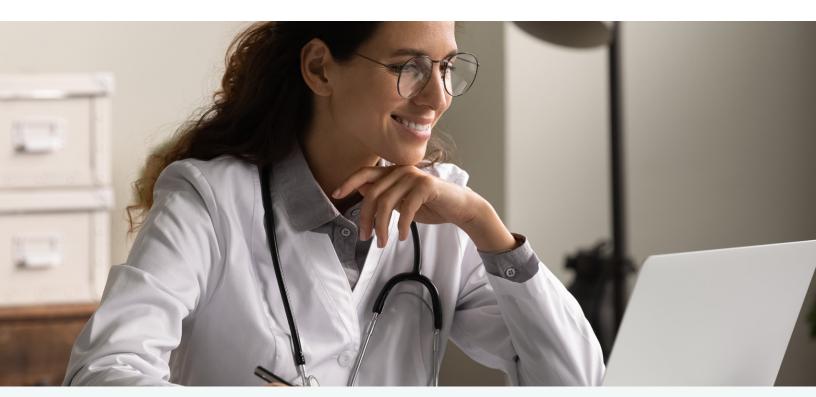
Proposed Specifications

In an effort to move the sector forward, we propose the following roadmap for interoperability with respect to Referral History, Tracking Outcomes, and Assessment History.

Our core principles in this endeavor include:

- Service Providers should be able to tell software applications
 Where to Send Referrals.
- Service Providers should be able to **Publish Outcomes** to interested parties (like funders).
- Service Providers should incorporate

 Previously Answered Questions in
 assessments (if the client says it's OK).





Referral History

If a Social Care Provider uses an electronic system of record that can receive electronic referrals, they should be able to provide directions to other Referral Platforms that make outbound referrals. These directions tell the Referral Platform what to do when someone wants to connect to the Social Care Provider.

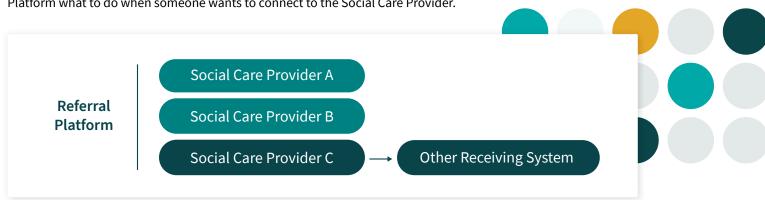


Figure 1.3: Social Care Providers can tell a Referral Platform where to send referrals.

Referral Platform vendors can allow Service Provider administrators the ability to own and update their listings on the platform. Part of the configuration includes a place to tell the Referral Platform where to send new referrals.

Many Service Providers use multiple SoRs to administer their programs. Platform Vendors should allow the Service Provider to configure each program to send referrals to their corresponding SoR (see figure below).

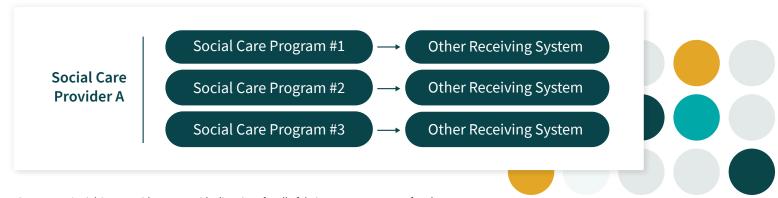


Figure 1.4: A Social Care Provider can provide directions for all of their programs to any Referral Platform that adheres to these standards.

In Findhelps's Referral Platform, we support webhooks. A webhook in web development is defined as 'a method of augmenting or altering the behavior of a web page or web application with custom callbacks. These callbacks may be maintained, modified, and managed by third-party users and developers who may not necessarily be affiliated with the originating website or application.' (source: Wikipedia)

With a webhook framework, the Service Provider is in control of Referral Information that is sent this means that any Service Provider, should they choose, can configure their Findhelp Program Listing to send referrals to their chosen SoR effective Fall 2020.

Technical Details — Referral History

The content of an Outbound Referral is also likely to be up for much debate. However, we can agree that some of the information should be dictated by things the network might require, and other items can and should be defined by the Service Provider. They know their industry, and know what information is needed to respond to a referral.

Our draft Outbound Referral specification includes the fields outlined in the table below.

Individual Referral — Data Specifications

Field	Description	Details
Referral System Defined Administrative Fields		
Originating System ID	A unique identifier of the originating system. (EX: Findhelp Social Care Network).	
Originating System Referral ID	A unique ID of the Referral, assigned by the originating Referral System.	
Originating System Person ID	A unique ID of the Person whom the Referral is on behalf of, assigned by the originating Referral System.	
Timestamp	The UTC Timestamp of when the Referral was sent, populated by the originating Referral System.	
Referral Status	The Referral Status at the time when this Referral was populated into the API query (or Webhook) results.	



