SYSTEMS INTEGRATION
A community project at United Way

Systems Integration Project (SIP)
Request for Information:
Data Ecosystem
August 26, 2019

Contents

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1. General Information

Request for Information (RFI): The Monroe County Systems Integration Project (SIP) is a five-year, multi-million-dollar initiative. The SIP is currently seeking information from interested and qualified vendors to develop a request for proposal (RFP) to design, develop and implement an integrated data ecosystem also referred to as a Community Information Exchange (CIE) that spans the health, human services and education sectors. Information obtained through this RFI will inform and influence the Project's requirements and content of a future RFP. As an incentive to respond, vendors who submit a complete RFI response will be eligible to receive an added 25 out of 100 points on the upcoming integrated data ecosystem RFP.

1.1 Collective Vision

The greater Rochester community is working across a diverse network of committed providers to build an interconnected, person-centered system of health, human services, and education leveraged by a unified information platform, to improve the health and economic well-being of individuals and families, especially those who are vulnerable and/or impacted by poverty.

1.2 Design Goals

The Systems Integration Team has identified several design goals for the proposed data ecosystem, including the use of an open-architecture framework that is interoperable, scalable and leverages existing digital infrastructure, and the identification and use of a minimum data set that aims to identify and share the minimum necessary information to coordinated service delivery and improve outcomes.

Theme	**An Integrated System…**
Accessibility	Is easily accessible for those who need it
Accountability	Holds both users and individuals/families accountable using methods of encouragement and incentive rather than penalty
Apolitical	Is apolitical. For purposes of this project, apolitical is the act of ensuring that "small-p" politics are not a barrier to person-centered service delivery and integration
Comprehensive	Includes a comprehensive data set that allows users to view/define/analyze and address individual/family needs
Continuous Improvement	Maintains a flexible structure that maximizes our ability to continuously improve the future state, leveraging real-time usable information, rapid cycle improvement and predicative analytics
Do No Harm	Applies the principle of Do No Harm, which dictates that no matter the intervention, the wellbeing of the individual is the primary consideration. For purposes of this project, the principle of Do No Harm should be applied to both service delivery and data sharing.
Efficiency	Allows for greater efficiencies: funding efficiencies, timely response of services and improved interactions between systems and sectors

Innovative/Data Driven	Uses innovative, data-driven practices that facilitate the sharing of information across sectors
Person-Centered	Is "person-centered". Person-centered is a philosophical approach to service development and delivery that requires services be provided in a way that is respectful of, or in responsive to the preferences, needs and values of people and those who care for them. Person-centered practices account for individual needs and priorities. Per the IBM Smarter Cities Challenge team, person-centered refers to a perspective that provides a 360-degree view of a person in need (RMAPI Lexicon).
Simplicity	Is simple for providers to use and easy for individuals and families to navigate

1.3 Guiding Principles

In addition to the above design goals, the SIP's data ecosystem will adhere to the Rochester Monroe Anti-Poverty Initiative (RMAPI) guiding principles. These principles inform our work and serve as a guide for community decision-making.

- **Build and Support Our Community:** Help to rebuild struggling neighborhoods with quality support services, for example businesses, healthcare and strong community schools, to make them safe, healthy and livable.
- **Address Structural Racism:** End the activities and actions that continue racial inequality in public policies, institutional practices and other cultural norms.
- **Address Trauma:** Help to heal people and neighborhoods that are suffering from repeated experiences with trauma; provide support and services that are sensitive to traumatic experiences like abuse, addiction and violence.

2. Introduction

The Monroe County Systems Integration Project aims to establish connections between local health, education and human services organizations by building technology and establishing relationships across sectors. This five-year project is a priority identified by the Regional Economic Development Council, the Rochester-Monroe Anti-Poverty Initiative (RMAPI), and others as a critical need for our community, as well as a key need and priority identified by people living in poverty. The United Way of Greater Rochester (UWGR) is the fiduciary for the Project.

