RFP Response Form

Client Management Information System

PROPOSER INFORMATION
Proposer Name: Netsmart Technologies, Inc.

Authorized Representative Name & Title: Kevin Kaufman, Chief Financial Officer

Address: 4950 College Boulevard, Overland Park, Kansas 66211

Telephone: 800-842-1973

Email: DL_PublicSector_RFP_Contact@ntst.com

Website: www.ntst.com

Legal Status: ☒ For-Profit Corp. ☐ Nonprofit Corp. ☐Sole Proprietor ☐Partnership

Date Incorporated: January 1994

How did you hear about this RFP? Marlo Svidron at FamilyLinks, Inc.

REQUIRED CONTACTS

	Name	Phone	Email
Chief Executive Officer	Mike Valentine	800-842-1973	DL_PublicSector_RFP_Contact@ntst.com
Contract Processing Contact	Joe McGovern	800-842-1973	DL_PublicSector_RFP_Contact@ntst.com
Chief Information Officer	N/A	N/A	N/A
Chief Financial Officer	Kevin Kaufman	800-842-1973	DL_PublicSector_RFP_Contact@ntst.com
MPER Contact*	Shelly Jarchow	800-842-1973	DL_PublicSector_RFP_Contact@ntst.com

** MPER is DHS's provider and contract management system. Please list an administrative contract to update and manage this system for your agency.*

BOARD INFORMATION
Provide a list of your board members as an attachment or in the space below.
A list of our board members has been provided as an attachment.

Board Chairperson Name & Title: Mike Valentine – Chief Executive Officer, Netsmart Technologies, Inc.

Board Chairperson Address: 4950 College Boulevard, Overland Park, Kansas 66211

Board Chairperson Telephone: 800-842-1973

Board Chairperson Email: DL_PublicSector_RFP_Contact@ntst.com

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Board Chairperson Name & Title: Howard Park – Managing Director, GI Partners

Board Chairperson Address: 4950 College Boulevard, Overland Park, Kansas 66211

Board Chairperson Telephone: 800-842-1973

Board Chairperson Email: DL_PublicSector_RFP_Contact@ntst.com

Board Chairperson Name & Title: Dave Kreter – Managing Director, GI Partners

Board Chairperson Address: 4950 College Boulevard, Overland Park, Kansas 66211

Board Chairperson Telephone: 800-842-1973

Board Chairperson Email: DL_PublicSector_RFP_Contact@ntst.com

Board Chairperson Name & Title: Hythem El-Nazer – Managing Director, TA Associates

Board Chairperson Address: 4950 College Boulevard, Overland Park, Kansas 66211

Board Chairperson Telephone: 800-842-1973

Board Chairperson Email: DL_PublicSector_RFP_Contact@ntst.com

Board Chairperson Name & Title: Linda Rosenberg, MSW – President and CEO, National Council for Behavioral Health

Board Chairperson Address: 4950 College Boulevard, Overland Park, Kansas 66211

Board Chairperson Telephone: 800-842-1973

Board Chairperson Email: DL_PublicSector_RFP_Contact@ntst.com

Board Chairperson Name & Title: Mark Carter – Managing Director, TA Associates

Board Chairperson Address: 4950 College Boulevard, Overland Park, Kansas 66211

Board Chairperson Telephone: 800-842-1973

Board Chairperson Email: DL_PublicSector_RFP_Contact@ntst.com

Board Chairperson Name & Title: Mike Kirkman – Principal, GI Partners

Board Chairperson Address: 4950 College Boulevard, Overland Park, Kansas 66211

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Board Chairperson Telephone: 800-842-1973

Board Chairperson Email: DL_PublicSector_RFP_Contact@ntst.com

Board Chairperson Name & Title: Patrick Hampson – Founder and Managing Partner, HM3Partners

Board Chairperson Address: 4950 College Boulevard, Overland Park, Kansas 66211

Board Chairperson Telephone: 800-842-1973

Board Chairperson Email: DL_PublicSector_RFP_Contact@ntst.com

REFERENCES
Provide the name, affiliation and contact information [include email address and telephone number] for three references who are able to address relevant experience with your organization.
Please do not use employees of the Allegheny County Department of Human Services as references.

The following clients can attest to our level of service and solution functionality.

Client References	
Organization Name	[redacted]
Contact Name	[redacted]
Phone	[redacted]
Email	[redacted]
Organization Name	[redacted]
Contact Name	[redacted]
Phone	[redacted]
Email	[redacted]
Organization Name	[redacted]
Contact Name	[redacted]
Phone	[redacted]
Email	[redacted]

PROPOSAL INFORMATION

Date Submitted 4/17/2019

RFP Response Form

Client Management Information System

Amount Requested: One [redacted]

Proposal Abstract:
Please provide a brief summary of your proposal that is at most 750 characters.
Netsmart implements systems across the country, including county and public environments to enhance care delivery. Our solutions provide accurate, accessible information to care teams across health & human services. Leveraging the Netsmart network, providers seamlessly & securely integrate information across communities, collaborate on effective treatments, & improve outcomes. For Allegheny County, Netsmart has proposed its CareManager platform – a population health management solution that provides care coordination, interoperability, analytics, outcomes & risk stratification. CareManager is a person-centered solution that aggregates data to identify trends, present health & treatment outcomes for analytics-driven decision making.

CERTIFICATION
Please check the following before submitting your Proposal, as applicable:

☒ I have read the standard County terms and conditions for County contracts and the requirements for DHS Cyber Security, EEOC/Non-Discrimination and HIPAA.

☒ By submitting this proposal, I certify and represent to the County that all submitted materials are true and accurate, and that I have not offered, conferred or agreed to confer any pecuniary benefit or other thing of value for the receipt of special treatment, advantaged information, recipient's decision, opinion, recommendation, vote or any other exercise of discretion concerning this RFP.

ATTACHMENTS

Please submit the following attachments with your Response Form. These can be found at http://www.alleghenycounty.us/dhs/solicitations.

- MWDBE documents
  Provided as a separate attachment.

- Allegheny County Vendor Creation Form
  Provided as a separate attachment.

- 3 years of audited financial reports
  See attachment. Netsmart will provide financials upon receiving a signed non-disclosure agreement (NDA).

- W-9
  Provided as a separate attachment.

- Screen shots or other visual aids as needed
  Provided throughout our response.

RFP Response Form

Client Management Information System

REQUIREMENTS

Please respond to the following. The maximum score a Proposal can receive is 140 points. Your response to this section should not exceed 35 pages. You may attach screen shots or other visual aids as needed. These will not count toward the page limit.

<u>Qualifications and Experience (20 points)</u>

1. **Describe how you have assisted other clients with assessing the best way to implement, measure, manage changes to, and achieve business objectives via the proposed Solution, especially human services agencies and/or other public sector clients.**

As a partner to providers in every state, Netsmart works daily to improve care delivery for each person in need through innovative solutions that expand access, reduce costs, and increase efficiencies so providers can focus on what they do best. Our partnerships with clients foster recovery and enhance quality of life for more than 25 million people. These partnerships have allowed us to grow into the largest human services, home health and hospice technology provider in healthcare and to deliver robust solutions designed to increase efficiencies and improve the quality of care and outcomes for the people you serve. Netsmart clients include 600,000+ users in 25,000 organizations across the United States. Netsmart clients serve behavioral health; addiction treatment; intellectual and developmental disabilities; child and family services; public health; home health, hospice and palliative care; senior living and post-acute care; and private duty.

Netsmart is different from other partners in several ways. Netsmart:

- Invests in our clients. Netsmart assigns a Client Alignment Executive (CAE) as the primary point of contact for communication, issue resolution, and strategic planning. These associates play a critical role in advising clients and optimizing their investment to meet their organizational needs.
- Is the leader in the community. As the largest and longest standing solutions provider serving more than 25,000 client organizations who help more than 25 million consumers every year, Netsmart has an obligation to serve – through its development and sponsorship of the EveryDayMatters® Foundation to its involvement with national policy initiatives.
- Focuses on innovation. We invest more than 15 percent of our revenue back into solution development to extend our capabilities and improve user experience.
- Collaborates with our clients who influence solution direction, design and development of our offerings. A significant number of the enhancements made to Netsmart solutions were client generated; user groups are a major source of that input.

Netsmart is the longest established community care technology solutions and services provider in the United States, with 50 years of proven experience and innovation. Your decision to purchase an interoperable technology platform is not just the purchase of a product but the beginning of a partnership. As your strategic partner you can trust us to support your mission-critical functions, keeping your organization sustainable for today while preparing for the future. Netsmart's focus has been on providing intuitive solutions to support providers in the Behavioral Health, Substance Use, and Human Services communities. Netsmart is one of the longest standing IT companies in the United States. We're an established company that over the years has witnessed numerous changes in the healthcare ecosystem.

Netsmart has over 40 years of public sector implementation experience. With over 25 states, 40 large counties, and 367 multi-facility organizations using Netsmart solutions across multiple facilities, and 48 state DHHS agencies, over 200 counties, and 2 federal agencies, Netsmart is the leader in the health and human services solutions.

Not only does Netsmart have the highest number of public sector clients of any of our competitors, we also offer a seasoned team of professionals on our public sector implementation team who specialize and are dedicated to implementing with organizations like Allegheny County DHS. The combination of market preference for our solutions and an implementation team that has successfully completed projects in dozens of other similar states makes Netsmart uniquely qualified for Allegheny County DHS.

Netsmart's CareManager solution is a client-centric case management software that will allow Allegheny County DHS staff to manage the overall health of its population through user friendly workflows in all steps of a client's life cycle through referral, assessment, care planning and service provision. By utilizing role based and program-based workflows, Allegheny County DHS will improve the quality of care delivered, providing real time access to information and collaboration across disciplines.

Beyond simply providing services to some of the most vulnerable populations in Allegheny County, Netsmart also recognizes the importance and magnitude of Allegheny County DHS' need for a solution to efficiently manage population health and care coordination for those individuals. Netsmart's CareManager Solution is a population health management platform that provides care coordination, interoperability, analytics, outcomes, and risk stratification. This platform is a person-centered and cost-effective solution to promoting quality, and aggregates data to identify trends to present health and treatment outcomes for analytics-driven decision making.

The proposed Client Management Information Components, in addition to CareManager mentioned above, includes:

- CareConnect Netsmart's web-based interoperability and integration network that will allow Allegheny County DHS to connect to outside organizations through a single connection point. CareConnect supports all federal and state policies and standards for health information exchange including, but not limited to, Direct, HL7, and CCD & CCDA.
    - Inbox/Direct secure messaging, ADT feeds, and Carequality, along with any specific connections noted by Allegheny County.

The proposed solution also provides:

- A flexible and comprehensive integrated client management solution to support the varied mix and complexity of services provided by Allegheny County DHS with the ability to have a shared holistic view of the client.
- Support for your clinical and business operations and goals of high-quality care. Netsmart is the only human services solutions provider with a chief clinical advisor and chief nursing officer dedicated to delivering the tools required to deliver high quality services.

- Support for your efforts to increase performance by providing better reporting and workflow processes that meet external demands and strengthen internal operational monitoring.
- Data conversion of existing structured and unstructured data files for current service recipients. Netsmart will apply the collective experience from more than 1,500 other implementations.
- Extensive security features for client confidentiality including user and role-based security measures defined by Allegheny County DHS and HIPAA compliance.
- State of the art SSAE 18 hosting facilities to ensure 99.9 percent uptime, data privacy and security, already used by 20,000+ hosted facilities and 250,000+ end users.
- The experience of implementing a variety of unique use cases for CareManager for its ability to track, manage, and support populations, programs and services similar to that of Allegheny County DHS, noted below.

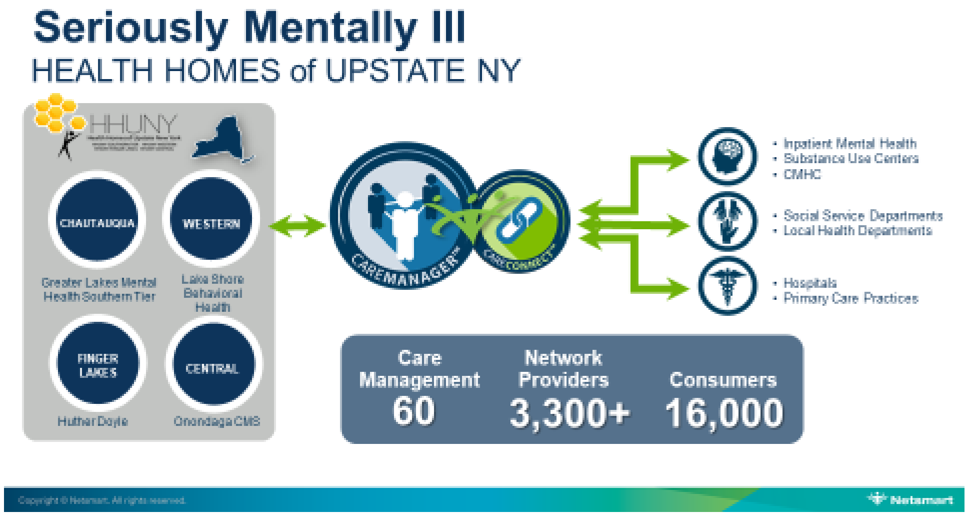
New York State Health Homes

Netsmart has successfully implemented CareManager for both adult and child populations across 100% of the counties in upstate New York. Having a critical mass of partners to work with allows Netsmart to deliver the most optimal client management solution. CareManager is aligned to support health homes within New York State, as well as across the nation.

Health Homes of Upstate New York

Health Homes of Upstate New York (HHUNY) is a collaborative organization comprised of four (4) lead health homes who have come together to manage members who are eligible for health home care management services across 23 western and central counties in New York.