Field	Description	Details
Referral System Defined Administrative Fields		
Referring Person ID	If this Referral was made by someone assisting the Person seeking services, this field will include a unique Referral System ID of the person making the Referral.	
Appointment ID	If this Referral was an Appointment Referral, this field will include a unique Referral System ID referencing the appointment record.	
Appointment Date	If this Referral was an Appointment Referral, this field will include the UTC Date of the Appointment.	
Appointment Start Time	If this Referral was an Appointment Referral, this field will include the UTC Appointment Start Time.	
Appointment End Time	If this Referral was an Appointment Referral, this field will include the UT UTC Appointment End Time.	
Appointment Type	If this Referral was an Appointment Referral, this field will include the type of Appointment (phone call, virtual meeting, or in-person appointment).	
Appointment Address	If this Referral was an Appointment Referral,this field will include the location of thein-person appointment.	
Virtual Appointment Details	If this Referral was an Appointment Referral, this field will include relevant appointment details, including relevant URL for virtual appointments.	



Field	Description	Details
Referral System Defined Demographic Fields		
First Name		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Last Name		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Middle Name		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Address	This field includes the street number, street name and any associated apartment numbers following the street name.	
City		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
State		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Zip + 4		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Referral System Defined Referral Details		
Email Address	This adheres to the format of joe@findhelp.org.	
Phone Number	This adheres to the format of 1 (512) 555-5555.	
Contact Preference	This field includes the Client's preferred method of contact (Email, Text Message, Phone Call).	
[Third Party Unique Identifier]*	This field contains a name value pair of a third party unique identifier for the Personseeking services. (Ex: Medicaid_ID, "Person's Medicaid ID).	(Optional) (Field Name, "Description", Field Value)
Referral Comment	A free text description associated with the referral.	
Service Provider Defined Referral Details		
[Service Provider Name Value Pair]*	This contains a name value pair of fields defined by the receiving Service Provider. Examples include: (Monthly Income, "Total monthly income", \$1,300).	(Optional) (Field Name, "Description", Field Value)



Configuration Details — Referral History

The Findhelp Referral Platform allows Service Providers the ability to configure details about the services offered. From within the administration pages, Service Provider Administrators can add details necessary to ensure that Inbound Referrals are automatically sent to their SoR.

Detailed instructions on how to add these configurations will be available soon.

Outcome History

Social Care Providers should be able to publish outcomes so that they do not need to re-enter information into other systems of record (SoRs), including those systems used by funders. A way to electronically publish outcome history allows Service Providers to spend less time on administrative work (like entering data into multiple systems) and more time with clients.

Technical Details — Outcome History

The Referral Outcome History can be obtained through:



Direct reporting access — allowing Service Providers to give stakeholders (including funders) direct access to see aggregate referral outcomes.



Third-party systems updating the originating system that sent the referral through an available means (such as a webhook).

Our draft Outcome History specification includes the fields outlined in the next table.

Outcome History — Data Specifications

Outcome History includes updates related to "what happened" as a result of the Referral. As such, the data received through an Outcome History query includes the original Referral History fields. However, when the Outcome History Webhook is used, an additional section is added, which includes information about what happened as a result of the Referral.





Field	Description	Details
Referral System Defined Administrative Fields		
Originating System ID	A unique identifier of the originating system. (EX: Findhelp Social Care Network).	
Originating System Referral ID	A unique ID of the Referral, assigned by the originating Referral System.	
Originating System Person ID	A unique ID of the Person whom the Referral is on behalf of, assigned by the originating Referral System.	
Timestamp	The UTC Timestamp of when the Referral was sent, populated by the originating Referral System.	
Referral Status	The Referral Status at the time when this Referral was populated into the API query (or Webhook) results.	
Referring Person ID	If this Referral was made by someone assisting the Person seeking services, this field will include a unique Referral System ID of the person making the Referral.	
Appointment ID	If this Referral was an Appointment Referral, this field will include a unique Referral System ID referencing the appointment record.	
Appointment Date	If this Referral was an Appointment Referral, this field will include the UTC Dateof the Appointment.	
Appointment Start Time	If this Referral was an Appointment Referral, this field will include the UTC Appointment Start Time.	
Appointment End Time	If this Referral was an Appointment Referral, this field will include the UTC Appointment End Time.	
Appointment Type	If this Referral was an Appointment Referral, this field will include the type of Appointment (phone call, virtual meeting, or in-person appointment).	
Appointment Address	If this Referral was an Appointment Referral, this field will include the location of the in-person appointment.	
Virtual Appointment Details	If this Referral was an Appointment Referral, this field will include relevant appointment details, including relevant URL for virtual appointments.	