The core components of the SIP, which will be implemented through March 2024, include:

- Consumer-driven, informed-consent and preference management functionality
- A shared digital dashboard that offers multi-sector users a 360-degree view of more than 150,000 individuals
- A shared digital closed-loop referral system utilized by more than 300 health, human service and providers
- A shared data hub and analytic engine that compiles new and existing data to both inform the development and application of evolved cross-sector workflows,

and provide the means for measuring shared accountability for sector-specific outcomes, including evaluation of return on public and private investments
- Improved access to needed services created via advanced front-door protocols and right-sized program capacity
- A robust change management process that involves nine multi-sector pilots, rapid cycle improvement, agile project management, and cross-sector training on integrated workflows, adaptive leadership and technology utilization

Over the upcoming months and years, the Systems Integration Project and key partners will shift the way our community works together to help individuals and families seeking support. This means people will have better access to services and information, and providers will be better informed to help their patients and clients. When fully implemented the SIP will both enable and evaluate coordinated cross-sector interventions that support a family's transition from crisis to stable to thriving.

2.1 History

In 2015, a team of experts from IBM analyzed Rochester's high rates of poverty including the highest rate of child poverty (50.1%), the highest rate of extreme poverty and the second-highest rate of poverty overall in the nation. They concluded that Rochester has a system in place to combat poverty, but for a variety of reasons, that system is not working effectively. The Smarter Cities Challenge team identified more than 17 key findings that they consolidated into five major categories.

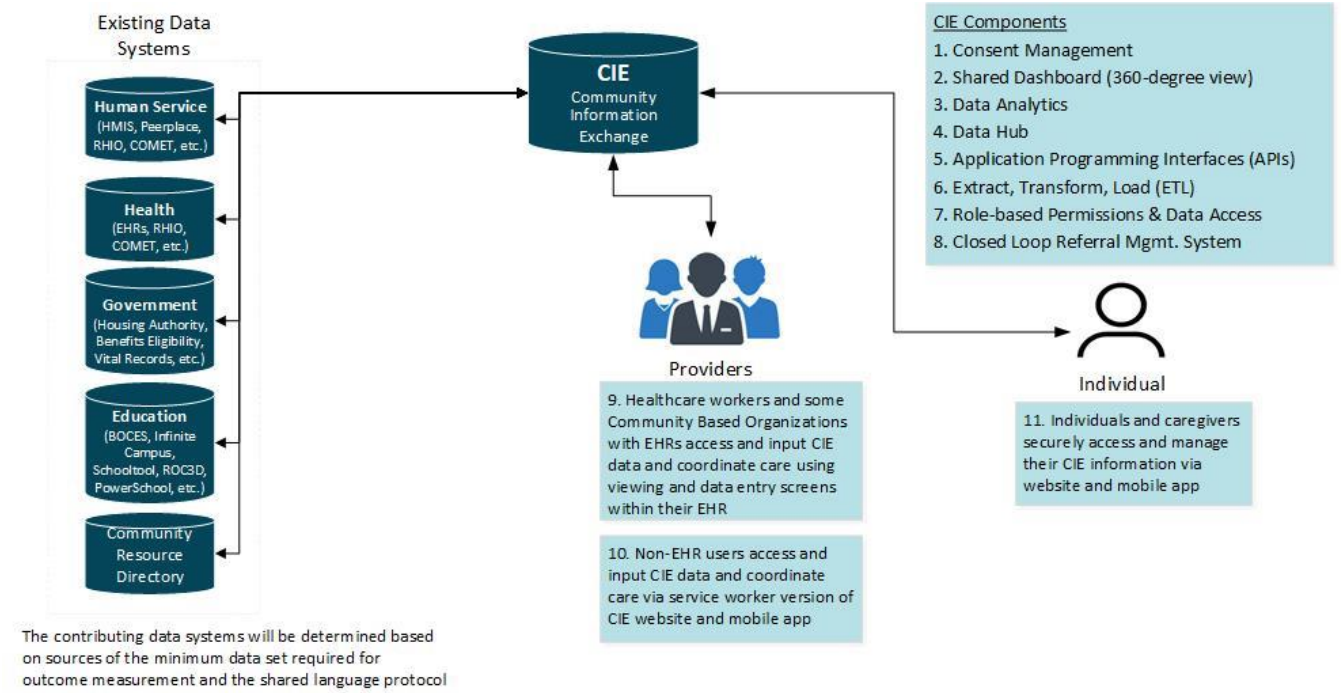
1. Misalignment of agency resources
2. Reactive with no focus on proactive and preventive actions
3. Lack of person-centric delivery and measurement system
4. Unrealized potential within the community
5. Inconsistent approach to data