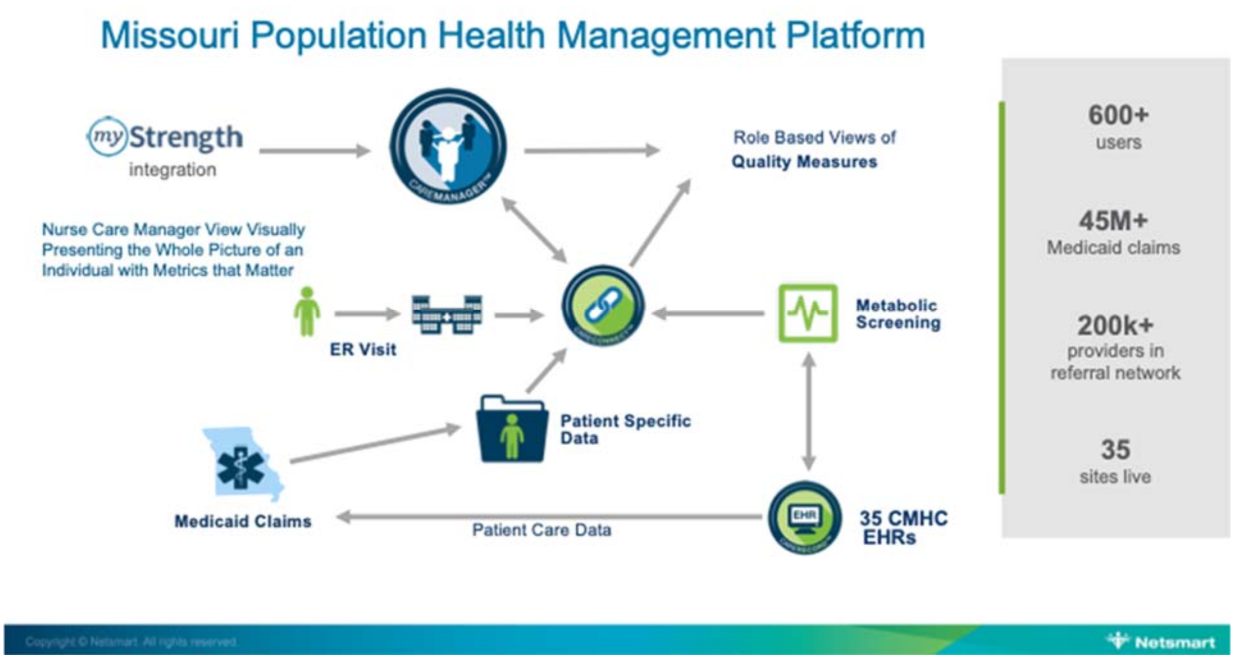
As shown in the following graphic, HHUNY uses Netsmart's CareManager as the central care coordination platform for more than 60 care management agencies and more than 3,300 direct service providers. This collaborative manages and coordinates the care for the high-risk population who are eligible for health home services in New York State. This group ensures the member gets the right care, at the right time in the most appropriate care setting.



Missouri Coalition for Community Behavioral Healthcare

The Missouri Coalition for Community Behavioral Healthcare, founded in 1978, represents Missouri's not-for-profit community mental health centers, as well as alcohol and addiction treatment agencies, affiliated community psychiatric rehabilitation service providers and a clinical call center. The Missouri Coalition and its 35 partner organizations work together to improve the system of care in Missouri and provide treatment and support services to more than 250,000 clients annually.

In 2016, the Missouri Coalition implemented Netsmart's CareManager platform to eliminate manual tasks, improve the delivery of care and reduce costs. Because the coalition uses one system that can easily and securely share information across 35-member organizations, providers gain access to data in near real-time, enabling them to proactively notify the right people to offer the right care to individuals. Doing so saves time, improves outcomes, reduces costs, and increases staff and client satisfaction. Additionally, because the platform aggregates data to identify risks and trends, providers can address care for persons with complex needs, including co-occurring mental and physical health conditions, and better coordinate care between other providers.



Seven Hills Foundation

Seven Hills Foundation, located in Massachusetts, provides exceptional integrated clinical, educational and community-based supports to children and adults with disabilities and significant life challenges. Massachusetts is fundamentally restructuring its healthcare delivery system to improve the MassHealth member experience with a Delivery System Reform Incentive Payment (DSRIP) program. A principal element of DSRIP is implementation of the statewide MassHealth accountable care organization (ACO). Currently, accessing services is difficult, coordinated care between healthcare providers and community-based organizations is lacking, and the cost to treat this population is high. To strengthen linkages between providers and community-based organizations, the LTSS Community Partner program was developed to help ACO and managed care organization enrollees with complex behavioral health and LTSS needs. Part of this initiative was partnering with community agencies to form the Massachusetts Care Coordination Network.

In 2018, Seven Hills Foundation implemented the CareManager platform to ensure appropriate information sharing between ACOs, MCOs, primary care, acute care and behavioral health networks; and be able to report on outcome measures so they can enter into risk-based payment contracts.

Outside of the above client examples, Netsmart has led the community in its work with publicly funded programs, including:

- State-operated care management initiatives in Minnesota in support of a cohort of people with intellectual/developmental disabilities
- Local Medicaid care management initiatives for OptumHealth in Pierce County, Washington
- Implementing the largest network of care for the Los Angeles Department of Mental Health, managing the Medi-Cal benefit program while providing electronic health records to more than 100 private providers and 150 county-operated providers; serving more than 150,000 people in care. In addition, Netsmart solutions are operating in more than 20 other California counties, including Sacramento, San Francisco, San Mateo, Sonoma, Solano, Fresno and Monterey

The success of the previous public sector and human services projects is largely due to the combined learning from those clients, serving the same communities as this engagement, as well as the flexibility of Netsmart solutions. Netsmart has found that a careful implementation approach has allowed us more success than any other vendor in the public sector arena.

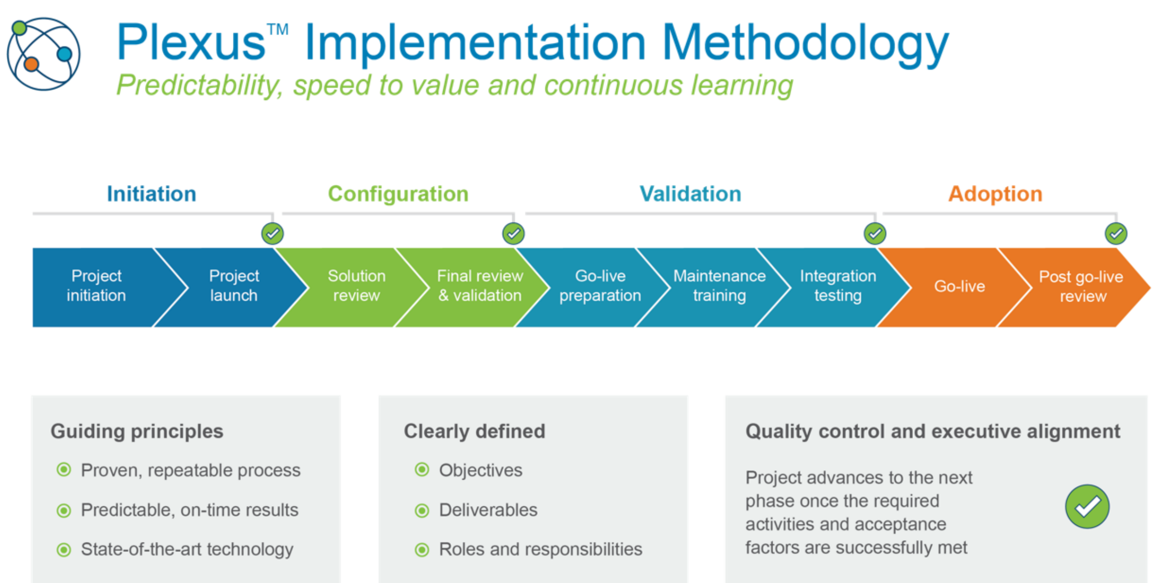
For all large-scale implementations, appropriate governance is key to drive project success. Netsmart is very conscious that the implementation of the Client Management Information System would need to be based on a clear vision, a comprehensive and integrated conceptual design across all functions, and well-defined business requirements. To achieve this, a vision will be agreed upon and a governing steering committee will be established. During the initiation phase, a comprehensive project schedule will be planned and managed in an integrated and structured manner to deliver the vision, thereby allowing Allegheny County DHS and Netsmart to continue to prudently deploy the Client Management Information System in a controlled manner.

Implementation

Netsmart uses a structured and disciplined implementation methodology based on the nationally-recognized Project Management Institute's (PMI) standards and the Project Management Body of Knowledge (PMBOK) to minimize project risk and improve timely delivery for enterprise-wide software projects. Netsmart has long recognized that the project plan is a collection of documents that outline the processes that should be followed in all knowledge areas as identified by PMI. This includes communication, risk, staffing, training, testing, configuration and other plans as well as the project schedule. Netsmart provides templates that have a proven track record of success as the building blocks for creation of these plans.

Netsmart uses the Microsoft Enterprise Project Management System, which the company has configured to support Netsmart's Plexus project quality model. The quality model provides for continuous monitoring of the project through all project phases starting with initiation and following through to project closure. Ultimately, the most important part of project planning is to ensure that collaboration and communication are established and maintained throughout the project and that visibility into project deliverables and status is available to the right individuals for achieving success.

The project implementation will follow Netsmart's Plexus Foundation methodology mentioned above. This methodology is based on prescriptive consulting to implement Netsmart's experience-based recommended practices and is proven to facilitate speed to value.



A monitoring and measurement process consisting of numerous cost and scope control, testing, quality assurance and acceptance activities is fundamental to the project lifecycle. Critical progress control checkpoints called Plexus Gates are included to ensure that the project cannot advance to the next phase until the required activities and acceptance factors are successfully met. The monitoring and measurement process employed by Netsmart ensures that projects are properly stewarded to both a time and cost budget.

This critical process transcends across the entire project implementation process to help ensure on-time project completion within estimated cost parameters, along with properly managed and approved schedule and scope changes, Status meetings and project status reports, client signoff and acceptance letters, project plan change requests, product change requests, product improvement forms, Plexus Gates.

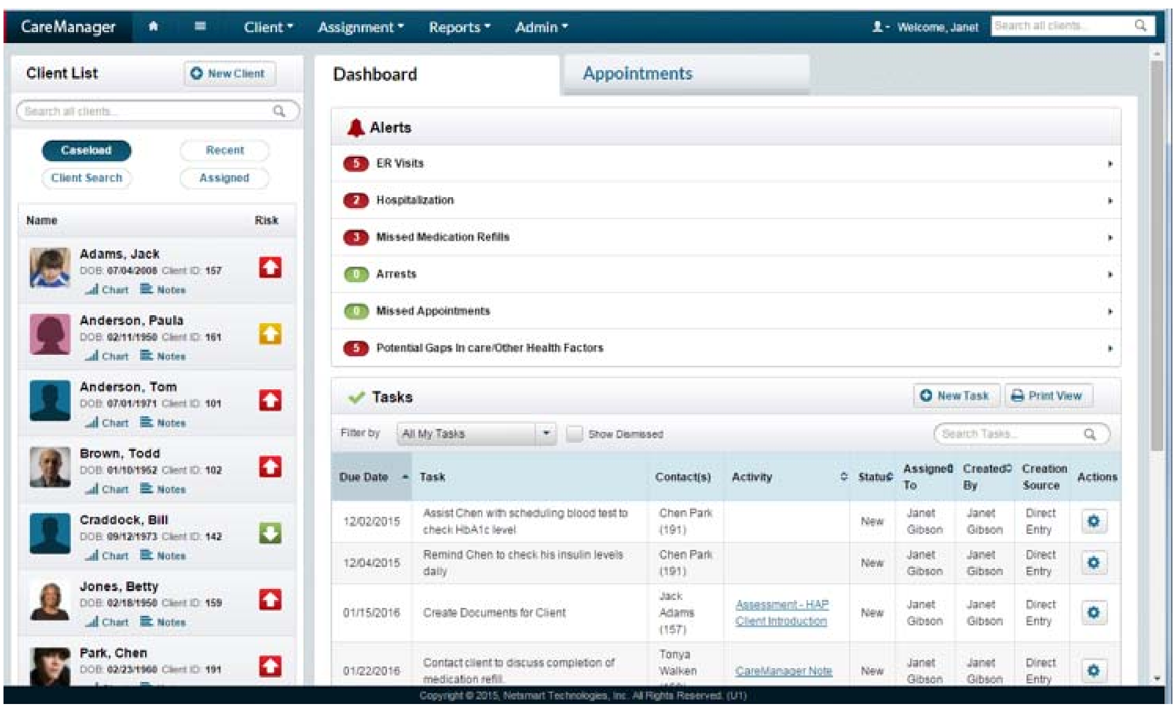
<u>Functional Requirements (40 points)</u>

2. Describe your capacity and capability to provide a Solution that flexibly supports the Core Features (Referral, Intake, etc.).

As health and human services and public sector providers continue to be critical players in coordinating and provisioning care between a wider range of providers and client populations, they need solutions that allow cross-organizational client management. Providers require innovative solutions that support this broader spectrum of services and related clinical data exchange.

Netsmart's Client Management Information System facilitates coordinated care across providers and enables the exchange of client data and tracking of clinical information to help manage a population and improve outcomes.

The platform gives access to all client records for which users are authorized. This comprehensive view into a client's health record provides broader insight and visibility into the activity taking place within the provider network. This visibility allows your organization to make informed decisions and real-time course corrections to ensure the patient is receiving the appropriate care, at the appropriate location, at the appropriate time.

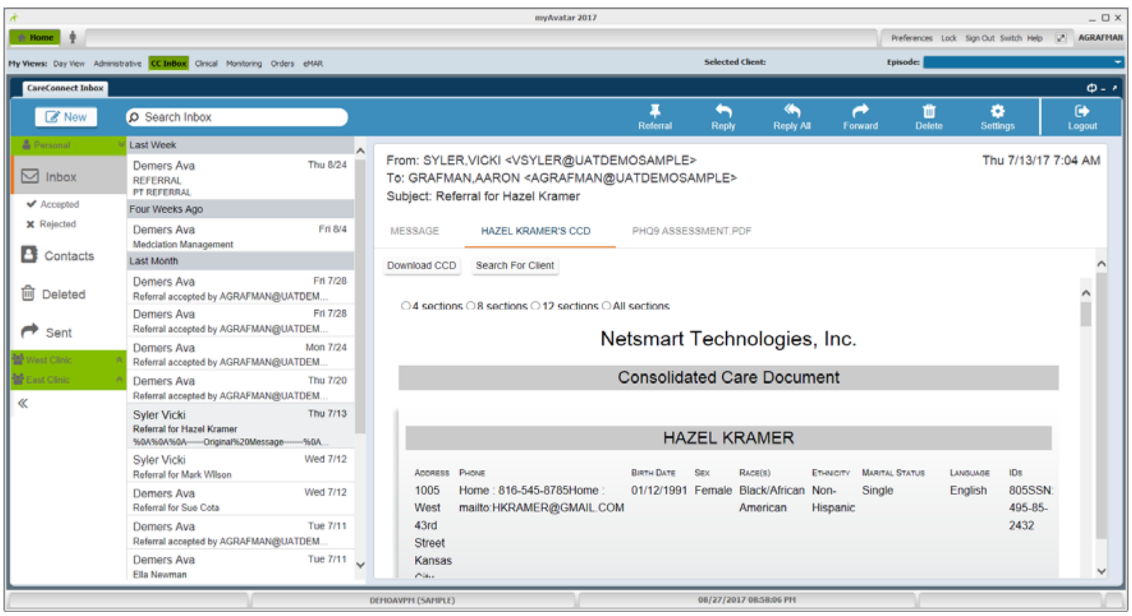


The full potential of the Care Manager platform is to bring providers, caregivers, hospitals and social services organizations together in a way that optimizes the outcome for persons in most need of care.