Field	Description	Details
Referral System Defined Demographic Fields		
First Name		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Last Name		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Middle Name		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Address	This field includes the street number, street name and any associated apartment numbers following the street name.	https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
City		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
State		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Referral System Defined Administrative Fields		
Zip + 4		https://pe.usps.com/cpim/ftp/ pubs/Pub28/pub28.pdf
Referral System Defined Referral Details		
Email Address	This adheres to the format of joe@findhelp.org.	
Phone Number	This adheres to the format of 1 (512) 555-5555.	
Contact Preference	This field includes the Client's preferred method of contact (Email, Text Message, Phone Call).	
[Third Party Unique Identifier]*	This field contains a name value pair of a third party unique identifier for the Person seeking services. (Ex: Medicaid_ID, "Person's Medicaid ID).	(Optional) (Field Name, "Description", Field Value)
Service Provider Defined Referral Details		
[Service Provider Name Value Pair]*	This contains a name value pair of fields defined by the receiving Service Provider. Examples include: (Monthly Income, "Total monthly income", \$1,300).	(Optional) (Field Name, "Description", Field Value)



Field	Description	Details
Service Provider Defined Referral Details		
[Service Provider Name Value Pair]*	This contains a name value pair of fields defined by the receiving Service Provider. Examples include: (Application_Status, "Where the applicant is in the workflow", Interview).	(Optional) (Field Name, "Description", Field Value)
[Service Provider Name Value Pair]*	This contains a name value pair of fields defined by the receiving Service Provider. Examples include: (Health_Plan_Chosen, "Name of the health plan the person was enrolled in.", Superior Health Plan).	(Optional) (Field Name, "Description", Field Value)
[Service Provider Name Value Pair]*	This contains a name value pair of fields defined by the receiving Service Provider. Examples include: (Denied_Reason, "The reason the applicant was denied services.", Did not meet income requirements).	(Optional) (Field Name, "Description", Field Value)

Configuration Details — Outcome History

The Findhelp Referral Platform allows Service Providers the ability to share Referral Outcome changes when they happen. From within the Findhelp Referral Platform's administration pages, Service Provider Administrators can add details necessary to ensure that Outcome History Changes are automatically sent to the right location.

Detailed instructions on how to add these configurations will be available soon.



Assessment History (Previously Answered Questions)

With permission from the client, Service Providers' SoRs should be able to query systems to find out if a client already answered a question in the past from another provider.

How could this be accomplished?

If an assessment was filled out in System A, System B (with appropriate permissions from the client) should be able to receive the answers to those questions. To do so, the following is necessary:

- System A should publish the questions and the answers in a machine readable format (with appropriate permissions).
- System B should be able to query this information from System A.

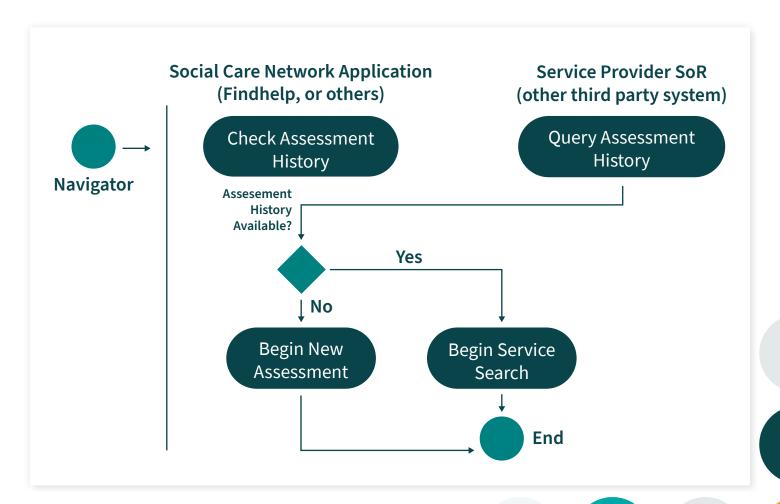


Figure 1.5: Interoperable Assessment History Search



How to View Assessments (Previously Answered Questions)

A system that records assessments should allow other systems, with appropriate permissions, the ability to check to see assessment history for an individual. There are two important prerequisites:

With these two guiding principles, there are logistical hurdles to overcome, no doubt, but gaining agreement among stakeholders to these two guiding principles is an important goal for the Social Care Sector.

The System asking to see previously completed assessments should have a secure way to electronically connect to an Assessment Repository.

The Client (person they are helping) should have given the querying system permission to view their Assessment History in other third party systems (should they exist).

Suggested Privacy Principle — Assessment History

A Service Provider who has performed assessments should have a way to allow the Assessments they've historically conducted to be queryable. This permission must be gained per Assessment, with the Client's permission. This means for Assessment History to be queryable, consent should be required (either verbal or written consent, depending on local policy guidelines).

A consent per Assessment History approach provides the broadest level of security necessary to protect the Client's personal information.

Technical Details — Assessment History

A System Administrator at a Service Provider should have the ability to make their Assessment Repository queryable, with appropriate permissions. Using an available Application Programming Interface (API), the Referral Platform Vendors (like AB's Social Care Network), allows a secure way to query the Service Provider's Assessment Repository.

Within AB's Social Care Network Application, the Assessment Repository will also be available to be queried through our API. In late 2020, detailed specifications for Assessment History APIs will be made available to our Customer Users and Service Provider Users.

Conclusion

This document is a living document, and as an organization, we commit to a more interoperable Social Care Sector. As new standards emerge from other standards bodies, such as the Gravity Project, HIMSS, and others, we commit to active participation with these bodies.

As we continue to develop our suite of products, we intend to move first towards the vision outlined in this document.