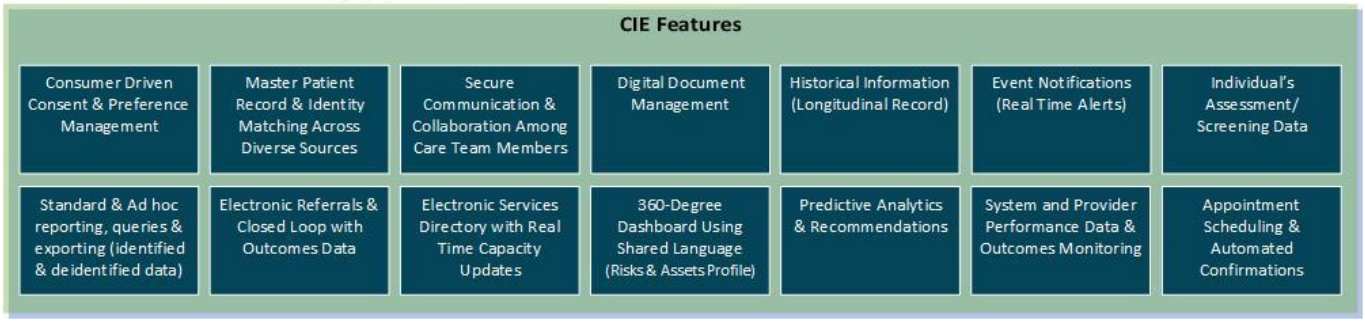
Motivated by New York State's efforts to reduce poverty, improve health, enrich education and control cost, several local initiatives began adopting models of collaborative governance, data sharing, and cross-sector service coordination. Unfortunately, in the quest for better integration, new siloes were forming around worthy but parallel solutions; we were redesigning our system in the broken image of its predecessor.

In response, over 40 local leaders from the health, human service and education sectors came together in the summer of 2017 to discuss the current state of disconnected services, the poor outcomes that result, and whether a single integrated solution could be both feasible and responsive to numerous sectors, initiatives and objectives. Consequently, the Monroe County Systems Integration Project (SIP) was born. The Systems Integration Project is a priority of the Regional Economic Development Council and the Rochester-Monroe Anti-Poverty Initiative (RMAPI). As a demonstration project, NYS will benefit from the SIP by investing in a single integrated system with an eye toward how to replicate this work in other areas.

2.2 Future State Vision

A draft, high level diagram illustrating one concept of how the SIP *could* integrate existing systems and new core components to deliver the desired features and functionality of a robust, person-centered Community Information Exchange.