Netsmart understands the regulations and requirements of healthcare reform in a fast-paced and dynamic marketplace. Accountable care requires healthcare organizations to provide more quality, client-centered, cost-effective, and accessible services. Improving outcomes, promoting healthy lives and reducing costs are mutually beneficial goals that drive value. Healthcare today requires technology solutions that integrate multiple environments with clinical information available whenever and wherever it's needed. Finding the right partner that understands these demands and is committed to the success of healthcare organizations is critical.

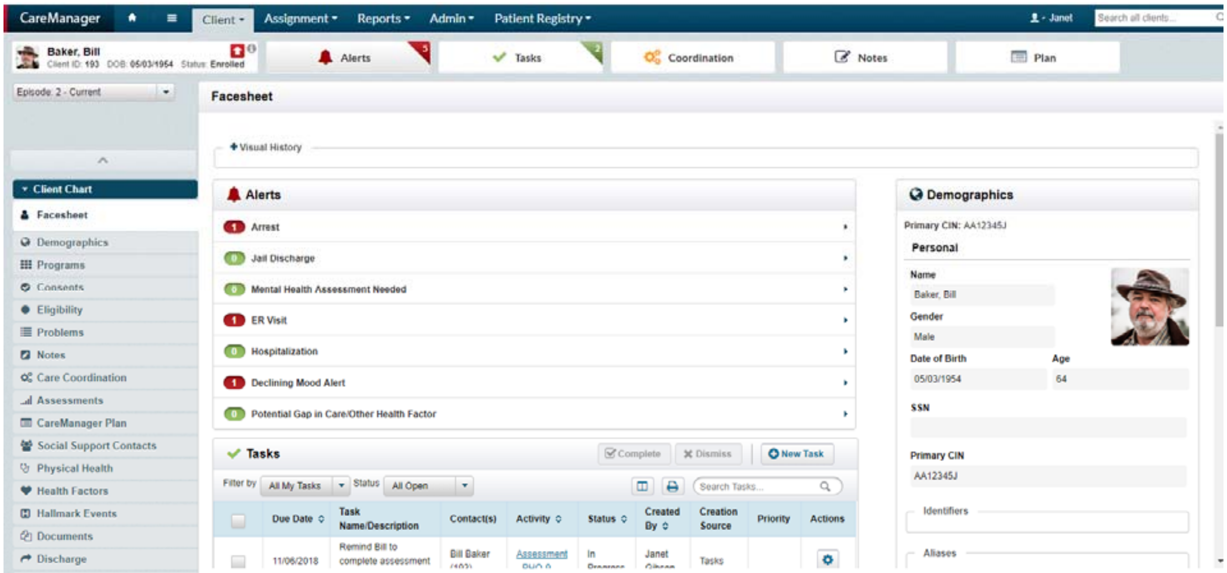
In review of the unique workflows provided in the RFP, Netsmart is confident the proposed solution can meet and exceed expectations, allowing for information to be entered one time and be viewed throughout the workflow process by all providers with access to the client data.

- **Referral**: Referrals are managed, both inbound and outbound, with CareConnect Inbox. CareConnect Inbox allows for direct, secure messaging to quickly and securely exchange referrals with external organizations as well as internally across departments.

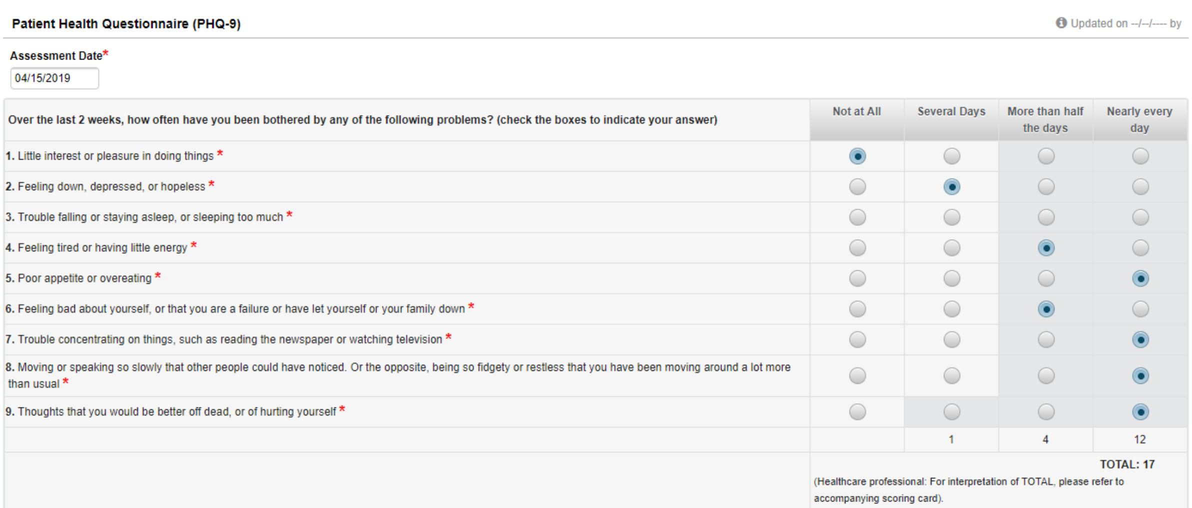


  - Beyond the inbox, referrals can be captured from the web, on paper, from a phone call, etc.
  - Referrals can be made on an individual or family members.
  - All referrals will be tied to the client(s) record, regardless of number of times a referral has been received.
  - Waitlists can be created if a program cannot immediately work with the referral.
  - All referral information, including outcome and enrollment in a program, will be captured.
- **Intake**: Information from multiple sources can be captured and reviewed to determine program/service eligibility.

- **Client Management**: All information about the client or family and interactions will be documented in the chart with quick access to pertinent information on the client facesheet.



- **Assessments**: Assessing is a core function of a worker, thus CareManager has assessments, such as the PHQ-9 and others, built in. CareManager also has a robust forms engine where new assessments can be quickly built as needs and requirements change. Below is an example of the PHQ-9.



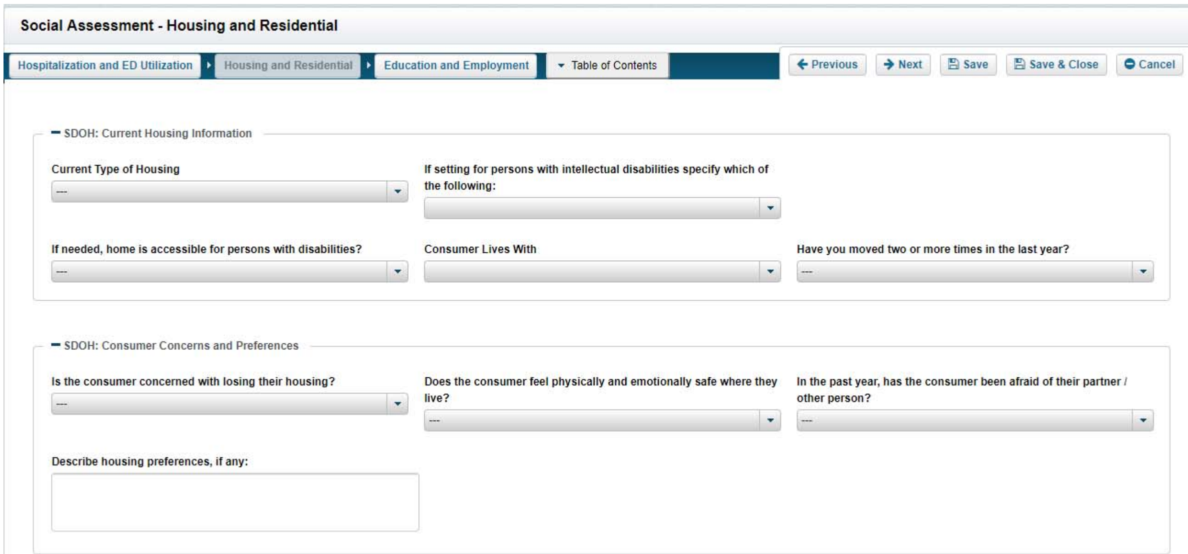
Patient Health Questionnaire (PHQ-9) Updated on --/--/---- by

Assessment Date*
04/15/2019

Over the last 2 weeks, how often have you been bothered by any of the following problems? (check the boxes to indicate your answer)	Not at All	Several Days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things *	●	○	○	○
2. Feeling down, depressed, or hopeless *	○	●	○	○
3. Trouble falling or staying asleep, or sleeping too much *	○	○	○	○
4. Feeling tired or having little energy *	○	○	●	○
5. Poor appetite or overeating *	○	○	○	●
6. Feeling bad about yourself, or that you are a failure or have let yourself or your family down *	○	○	●	○
7. Trouble concentrating on things, such as reading the newspaper or watching television *	○	○	○	●
8. Moving or speaking so slowly that other people could have noticed. Or the opposite, being so fidgety or restless that you have been moving around a lot more than usual *	○	○	○	●
9. Thoughts that you would be better off dead, or of hurting yourself *	○	○	○	●
		1	4	12

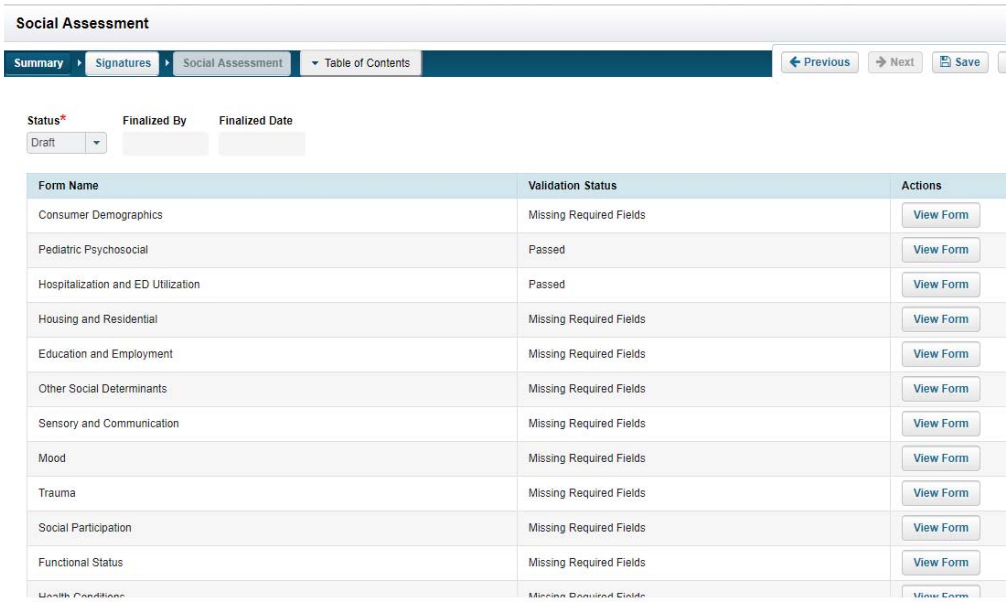
TOTAL: 17
(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card).

   - Workflows can also be built using assessments. An example below shows a Biopsychosocial assessment broken down in a workflow as different people complete different parts of the assessment throughout the client's service interactions.

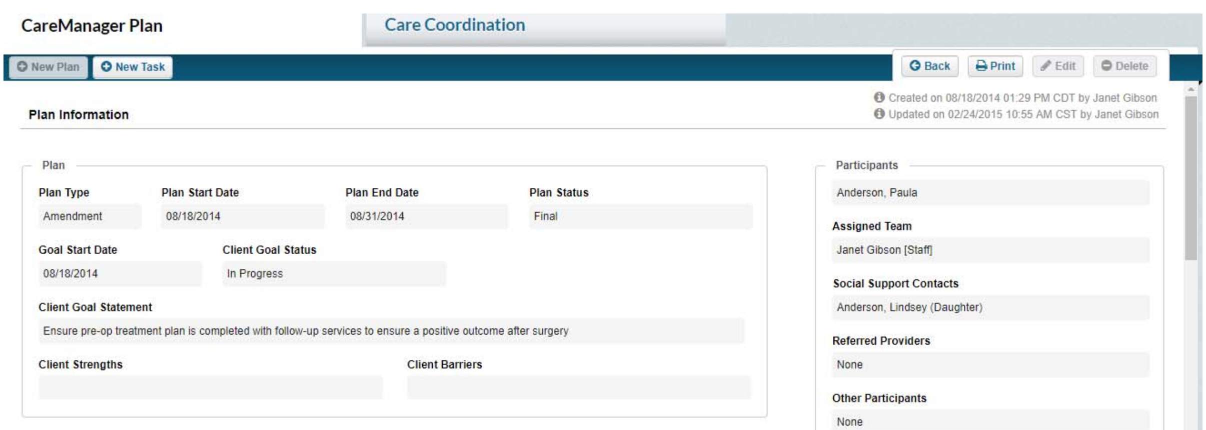


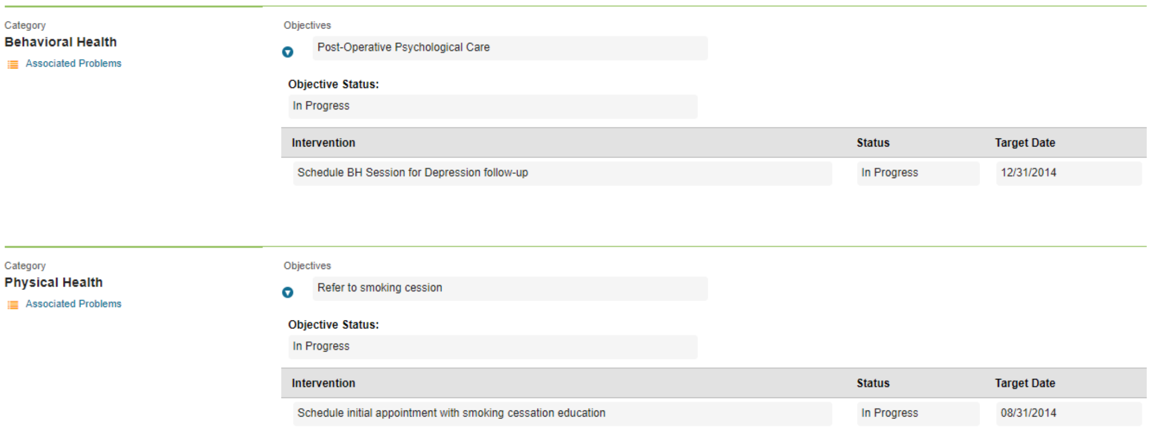
- A worker can quickly go to their section of the workflow:

- A view into what has and has not yet been completed in the workflow shows here:



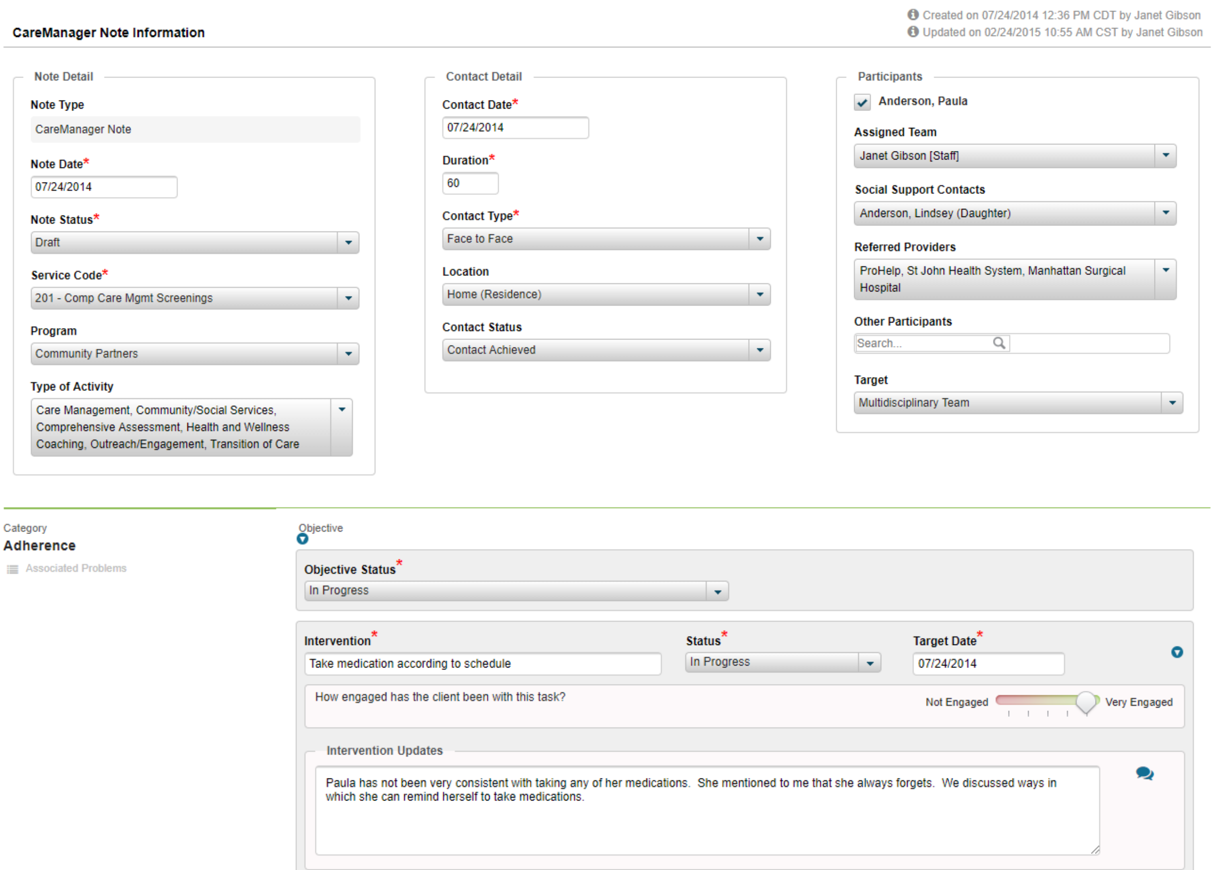
- **Service Planning**: Netsmart understands that service planning is a vital part of a client's care and needs to be dynamic and shareable. Service planning can be completed using the core Care Plan within CareManager or using easy configuration to create a program specific plan.



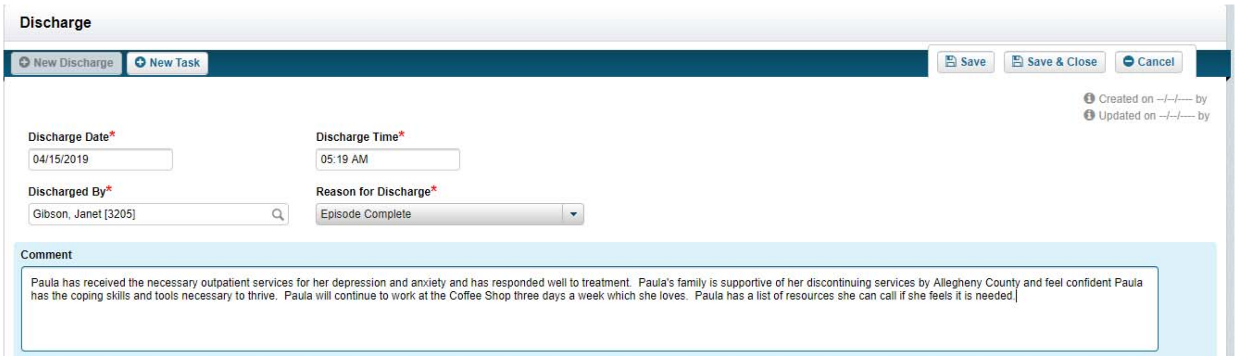


- o The plan can have domains and is client-centric, allowing for the client to be actively involved in their own care planning.

- **Services**: While service information is typically captured in notes, CareManager is easily configurable to allow for expansion of service capture outside the client record as mentioned in the RFP. Below is an example of service capture.



- **Discharge**: Discharging a client can take place seamlessly in the client record:

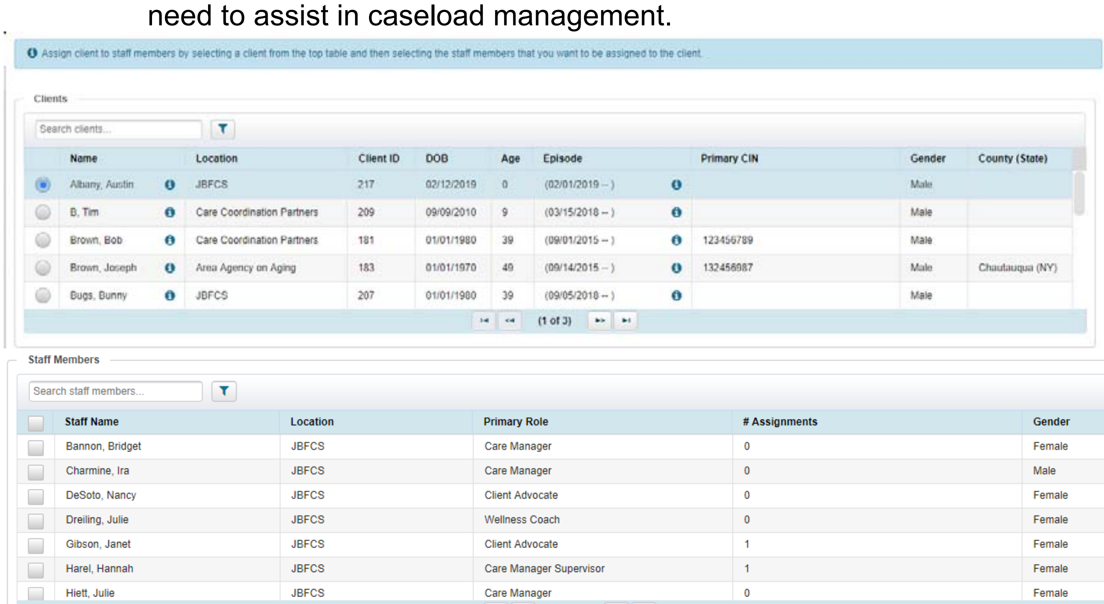


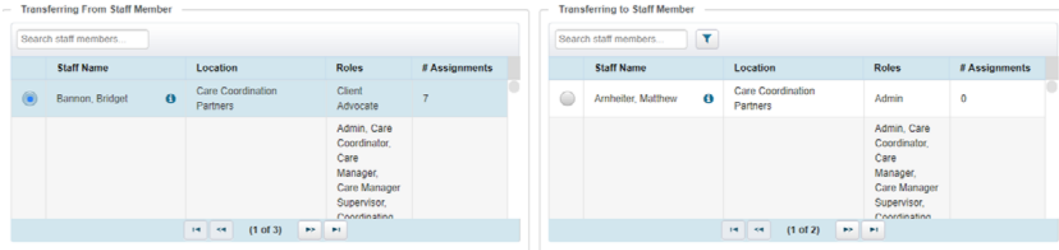
- o Discharge documentation can also be easily configured/modified.

3. Describe your capacity and capability to provide a Solution that flexibly supports the Supporting Features (Provider/Facility Management, Forms & Reporting, etc.).

CareManager is a robust solution, allowing for changes in policy or procedures to not cause service disruption. Configuration in the system is typically handled by Allegheny County DHS staff with little to no assistance by Netsmart. Historically Netsmart has focused on client enhancements as the solution focus was the client and family. However, Netsmart understands the need for an organization to also manage staff development, time tracking, etc. As a result, Netsmart has on the roadmap enhancements to this area of the system and welcome partner input.

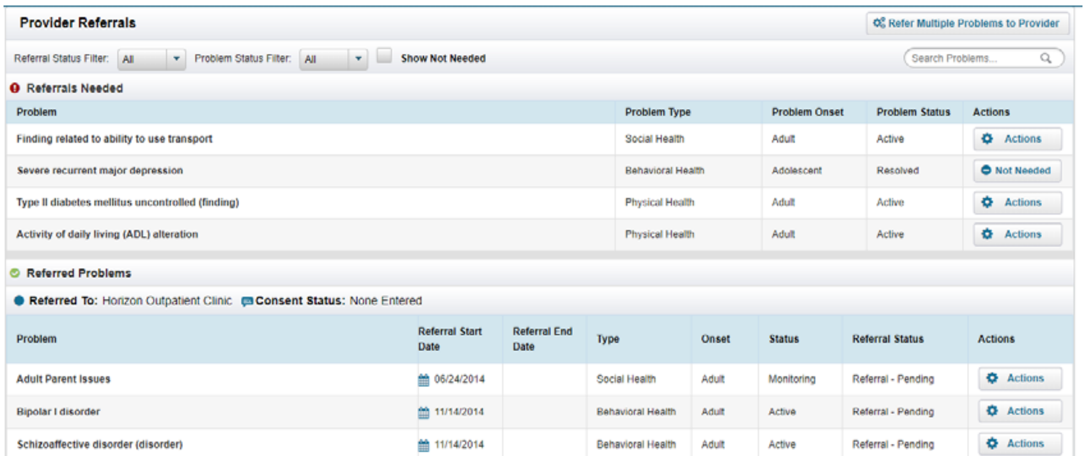
- **Provider/Facility Management**: Caseload management is handled via the Team Management feature.
  - o **Team Assignment**: Effortlessly assign clients to staff (or vice versa). The system will show a count of current caseload numbers so staff can make informed decisions when assigning. Team Assignment also allows caseload reassignment if a staff member is no longer with the agency or is on an extended absence and other staff need to assist in caseload management.



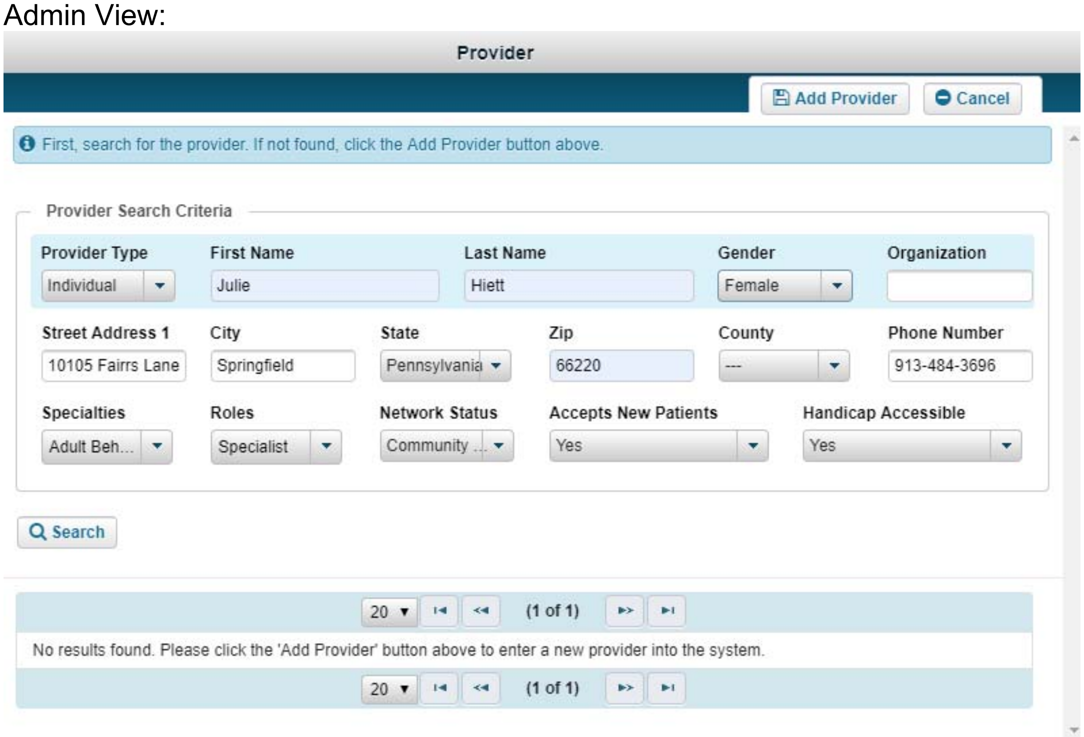


- **Provider Management**: There are both end user and admin features within the solution to address Provider needs.