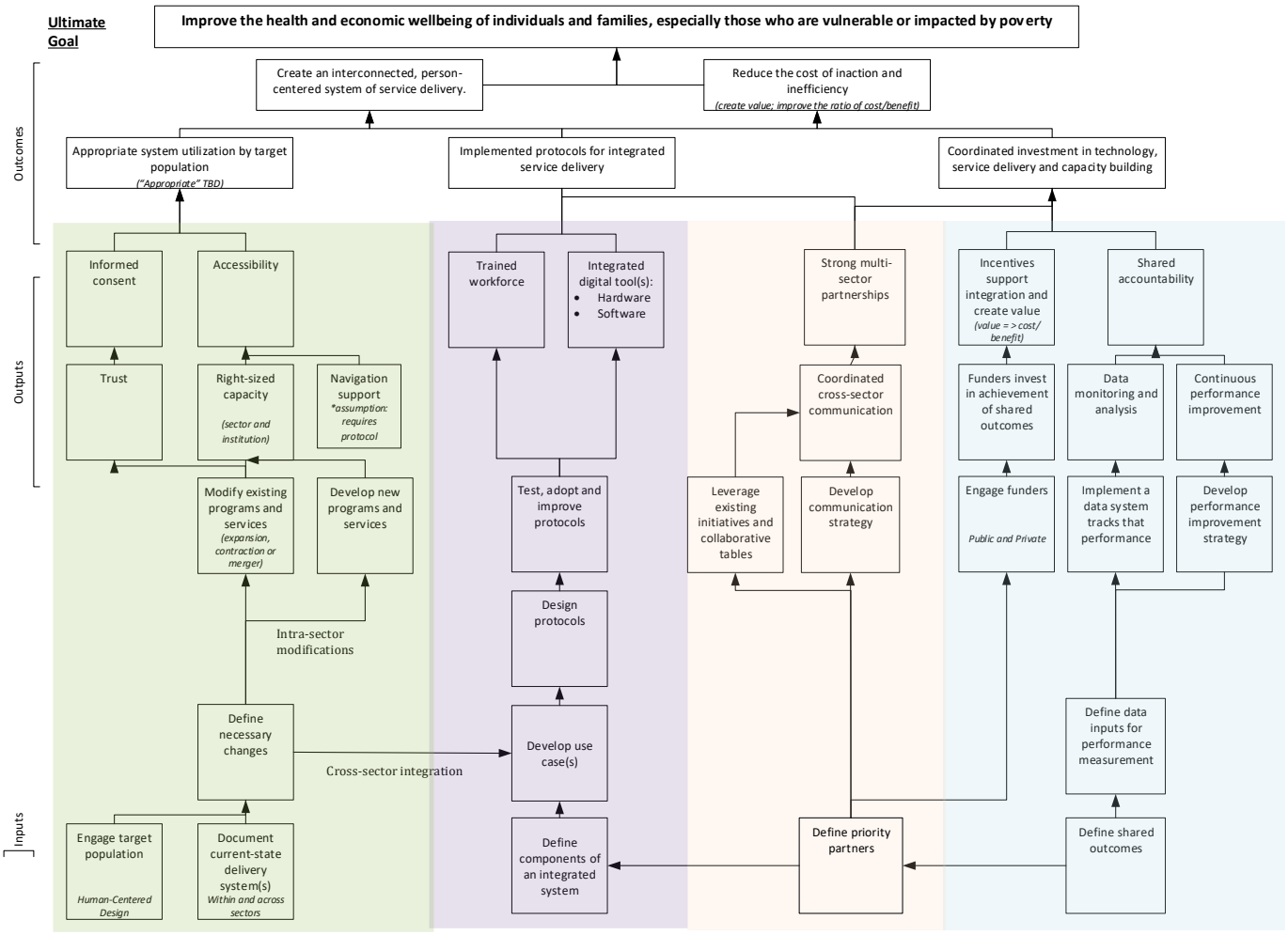




2.3 Theory of Change

The Systems Integration Project roadmap is illustrated in the below Theory of Change diagram. The integrated data ecosystem (Community Information Exchange) is identified in the purple vertical, and the diagram illustrates how the technology is expected to interact with all of the other improved aspects of "The System," including people, workflows, performance measurement, and more.

The Theory of Change is divided into four strategies: User Access, Integration, Collaboration, and Shared Accountability. It is read from top to bottom (by strategy), then left to right. In order to accomplish each box in the Theory of Change, we must first fulfill the boxes below it – they are the defined pre-conditions for success.