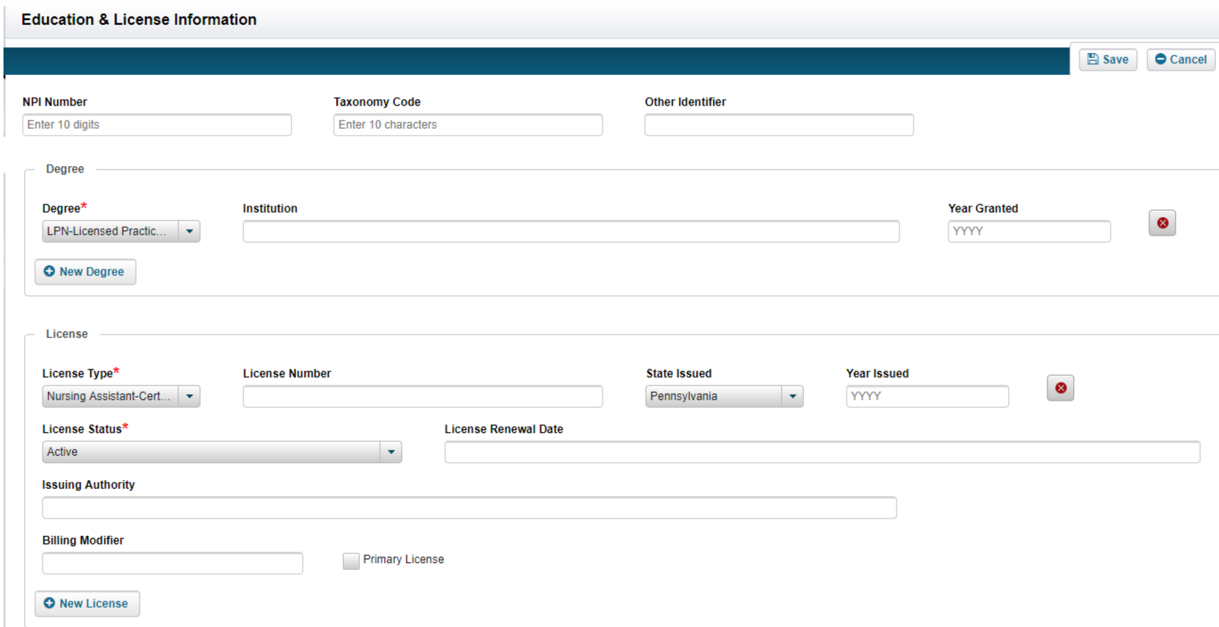
End User View:



Admin View:

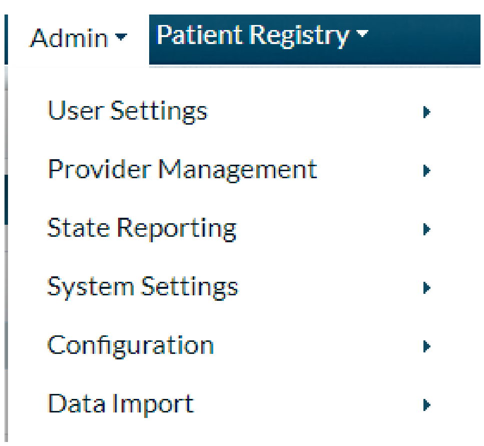


The other information provided in the user story will need expanded on to determine best approach to capturing the needed data efficiently in the solution. Netsmart anticipates expansion of the staff profile where information on education, licenses and certification is captured. Information on supervision and other noted items could easily complement this section.

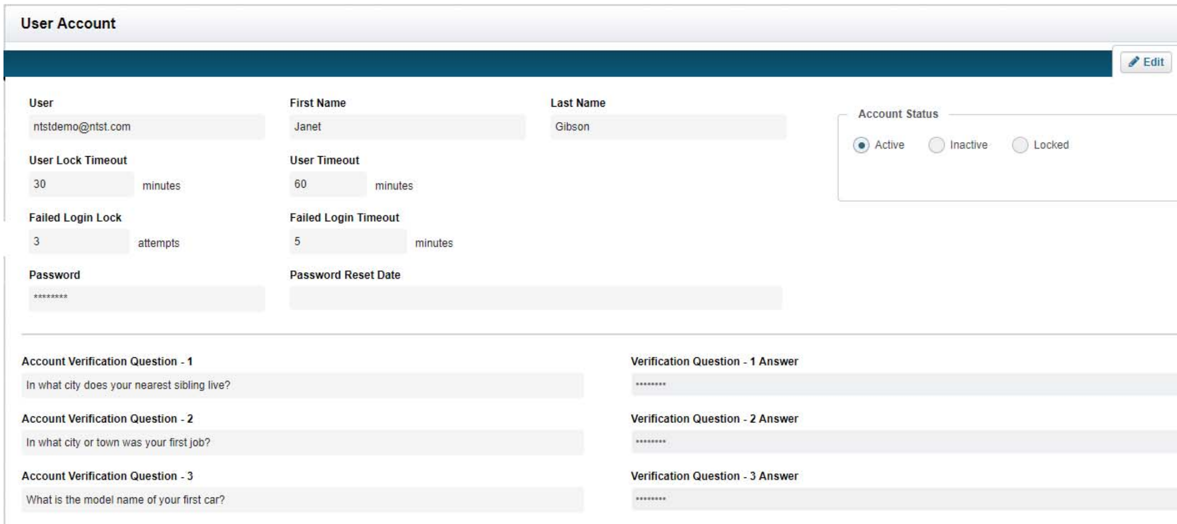


Expansion of the Admin capabilities would allow for program description, eligibility requirements and capacity. This would be part of the already identified Organization and Program section of the solution.

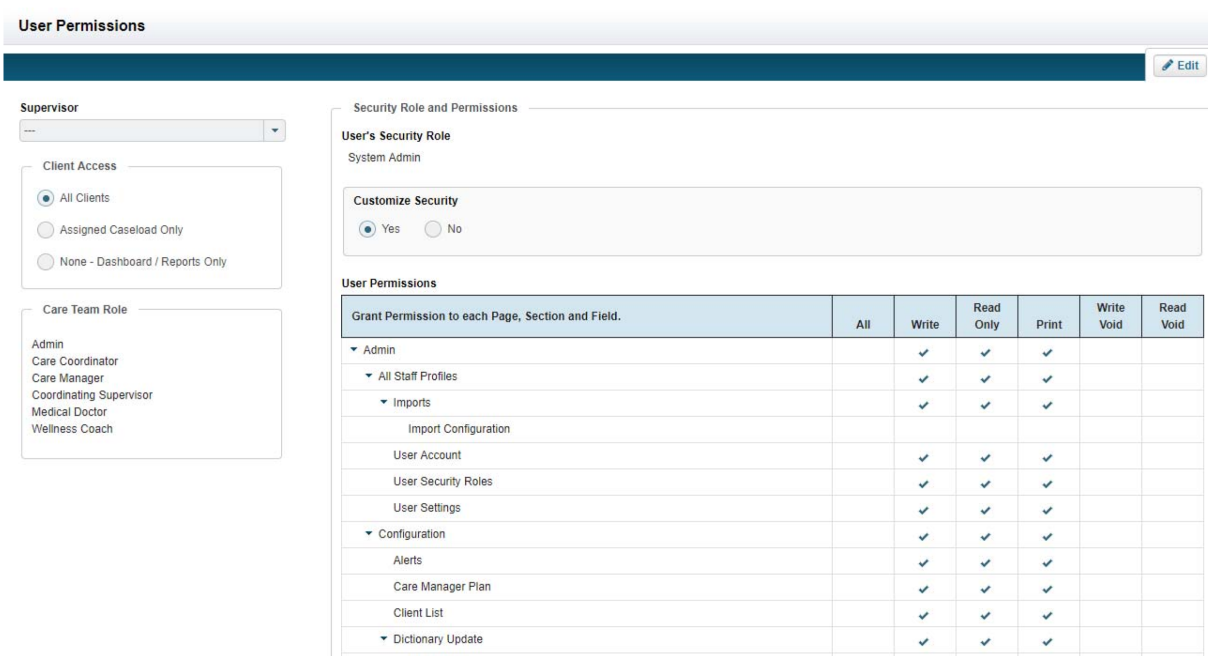
- **User Administration & Security**: All of the tasks lined out in the user story in the RFP are configurations readily available in the solution via the Admin tab features:



- o **Security Profiles**: Staff profile set up and modification is easy and efficient, including locking or deactivating a profile.

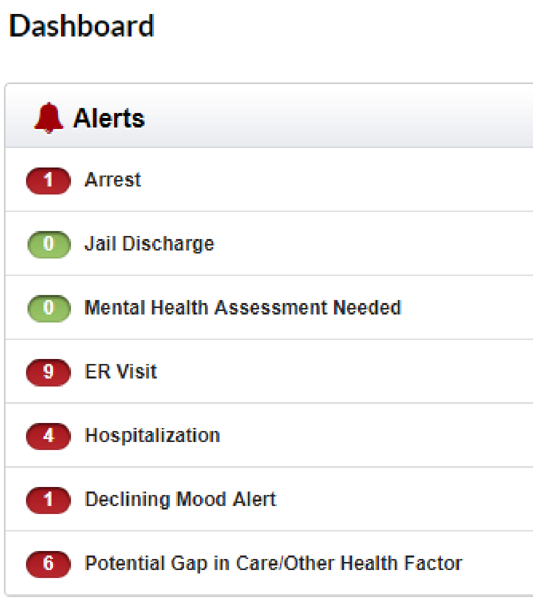


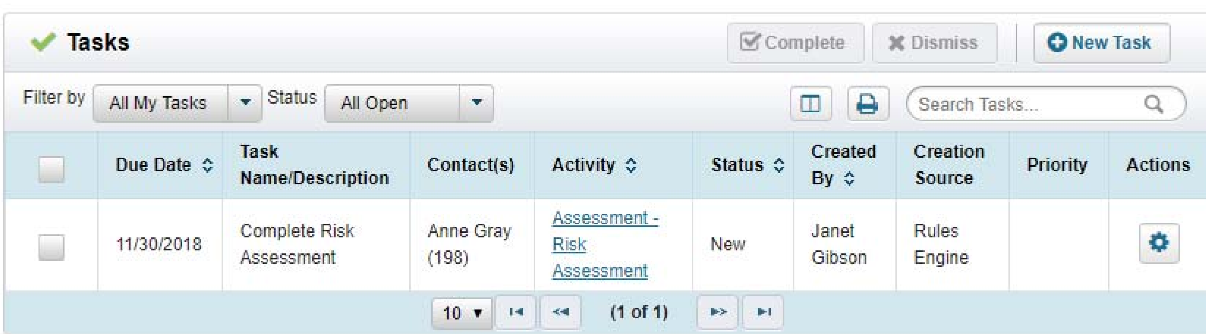
- o **Security Permissions**: Security access is based on user and role permissions.



- **Workflow Management**: Workflow throughout the solution can be managed at the Admin level to ensure policy and regulatory processes are being followed. Some of these will be managed via the business rules engine and identified during implementation gap analysis. Others are inherent to the solution such as the ability to modify who can complete certain workflow tasks.

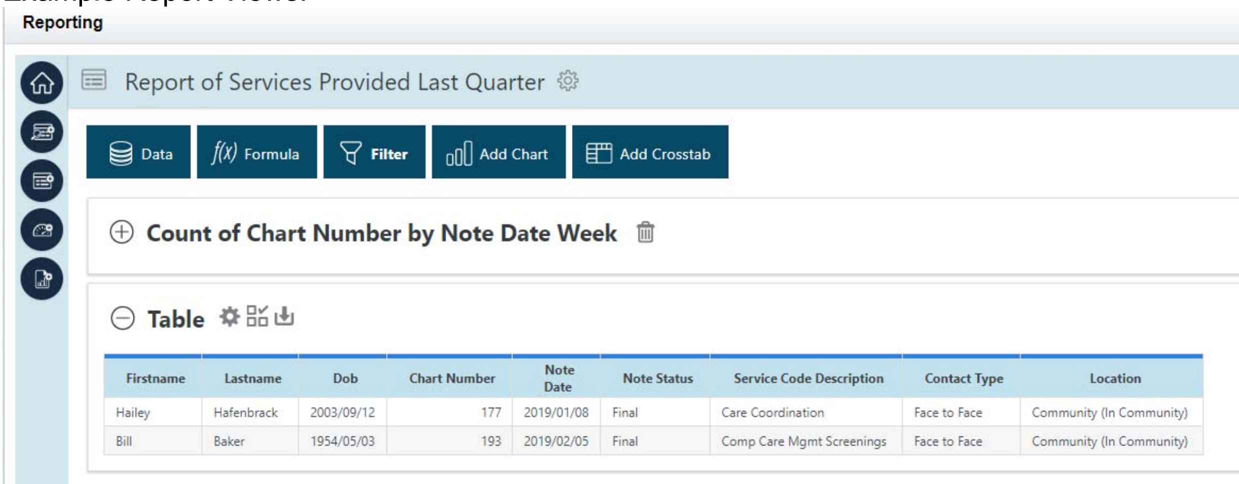
- **Alerts and Tasks**: Alerts and tasks can be utilized to build efficiencies in the workflow based on pre-set criteria and set in the business rules engine. For example, you could have a task auto-assigned once an assessment is completed to move to the next step in a workflow or as a tickler within 30 days of when it is due for an update. Example alerts below:

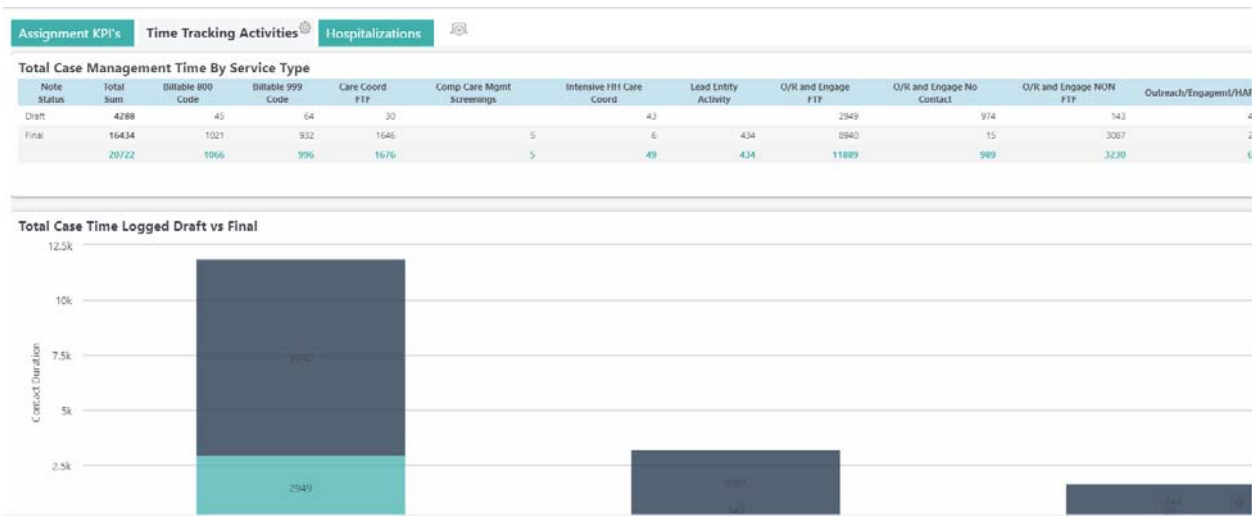




- **Forms & Reporting**: As mentioned above, forms are both inherent to the solution as well as can be configured and modified. The term forms includes assessments, service plans and other features within the solution. A form workflow is shown above.
  - **Reporting**: The solution includes an embedded reporting solution for real time and historical views in list or dashboard form. Ad hoc reporting is available and easily run by end users and admin level staff. Reporting users the same user and role security so information is not displayed if someone should not have access to the client record or client level data.

Example Report Views:





- **ETL Reporting Server**: This proposal includes access to an ETL Reporting Server which will have a nightly refresh of the database to complete more in-depth data analysis using the reporting tool of your choice, such as Crystal Reports.

<u>Non-Functional & Technical Considerations (35 points)</u>

4. Describe your approach to the access to and integrity of data entered in to the proposed Solution (e.g., access to data, protecting data, documentation).

As mentioned in the above section, an ETL reporting server is including in this proposal, allowing for access to the data tables.

There are two types of user access to the platform: 1) Staff Profiles and 2) Provider Profiles.

What a user can see and do in the platform is based on user definition and/or user role definition. It is these definitions that control access to the portions of the system and more important what options a user has when accessing those aspects. When a user is created in CareManager, their profile is set up based on agency access and role. A staff or provider username is their email address which is tied to their agency and system level access. Part of the user or user role definition is another permissions layer which designates client access: 1) all clients being served by their agency, 2) caseload-only access, which only allows view of a client if the person has been assigned to the care team, and 3) dashboard/report only access. Finally, there is a Tenant Code at the server level, so information is secured within a tenant. CareManager supports security control down to the screen and data table row level. Only data associated with those clients that are within the user's security purview would be included in the reports and only for those screens that are included in their user role.

Netsmart is governed by an information security management system that aligns to the NIST CyberSecurity framework, which directly aligns to the NIST suite of controls including NIST 800-53. Netsmart complies with HIPAA, HITECH, and will comply and with CMS MARS-E requirements. Netsmart today completes annual HIPAA Risk Assessment validation and undergoes a minimum of annual penetration test and regular vulnerability analysis. Netsmart will provide results from these validations with Allegheny County DHS under mutual NDA, if necessary.

CareManager is designed to meet and exceed the requirements outlined in the security standards for Access Controls. Netsmart has implemented robust policies and procedures and reviews them as necessary. Netsmart assigns responsible account managers, regularly reviews access, and closely manages information system accounts. Netsmart employs automated mechanisms supporting this management, including email notifications, dashboarding, and a robust Governance, Risk and Compliance system (GRC). Netsmart establishes and administers privileged user accounts in accordance with a role-based access scheme, and regularly audits this administration, including multiple levels of automated monitoring and control.

Netsmart’s security program is based on the NIST 800-53 Federal Security Standard. In addition to performing continuous in-house network security scans, vulnerability scans, and 24/7/365 signature-based patch scans, the platform is also tested and certified by third-party application and network security auditors. Our security team maintains many application vulnerability and penetration testing tools, including:

- Tenable's SecurityCenter and Nessus for vulnerability management
- IBM Security AppScan for application security assessment
- Nmap, Metasploit, BURP Suite, Charles, and others for more in-depth penetration testing

Our defense-in-depth network security architecture is designed to meet the security and performance needs of the platform. We have leveraged multiple complementary layers of network and application firewalls, as well as multiple intrusion detection and prevention systems. Information assets are classified and segregated based on the data they process and the devices with which they are required to communicate. All packets entering and exiting the data center, as well as packets traversing security zones, are secured using TLS 1.2 encryption with 2048-bit client specific encryption keys and are inspected for validity.

Finally, a major part of the security program, and what separates us from our competitors, is the amount of real-time threat management monitoring we bring to bear. When we were put through our most recent federal audit and were approved to directly connect with federal systems, we brought the same tools used by the Department of Defense and other federal agencies into our in-house arsenal. This includes investments in Tenable's SecurityCenter, F5 ASM web firewalls, OSSEC Intrusion Detection systems, centralized antivirus, and many other enterprise-class tools that continuously scan our site and inspect traffic in real-time to identify and isolate threats as they develop.

Physical access to our hosted equipment is protected by the following layers of control:

- Photo ID and passcode
- 24/7/365 on-site guards
- Key card and biometric access to enter data center
- Two separate keys to access equipment
- Subfloor motion detection and camera coverage throughout the facility

For protecting data, Netsmart's CareManager platform is 100% hosted by Netsmart in our Plexus Cloud data centers and is a multi-tenant SaaS based application; these data centers are staffed by Netsmart associates. The application could be run on Microsoft Azure Cloud, but it is not currently hosted there. Netsmart's Tier 3 data centers incorporate extensive physical and data security safeguards, including data encryption, perimeter and internal systems security, and backup and disaster recovery services. Netsmart's Plexus Cloud hosted environments are SSAE 18 certified, following an ISO27000 compliance and governance model, and are SOC 1 and SOC 2 certified. In addition, we conduct annual HIPAA and HITECH compliance audits to ensure the safety and security of our clients' hosted data. Each data center has redundancy built for HVAC, power, and Internet. All infrastructure components, including network load balancers, web servers, application servers, and database servers are in a redundant configuration. Netsmart's data centers are geographically dispersed to guard against the most extraordinary circumstances. Your data will be housed in a single tenancy environment at our primary data center in Kansas City, Missouri and replicated to a secondary data center in Solon, Ohio. Your data will never be housed outside of the United States.

Our service level agreement guarantees 99.9% uptime to access your data. Upgrades require system downtime, but generally require no more than an hour or two and are scheduled overnight or at mutually agreeable times to reduce the impact on business operations.

For our Netsmart solutions, the end user guides, system administration documentation, technical references, and report development instructions are stored and maintained on the Netsmart Wiki Help website. Netsmart's Wiki is an easy-to-use, online documentation database for most products within the Netsmart portfolio.

5. Describe how the proposed Solution enables a high level of interoperability and integration.

During our 50-year history, Netsmart has implemented behavioral health and chemical dependence service solutions across the U.S. healthcare system. We've demonstrated our agility, commitment and innovation to help our clients adapt to the ever-changing healthcare environment, whether they are combating crises like the heroin and opioid epidemic or implementing planned transitions to value-based care. Building a network to enable collaboration with first responders, support efficient transitions in care, and identify individuals most at risk, will require Allegheny County DHS to partner with an organization that has a proven record to build such networks in a diverse healthcare ecosystem. **Netsmart is the only company in healthcare that has the expertise, scale, technology, passion and the leadership to deliver … today.**

Netsmart has invested significant time developing our proprietary, web-based interoperability and integration network, CareConnect. CareConnect is a purpose-built interoperability solution disrupting the traditional acute care or medical only centric health information standards developed traditionally to accommodate the medical industry. CareConnect was built from the ground up to represent the Substance Use, Behavioral Health, Child & Family Services, Autism, and Intellectually/Developmentally Disabled markets. This means that at the core of its technology it has seen every type of information sharing rules specific to sensitive data and 42 CFR part 2 requirements in all fifty states. Netsmart leads the industry by advocating on behalf of our communities at the federal level and with each encounter we engage at the State or Local level. This includes consent2share, a consent to query or consent to release model flexible enough to meet any type of provider consent policies that educates patients and supports their desire to share.

Even in states with Health Information Exchanges running, the substance use community hasn't historically adopted or trusted these networks, because under these networks, data is housed in a repository. CareConnect supports sending and receiving referrals and clinical data electronically across our network of more than 1 million providers without housing the data in any one repository. More specifically, our consent can be sent with our attribution of clients along with a 12 month expiration date. The network spans not only human services but also acute, primary care and post-acute. Netsmart's existing national network of over 1,000,000 individual providers and almost 70,000 organizations will now only be a click away for Allegheny County and its community of providers when clinically relevant data needs to be sent or received – while still maintaining the privacy and consent requirement of 42 CFR part 2.

This network is the foundation for empowering Providers and Peers alike to deliver more timely care to those most in need. Through clinical data sharing Allegheny County will be able to measure success in the outcomes of the community you serve.

Additionally, Netsmart has been a leading partner for FHIR and the Sequoia Project's Carequality Network. Netsmart has taken the step to implement the Carequality Interoperability Framework for health data exchange, enabling clients on its network to share data with providers on other networks. For example, Epic has its own network similar to Netsmart's CareConnect solution. Carequality collaborated with industry leading interoperability networks such as Epic and Netsmart to create a governing body that enforces a standardized way an EHR can query other EHRs directly without the middle man of an HIE acting as a data repository.

Netsmart's implementation of Carequality will increase access to relevant clinical records at the point of care to support care decisions, avoid duplicate procedures, and aid in care coordination. This will save providers time, expense and frustration. Subscribing to the Carequality standards allows for clients to have access to almost 300 provider partners on day one. In addition, because all Carequality implementers abide by the same "rules of the road"

Netsmart clients will have access to not just the almost 300 implementers who are already on the network, but every provider who will ever join the network.

This industry disruption and collaboration between Netsmart and Carequality is important because approximately 61.5 million Americans, or one in four adults, experience a mental illness each year. A U.S. Surgeon General report found 10 percent of children and adolescents suffer from serious emotional and mental disorders that cause significant functional impairment in their day-to-day lives at home, in school, and with peers. These mental and behavioral health challenges do not happen in isolation to substance abuse or gambling statistics. The Robert Wood Johnson Foundation reported that 68% of adults with a mental disorder have one or more medical conditions. These patients are some of our country's most vulnerable – and most likely to benefit from the speed in which platform to platform care coordination can occur to create a longitudinal record of recovery. Netsmart's implementation of the Carequality Interoperability Framework will help these providers better care for these patients.

Netsmart partnered with Epic to propose a consent model which adhered to 42 CFR part 2 and allowed for a provider to systematically query for sensitive patient data while accessing and adhering to consent requirements, enabling wide spread data sharing, integrating behavioral/substance use data and general health data. This use case was adopted by Carequality and is now available for all Carequality implementers. This joint effort is driving the adoption of sharing sensitive data across the broader exchange, with the design and adoption of the "point of care consent" use case.

CareConnect enables the sharing of clinical information among providers involved in the care of a patient and with other entities such as Health Information Exchanges (HIE) and Regional Health Information Organizations (RHIO). With Netsmart's CareConnect service, providers can register a client with the network, create referrals for clients that need to move between care providers, request information from other providers, and receive that information in a standard Continuity of Care Document (CCD).

More uniquely, the CareConnect team recognized early that to truly digitize and share information specific to our community, we needed to advocate for standard messaging protocols that allowed attachments to support assessments or clinical documentation such as treatment plans or progress notes.

To improve these national standards, Netsmart implemented the new CareConnect Inbox feature. The Inbox simplifies communication among care team members, as well as between your organization and the larger healthcare ecosystem. Clinicians can Direct Message team members, send referrals and share clinical information if a consent is on file. This secure exchange between providers allows them to share significant patient information and ensure a successful, expedited transition of care.

The Inbox also includes a "Send Message to User" feature that allows users to send messages to other users securely through the solution, similar to a "chatting" tool.