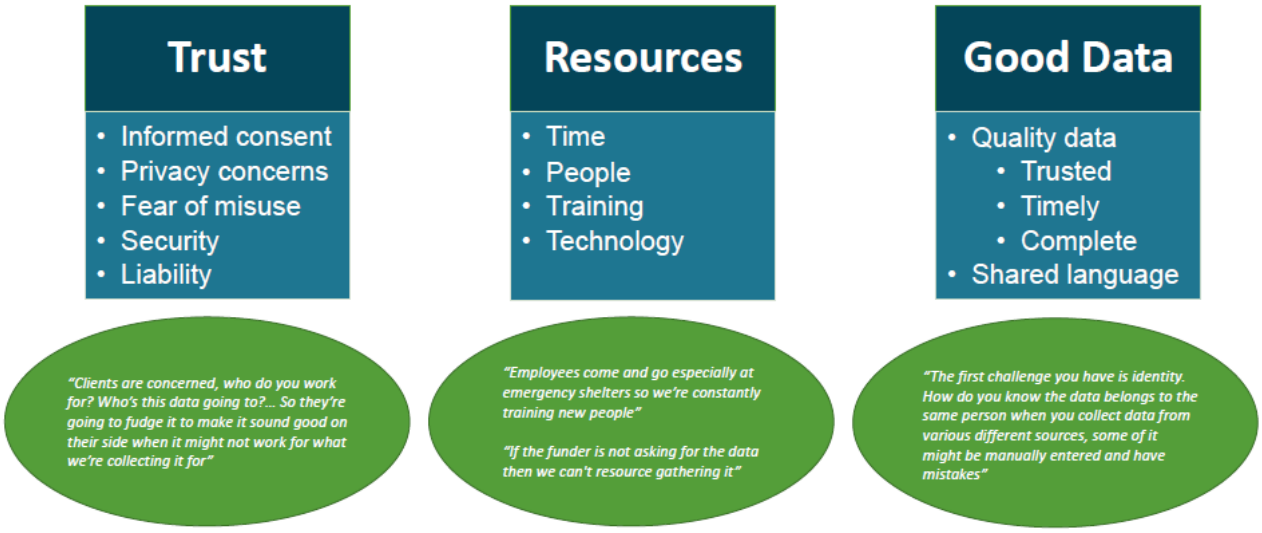
2.4 Current State

2.4.1 Current IT Environment

Through a series of business requirements interviews, the team identified the current, pervasive data issues impacting all three sectors that prevent effective service delivery:

Issue	Description
Data Quality	Data is duplicative, incorrect or unverified and information is dated
Data Sharing	Consent to share required, need ability to share internal and external, no standard & universal language and no easy way to share info when making and receiving referrals
Data Gaps (lack of a 360 view of a person)	Demographic information, health, housing, education, family, transportation, trauma

Some of the major barriers to data collection are: Trust, Resources and Quality/Usable Data



The ways that organizations across the sectors are filling data gaps vary and include:

Issue	Description
Manual Effort	Working personal networks (email, phone call, text), merging data sources, verifying and editing data
Partnerships	Sharing data with partners, asking clients to self-report through surveys and interviews, using publicly available data
Technology	Different solutions across sectors (and within), a mix of home-grown solutions off the shelf software and integrations with larger systems

When looking at the various outcomes and outputs created by each sector, it is clear that the desired data to fill information gaps already exists in other sectors, and the challenge is how to make that data high quality, sharable, and easily accessible.

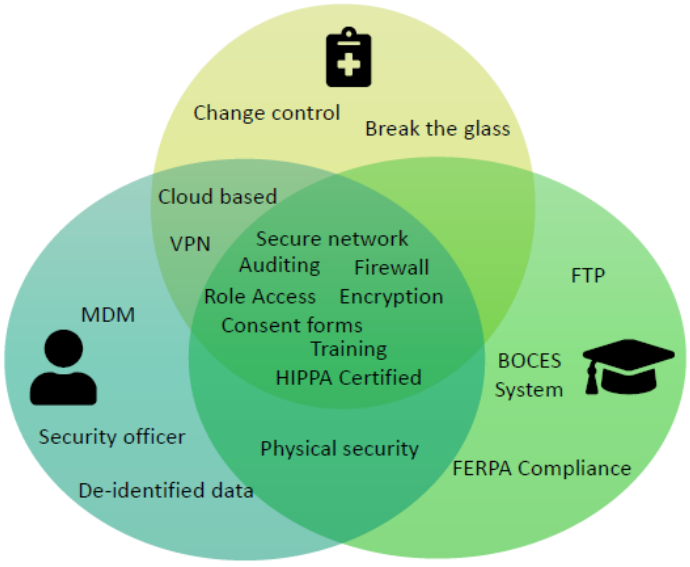
Outcomes and Outputs by Sector

Outcome reported	Human Services	Healthcare	Education
Demographics	✓		●
Income level	✓		
Housing data	✓	●	●
HMIS (Homeless Management Information System)	✓	●	●
Returns or readmissions	✓●	✓ ●	
Services Received	✓●	✓ ●	✓●
Grade level standards	●	●	✓
Attendance	●	●	✓
Social/emotional outcomes	●	●	✓●
Health care data	●	✓	●
HEDIS Measures	●	✓	●
Length of stay		✓	
Outbreaks	●	✓	●
Family data	●		●
Transportation data	●	●	●
Criminal Justice data	●	●	●

Solid circles indicate data is wanted and checkmarks indicate data is reported

2.4.2 Securing Sensitive Data

Network security is a top priority for all organizations that keep sensitive data. There is a significant overlap in the policies and tools that are in place to keep data secure.



2.4.3 Existing System Tools

Human Services organizations are using a large mix of different systems to record data. Reporting is primarily funder driven and can be difficult when reporting to multiple funders that would like outcomes shared differently. When it comes to reporting outcomes, Human Services is using tools that range from fax machines to high-tech solutions.

School systems are generally reporting standards to state government. Schools have already adopted many digital tools to better reach students and their parents or guardians. The Education sector uses tools to collaborate and track to make data driven decisions.