Connectivity Standards

IHE, HL7, DIRECT, SFTP, VPN, MLLP, HTTP, SMTP, SOAP Web Services, XDR/XDM, XDS, XCA, XCPD, PDQ, PIX.V2/V3 (Meaningful Stage 2)

Data Transmitted

CCD, C-CDA, PDF, ADT, Care Plans, Discrete Data Elements: ED Alerts, Medications, Lab Results, Problems, Immunizations

Infrastructure Standards

Secure Messaging based on Direct protocol (using SMTP and S/MIME), Secure Messaging based on Direct protocol (using IHE Cross Enterprise, Document Reliable Interchange or (XDR), Direct Messaging (using IHE Cross Enterprise Document Media Interchange or XDM), IHE Cross Enterprise Document Sharing (XDS), IHE Cross Community Patient Discovery (XCPD), IHE Cross Community Document Access (XCA), IHE Audit Trail and Node Authentication (ATNA), IHE Patient Identifier Cross Reference (PIX v3), IHE Patient Demographics Query (PDQ), IHE Cross Enterprise User Assertion (XUA), Support for digital signature standards (such as IHE Document Digital Signature or DSG), Support for patient consent standards (such as use of IHE Basic Patient Privacy Consents or BPPC)

Data Standards

HL7 2.5.1 Implementation Guide for Immunization Messaging, HL7 Version 3 Implementation Guide: Family History/Pedigree, HL7 Version 2.5.1 Implementation Guide: SandI Framework Lab Results Interface, HL7 Version 3 Standard: Clinical Decision Support Knowledge Artifact Specification, HL7 Clinical Document Architecture (CDA), Fast Health Information Resource (FHIR), ASC X12 (supporting HIPAA 5010 administrative data transactions)

Data Semantics

MSDRGs, CVX, AMCH Confidential, Logical Observation Identifiers Names and Codes (LOINC®), ICD-9, ICD-10, MVX, NCPDP Script, RxNORM, SNOMED-CT, Unified Code for Units of Measure (UCUM)

CDA Documents

C-CDA - Continuity of Care Document (CCD), C-CDA - Consultation Note, C-CDA - Diagnostic Imaging Report (DIR), C-CDA - Discharge Summary, C-CDA - History and Physical (HandP), C-CDA - Operative Note, C-CDA - Procedure Note, C-CDA - Progress Note, C-CDA - Unstructured Note

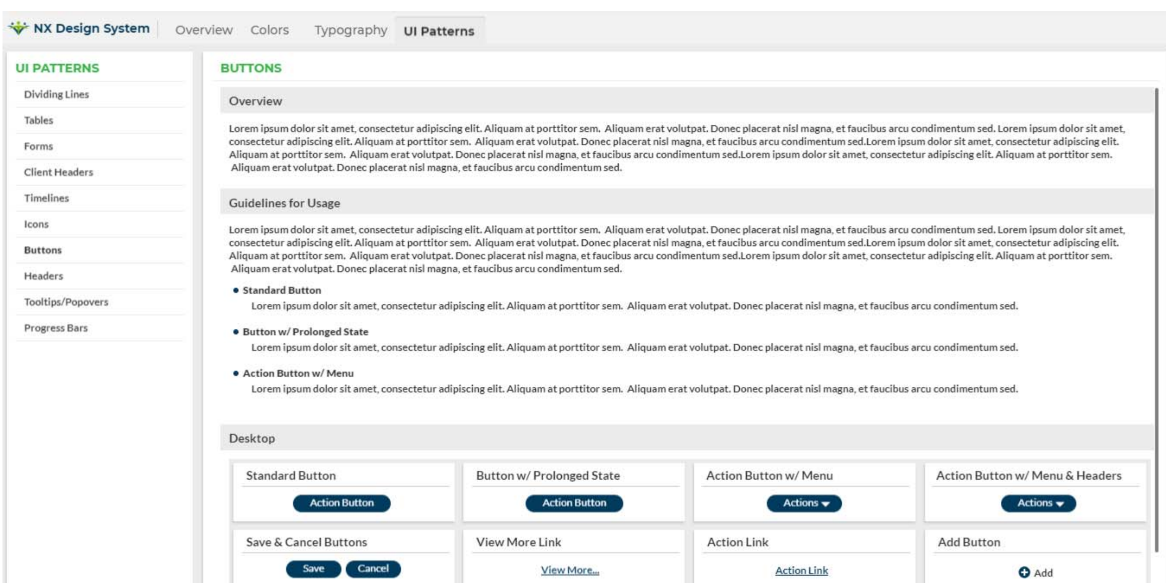
6. Describe your experience in user interface design, user experience design, usability and information architecture and provide examples.

   Netsmart's suite of proposed solutions will empower Allegheny County DHS to treat the whole person through flexible workflows and configurable options to allow Allegheny County DHS's unique program and service delivery needs to be enhanced for everyday use, while allowing for efficient information exchange and communication across care team members in multiple care settings for seamless care coordination.

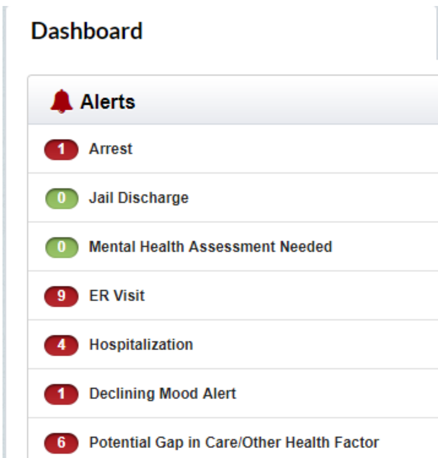
   Netsmart maintains a strong focus on User Experience through a dedicated group of professionals. All solutions within the Netsmart portfolio are built around four core tenants of Application Architecture, Technical Architecture, Cloud Architecture, and User Experience. The UX team focuses across the whole lifecycle of the solution providing the following areas of concentration:

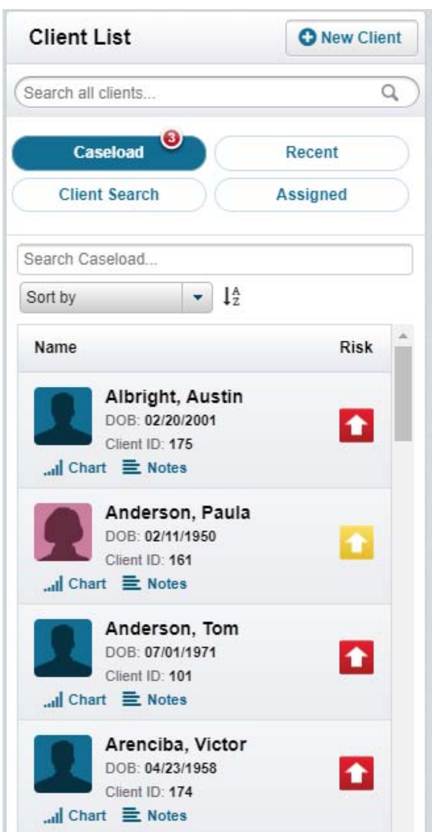
- Research – User and market research is performed to understand the value of the solution, the profiles of the typical users, and the environments that users typically work in. User shadowing and interviews are performed to provide a deep understanding of why and what users want to accomplish
- Strategic analysis – All of the information gathered in the research stage is compiled into user stories, information architectures, user flows, and product requirements.
- Design – Several iterations of prototypes are created and tested with users to ensure the solution is intuitive, accomplishes the tasks, and is efficient. Tools like Morae are used to gather additional data during this stage.
- Development – The user experience team is embedded within the agile development teams to work through design considerations and ensure adherence to Netsmart's style guidelines as the solution is being built.
- Delivery – The user experience team measures the results of the efforts through user satisfaction surveys and analyzes the data captured within Netsmart's proprietary application monitoring tool, Guardiant. This allows the team to view how clients are utilizing the solution, what workflows are used the most, and hone the design over time.

Netsmart maintains a standard design system that continually evolves as technology changes and to keep up with current design research. The design system is documented and leveraged by the engineering team (UX, Development, and QA) to provide consistency resulting in more intuitive solutions. Colors, typography, controls, spacing, etc. are all documented in the design system:



In the design of the user interface for CareManager, Netsmart paid special attention to how users view and respond to information. This started with simply reviewing how many clicks it takes to get to certain pieces of information. Wherever possible, Netsmart utilizes additional views and tends to stay away from overcomplicating the user interface. This helps with increased user adoption and satisfaction. The home view is the landing page for all users when logging into the solution. Upon login, this home view starts with currently critical or important alerts associated with the clients within the user's caseload to drive priority and critical workflows.





Clicking these alerts display alert details and the associated clients. Clicking a specific client opens client's record for further examination of clinical details. In addition, there are views via dashboards and reports that can be made interactive that can support the work of care managers and other users of the solution.

CareManager has a robust reporting system which allows both ad hoc and custom reporting. Training on the creation, managing and running of reports is part of any standard CareManager implementation. Using the embedded reporting writing solution end-users can be given access to create the reports and dashboards they need. The use of these tools does not require a highly skilled information technology analyst; the tool was designed for average end-users to be able to create reports without IT intervention.

7. Describe the proposed Solution's technical support capabilities (e.g., event logging, audit capability, production support, high availability).

The solution is fully HIPAA-compliant and includes a full audit trail of user logins/logouts as well as a history of all record views and revisions, including which user accessed the record, what information was viewed/added/deleted/revised, and when the transaction occurred. CareManager data is stored in audit tables tracking any rows of data that have been updated and/or edited. As records are updated, the prior version is stored in existing audit tables. This data is available to core solution and user defined audit reports. The core audit reports include non-caseload access, failed login, and event log.

8. Describe the proposed Solution's capability to support users in the field.

The solution is also built utilizing JavaScript™ and HTML 5 which allows the solution to be deployed on several different platforms, including iPads and/or Android devices, in addition to accessibility using a laptop. It operates in the following browsers: Internet Explorer® 8.0 or later, Mozilla® Firefox 4.0 of later, Google Chrome™ 5.0 or later (Recommended). No data is stored on the device, nor is the CareManager application stored on the device. It is accessed via an icon that opens the session. The application associated with the user's access definition is then loaded from the server via the internet link.

<u>IT Governance & Delivery Methodology (20 points)</u>

9. Describe how you would assist DHS in governing how the proposed Solution will be managed across various different use cases and stakeholders in a way that retains the Solution's value.

Netsmart's Plexus Implementation delivery methodology takes an iterative approach to requirements elaborations.

<u>The Project Initiation Phase</u> provides the opportunity to prepare the project teams. The Plexus Foundations implementation methodology is introduced and the different events within the methodology presented, outlining the objectives of each event and the roles and responsibilities of each member of the team. The purpose of this phase is to review project scope and assumptions, develop the detailed Project Management Plan and other governance related deliverables, review the event-based Netsmart Plexus Foundations methodology, introduce starter kit tools to commence the data collection process and commence planning for the

Requirements Elaboration and Specification Definition activities. Specific to Requirements elaboration, Netsmart will introduce a key tool called the Data Collection Workbook.

The Project Launch Phase requires both teams to collaboratively develop the proposed system's Functional Requirements, Technical Requirements and the deployment plan for the overall implementation.

During this phase, Netsmart will introduce the product suite to the core team, review current state workflows, develop future state workflows, clarify requirements and develop detailed specifications.

Netsmart will schedule several joint design workshops, each designed to solicit feedback from multiple stakeholders to fully understand the desired functional and technical requirements, and the corresponding proposed future state workflows required.

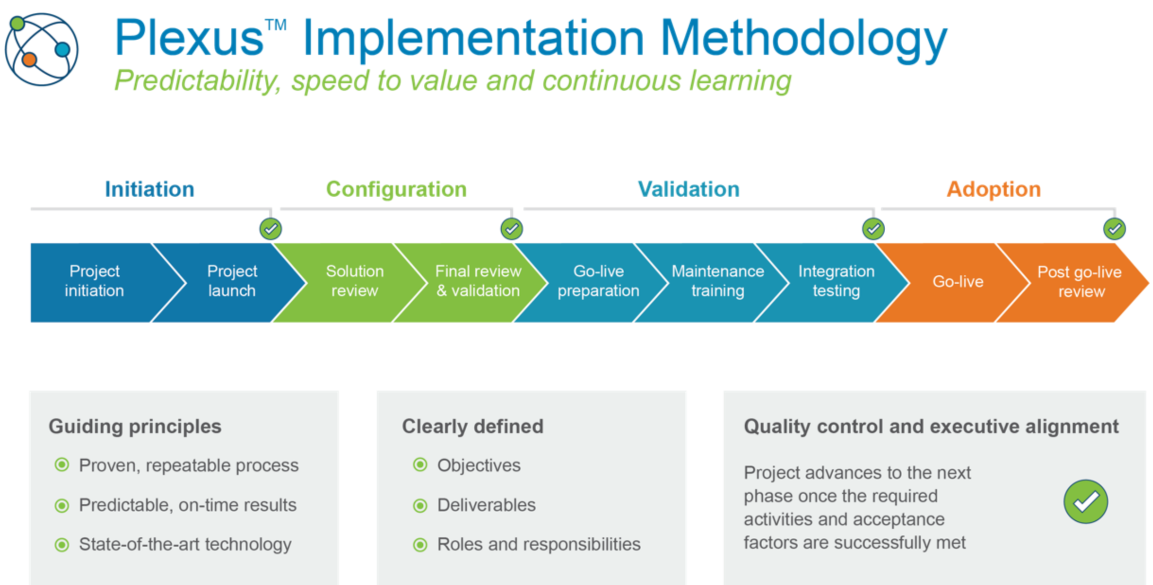
The business needs will be further elaborated with the attendance of end-user/departmental representatives trusted and empowered to make design decisions. These representatives should have a solid understanding of the workflow in their area of expertise and will be expected to interact accordingly with others within the department to gain access to answers as will be necessary. As a result, Netsmart will document all configuration required including clinical and workflow requirements, interface requirements and product engineering customizations as needed.

In addition, during the Workflow Assessment sessions Netsmart and Allegheny County DHS departmental/solution representatives, which could include a combination of IT analysts, departmental heads and/or key stakeholders from that department, will walk through the departments to get an understanding of the unique workflow and processes and how it aligns with Netsmart's recommended practices. The walkthrough will be facilitated using both the data collection tool, having already been completed, the results of the Gap Analysis, as well as the Workflow Assessment which will serve as a framework for questions and documentation of the discussions that occurred during the assessment.

Netsmart will own detailed functional and technical requirements. All other configuration changes will be documented with the appropriate design specification per the Plexus Implementation Methodology.

At the end of this phase, Netsmart will produce an Updated Data Collection Worksheet, any build or workflow requirements and any interface or conversion specifications documents. The total list of all requirements deliverables will constitute the needed Functionality to support the project needs. This will be presented as the Deliverables Acceptance Document for review and approval.

As mentioned previously, Netsmart's implementation management methodology is called the Plexus™ Foundation Implementation Methodology. The Plexus Methodology is built on the PMBOK processes of initiation, planning, execution and close. The methodology is divided into ten discrete events to drive the project to closure in an efficient and effective manner to bring the project to successful completion.



10. Describe how you have used governance and delivery methodology to empower other clients to achieve transparency and flexibility in changes to the proposed Solution.

During the project Initiation phase, the project governance tools will be further established. These will include Project Communication tools, Project Governance Tools and the selection of an **online project portal.** Netsmart typically uses Microsoft SharePoint Site to serve as the project repository for all project artifacts. This site could either be housed by Netsmart or by Allegheny County DHS.

Netsmart will use several other tools to specifically support the tracking of requirements throughout the implementation.

System Configuration – Netsmart has a proprietary **Data Collection Toolset.** Netsmart will work collaboratively with the county to iteratively complete the data collection. As we move into the build phase, the data collection tool will be used as a cross reference to ensure the system configuration fully supports the county's requirements.

Technical Specifications – Netsmart typically uses Microsoft Excel and Word to capture detailed technical specification including but not limited to interface specifications, conversion data mapping or form and workflow requirements.

In addition, from a project governance perspective, the team will maintain a **Project Decision Matrix Document** in Microsoft Excel. The decision matrix will capture the status of all requirements as they get developed. This will ensure that any change management because of project decisions will be reflected in the latest project requirements specifications.

The importance of cross-referencing business requirements to project decisions, specifications and the data collection tool will allow for complete end to end validation of business needs, ensuring that all gaps are addressed during the requirements validation stage.

Active throughout the project lifecycle and fundamental to overall project governance is a monitoring and measurement process that consists of numerous cost and scope control, testing, quality assurance and acceptance activities. These ongoing activities are supplemented by critical control points, progress checkpoints, called Plexus Gates which are included to ensure that the project cannot advance to the next phase until the required activities and acceptance factors are successfully met. The monitoring and measurement process employed by Netsmart Technologies ensures that projects are properly stewarded to both a time and cost budget. This critical process transcends across the entire project implementation process to help ensure on-time project completion within estimated cost parameters along with properly managed and approved schedule and scope changes.

During the Testing Phase, Netsmart will manage all aspects of the testing activities and will engage the implementation team and the Allegheny County DHS testing coordinator and testers. The entire testing process includes the flow from specification to solution development to acceptance testing. Testing is not only testing of the software to determine if the data files and saves correctly, it is also testing the workflow, the internal policies and procedures, and the input and output of data and how it is read as information.

While the entire testing process includes testing conducted by Netsmart's QA process, Cloud Services Team and Security Teams, the Testing Plan and the Testing Workshop will focus primarily on the testing to be executed and completed by Allegheny County DHS as a part of the project prior to Go-Live.

Testing Roles

Allegheny County DHS Testing Coordinator - Allegheny County DHS should identify a Testing Coordinator on your project team. The Testing Coordinator can be a member already on the project team or someone independent of the team, but you will want to assign someone directly with this responsibility. General responsibilities of this role include:

- Complete Testing Plan; Including the Testing Timeline
- Identify and Coordinate Testing Resources
- Assign and Coordinate System & Integration Test Script Development
- Schedule Integration Testing Resources (people and equipment)
- Coordinate with 3rd Party Resources to be Available for Integration Testing
- Lead Daily Kick-Off & Progress Review Meeting During Integration Testing
- Track & Communicate Progress Against the Testing Plan
- Secure Facilities and Equipment for Integration Testing

Netsmart Leads

The Netsmart leads are your primary solution contacts on the project, engaged in nearly all activities from the beginning to the end of the project. They will also be responsible for unit testing the system, troubleshooting any issues that arise and will provide support as you perform the Integration Testing and Go-Live Events.

Functional & Regression Testing

Functional Testing is the validation that each function is working as designed when variables are introduced into the system. For instance, to ensure each upgrade is functioning properly as designed.

Functional testing is typically focused on those aspects of the system that have changed because of the installation of new code, environment creation or refresh, or other things that may have introduced variables to an environment. Functional testing is some of the most basic testing that can be conducted. It does not generally represent testing of entire workflows or processes but the individual elements that make up those workflows that may have been disrupted because of the introduction of a variable element.

Regression testing includes testing of functions that have failed functional testing after corrections are made.

Functional and regression testing will continue after the initial testing and after Go-Live as new functionality is introduced. New upgrades or enhancements will be implemented in UAT, and existing functionality will be checked and verified as working properly. This is an ongoing process.

A checklist of functions is a good tool to follow to ensure that all options in the solutions were evaluated, data was entered, and a report or inquiry displayed the data correctly.

Unit/Incremental Testing

Unit/Incremental testing represents testing that is conducted to confirm each configured data element and menu item work after being built, configured or modeled. It is the most basic unit of testing and should be conducted whenever new configuration work has been conducted or modifications to existing configurations have been done in the system. This includes security testing and any interfaces that have been developed.

Unit testing during the project occurs primarily during the building phases of the project between Project Kickoff & Final Review and Validation. This work is conducted by Netsmart associates while they are configuration the system. If changes to configuration are required because of testing, Netsmart associates will be responsible for unit testing those modifications.

Post Go-Live, Allegheny County DHS will continue to conduct Unit Testing as additions and modifications to the system are made.

System Testing

System Testing is the next building block up from Unit Testing. Where Unit Testing is focused on validating each individual element that was configured, System Testing is more workflow/process focused. System Testing should focus on the major processes within each department. It is not necessary to validate every possible scenario but at a minimum all the major workflows should be represented and built into System Test scripts to be validated. System testing should also include incorporation of security testing in the scripts.

System Testing is the primary responsibility of the client and begins with the client modifying the baseline System Test scripts that will be provided by Netsmart. These scripts will need to be modified to the client’s specific configuration and setup. Netsmart associates will provide guidance during this process but the client is expected to lead these activities through the direction of someone they have identified as the Testing Coordinator.

Once the scripts have been modified, identified individuals from the client project team, and possibly others who have been identified to be included will execute the scripts and document the results. Issues that are identified during testing are logged to the Netsmart project team for investigation and resolution.

System testing timelines for both script development and test execution will differ by client but will be outlined in this document to be uniquely executed against. The Testing Coordinator and the Client Project Manager are key to ensuring System Testing remains on track relative the defined schedule.

Integration Testing

Integration Testing (IT) is the verification by Allegheny County DHS that the major workflows all integrate. It is all inclusive of User Acceptance Testing (UAT), Interface Testing, and full workflow performance testing. It is the next level of testing up from System Testing. It is almost like combining a series of System Testing scenarios into single scripts that reflect the overall life of a claim.

IT should test not only the Netsmart software workflows but just as importantly how it interacts with other software in the workflow, including interfaces and interdependencies to other, non-Netsmart applications that make up the complete system. This event tests the HL7 interfaces to verify that the expected data is being passed properly between applications. Peripheral devices, like printers, bar code readers, interfaced devices, etc. should additionally be tested.

For Netsmart's suite of solutions a process should be laid out for the day in the life of a patient/client based on several typical client scenarios to validate the process and the functionality. Client testing staff should walk through the admission process, daily events, and discharge process with all integrated solutions (including foreign systems, interfaces, printers, etc.). They must validate the client's movements and print reports in each phase for verification. Processes and policies may also be scrutinized to check for possible changes in business rules and/or workflow.

Integration Testing begins with the client tailoring Netsmart's baseline Integration Test scripts to reflect their workflow processes. This is completed alongside the development of the System Test scripts, but Integration Testing will not occur until System Testing has been completed. The client Testing Coordinator will identify the resources that will assist with this testing, schedule the rooms and required equipment and drive the process through a week of testing. With that week the scripts can be run multiple times if desired. Because the client project team has been trained on system maintenance & troubleshooting during the Maintenance Training event, they will take the lead on troubleshooting and issue resolution during this event.

The Netsmart project team will provide guidance throughout the process and will support the Integration Testing event remotely. Meetings to confirm the days plan (morning) and to review the days projects (afternoon) will be held and facilitated by the client's Testing Coordinator.

Other Types of Testing

Data Conversion Testing – Conducted relative to project plan timeline.

1. The client creates an extract file as defined by the Conversion documentation
2. Client provides the conversion file to Netsmart
3. Netsmart runs the conversion file to check for errors
4. Errors are posted and available to the clients in the Conversion Error Report

5. Client makes necessary corrections
6. Repeat as necessary
7. Netsmart runs the conversion against the setup of dictionaries and tables
8. Client checks the conversion error report
9. Client makes necessary changes
10. Netsmart runs the conversion 2 times to make ready for the production Conversion

At Netsmart, quality is the responsibility of the team as a whole. Netsmart delivers a testing plan and templates for various testing scripts to perform all testing functions. As all active project team members become functional experts, they are requested to perform the test role in creating test cases based on the need during that iteration. This evolution continues to retain some concepts and types of testing. Newer types include exploratory testing where the user story and testing scenario is not fully complete or even fully defined. It could be required to vet out an idea and feasibility.

At the start of each iteration, with the other team members, the test plan and required test cases are established based on the work units that are outlined in the project schedule and testing plan. The test cases are built against the defined requirements and business objective along with considerations that are needed for regression coverage. The test cases may become the definitive set of requirements as clarity is established and the abstract and nebulous statements are further elaborated upon.

These are stored in a central library. Effectively, these are created Just-In-Time and comprising the detailed specifications. The collaboration and the integration of cross-functional roles allows the testers to gain a greater technical understanding of the design and architecture enabling more meaningful discussions for the project and projects downstream.

11. Describe your capability in supporting tight feedback loops between proposed Solution changes and positive impacts to end users.

Netsmart recognizes that the undertaking of a system and technology overhaul on the scale of Allegheny County DHS's request in this RFP will certainly lend certain challenges and difficulties that will have to be overcome. Even in the most well-planned implementation strategies, certain difficulties and challenges can arise. To overcome these difficulties Netsmart has inserted in its implementation methodology various Quality Control Stop-gates that require both Netsmart and Allegheny County DHS project staff to complete a joint sign-off that all issues have been resolved, all configurations are set up in accordance with both Allegheny County DHS and Netsmart best practices. With thousands of successfully completed implementations, Netsmart is confident that any difficulties that may arise can be overcome through collaboratively approaching solutions that satisfy both our system best practices and Allegheny County DHS's functional workflow needs. However, throughout our history, Netsmart has identified a few key areas that can challenge a project's timeliness and success:

- **Lack of executive oversight & engagement** – Executive oversight is key to your success as it shows the whole agency is dedicated to a successful implementation. Project Management Institute (PMI) research shows that having actively engaged executive sponsors is the top driver of project success.

Netsmart will host regular Executive touch-point to ensure goals and objectives are being met by both parties and any barriers to success have action items to overcome.

- **Lack of collaboration** – When coming together to share one system, agreement and collaboration between Allegheny County DHS and Netsmart is vital. Beyond the monetary gains of a shared system, utilizing best practices and successes across agencies will enhance your workflows and expand your options.
- **Over-customization** – The system is very robust and flexible, allowing for forms and other features to be modified. However, over-customizing the system can lead to issues down the road when updates or enhancements are released. While knowing what is absolutely needed for Go-Live is important, best practice is to start using the system with “must have” functionality and enhance and optimize post Go-Live.
- **Trying to re-create a system exactly like your current system/process** – The workflows developed in one system can often be streamlined in the new system. A review of your current state workflow is a vital part of implementation, but the goal should be enhancing and building efficiencies versus rebuilding the current process in a new system. Netsmart implementation resources will be on hand to provide guidance and best practices if current workflows are not able to be replicated within Netsmart solutions.
- **Breakdown in communication** – Open communication among your internal teams, across agencies, and with the Netsmart team is the key to success. Clear expectations must be set early and reassured often across all stakeholders.
- **Not involving end users at any point of the implementation process** – Decisions are strongest when they involve not only the leaders, but also associates who will be using the system daily. This would include representatives from all aspects of your business. These representatives are not necessary at every meeting but exposing users beyond the Core Project Team will help with buy in and adoption.

Financial Management and Budget (25 points)

12. Attach a detailed start-up budget and annualized budget that clearly outlines the costs associated with implementing and maintaining the Client Management Solution.

    In addition to the cost of implementing the initial baseline solution, please refer to the information in Appendices C-N regarding the Re-Entry program and provide a detailed cost estimate for implementing a configured Instance of the Solution for the Re-Entry program, as well a cost estimate to maintain and enhance this Re-Entry Program on an annual basis (a “Total Cost of Ownership” estimate). We are hoping to use this estimate to understand the true implementation costs of spinning up business/program needs, as well as ongoing costs of ownership of these instance spin ups. If the cost of a Solution Instance configured specifically for the Re-Entry program would differ significantly from your typical per-Instance cost, please explain.

Netsmart has included pricing table with cost estimates Allegheny County can expect for up to 5 years of partnership with Netsmart under the functionality and solution requirements described in the RFP.

RFP Response Form

Client Management Information System

Netsmart Technologies

CareManager for Allegheny County
[redacted]

Pricing Assumptions:

- [redacted]

- o [redacted]
    - [redacted]
- [redacted]
- [redacted]
    - [redacted]
    - [redacted]

As noted in the RFP, Netsmart invests significant time, effort, and resources into training during the initial installation and implementation process of the “baseline system”. Netsmart’s goal is to empower organizations to be self-sustaining and able to manage their systems autonomously through thorough training in Implementation and ongoing education through the Netsmart Community. In addition to supports provided during implementation, all Netsmart clients have access to the Netsmart Community, a user group community dedicated to sharing ideas, information, and content (such as documentation, assessments, and reports), which our clients find to be a tremendous resource as they roll out new programs and services within their organizations that may have a significant overlap with a program or service another Netsmart client manages in their systems.

The flexibility and configurability of Netsmart’s solutions means that many Netsmart clients add additional programs, services, and/or business units without the direct involvement of Netsmart resources. However, should Allegheny County DHS choose to engage Netsmart professional services resources, there are several ways to do so by engaging Allegheny County DHS’s Client Alignment Executive, who can explore the various options for Netsmart to scope out a Level of Effort for such projects on a case by case basis.

In addition to supports provided during implementation, all Netsmart clients have access to the Netsmart Community, a user group community dedicated to sharing ideas, information, and content (such as documentation, assessments, and reports), which our clients find to be a tremendous resource as they roll out new programs and services within their organizations that may have a significant overlap with a program or service another Netsmart client manages in their systems.

However, Netsmart recognizes that each individual organization, such as Allegheny County DHS, and each program or service may be unique and require vendor assistance. Upon review of Appendices C-N, the Re-Entry program does not appear to be an overly complex program that would require a significant financial or resource investment. However, because Netsmart utilizes a shared responsibility approach to all implementations – not just the initial roll-out of a baseline solution – we are unable at this time to give detailed cost estimates for adding this particular Re-Entry program into the baseline solution, as the costs could vary depending on the level of shared involvement between Allegheny County DHS staff and Netsmart resources. A deeper discussion would need to take place between Allegheny County DHS and Netsmart to determine a project plan that adequately utilizes expertise of Netsmart staff, while maintaining the balance of engaging Allegheny County DHS staff to remain empowered to “own” the program post go-live for not only the Re-Entry program, but also any other programs that Allegheny County DHS plans to incorporate within this solution.