Healthcare is more singularly focused with the technical solutions they use and the outcomes they are reporting. Healthcare is heavily invested in specific systems and are strong proponents of any new system integrating with their current infrastructure.

Below is a representative sample, not an exhaustive list, of the identified systems and tools currently in use.

Human Services	Education	Healthcare
Homeless Management Information System ROCHESTER RHIO medisked COMET peerplace tableau UNITE US Homegrown databases Spreadsheets	CLEAR IMPACT ROC 3D Data Driven Decisions COMET schooltool Infinite Campus frontline education (IEP Direct) schoology PowerSchool Student Management System Spreadsheets	Epic MyChart Care Everywhere Happy Together Social Care COMET ROCHESTER RHIO MEDENT eClinicalWorks "Improving Healthcare Together" Netsmart non-EHR examples: Arcadia & NYSIIS

A common system used both by Healthcare and Human Services is the Rochester Regional Health Information Organization (RHIO). The Rochester RHIO is a secure, electronic health information exchange (HIE) serving authorized medical providers and over 1.4 million patients in 13 counties in upstate New York.

2.5 Implementation Requirements

The SIP will be looking for a technology partner with whom they can design, develop and implement a solution that will address the current state challenges and bring "The System" closer to the desired future state concept that is illustrated in section 2.2.

Besides the specific technical components of the Community Information Exchange, there are a number of implementation requirements that the SIP needs to meet and will look to their vendor partner(s) to help deliver.

2.5.1 Performance: Solution must provide the response times with minimum latency to ensure highest possible performance.

2.5.2 Availability: Solution must meet availability requirements including required hours of operation (system availability SLA 99%-99.96% is to be determined)

2.5.3 Cybersecurity: To earn and maintain the trust of community users, the CIE will adopt comprehensive policies, procedures and standards related to data security. The technical solution must support such security measures as activity logging, role-based access, two-factor authentication and strong data encryption in transit and at rest.

2.5.4 Capacity & Responsiveness: Must provide the level of service and responsiveness required to meet the CIE demands (including screen refresh and updates, client search, reports and queries) and shall enable Capacity Planning to support current and future processing requirements.

2.5.6 User Interface: The solution's user interface (screens, navigation, iconography, etc.) must be intuitive so that service providers and individuals seeking service (system users) can easily navigate the technology. Regular updates to user interface cannot require extensive training or tutorials for users to adapt to the changes.

2.5.7 Business Continuity / Disaster Recovery: The CIE solution shall provide reasonable time to restore operations to ensure business continuity (includes disaster recovery)

2.5.8 Project Management: Must collaborate with SIP to develop a PMI compliant project plan and support the project from design through finished deliverables including deployment of the new System.

2.5.9 Business Process Change Management: Must address the operational process aspects of the project and provide an Operational Process Change Management Plan, including a Change Readiness Assessment, Gap Analysis, and Recommendations for Organizational and Process Changes.

2.5.10 Knowledge Transfer & Training: Must collaborate with SIP to develop and support knowledge transfer and training and provide metrics for tracking progress in achieving training and knowledge transfer objectives. The SIP will require inputs to develop and conduct train-the-trainer courses, develop web-based training on-demand courses, and develop reference documentation.

2.5.11 Solution Design, Development & Customization: Must provide a methodology for the solution design that complies with the Secure System Development Lifecycle. SIP desires a partner who uses Agile development and is accustomed to delivering regular sprint demos and reviews to facilitate acceptance. Comprehensive Design and Development Plan should consider the ability to consume and leverage design prototypes (cross-sector workflows, storyboards, user interface wireframes, etc.) that were previously developed using human-centered design processes.

2.5.12 Testing & Deployment: Must provide a strategy and detailed plan on how to test and implement the proposed solution. Test plan must consider rigorous Security testing and User Acceptance Testing. Deployment plan must consider a phased approach starting with pilots and expanding to full implementation.

2.5.13 Quality Management: Must provide a quality management approach and methodology that includes metrics, organizational structure, defect and issue tracking system. Include methods for assessing reliability and validity of data to maximize utility of the shared data.

2.5.14 Production Support & Transition: Must provide a production support and transition plan that shall include: routine system upgrades and fixes (at no additional cost); an automated maintenance routine and maintenance activity report; and a system Operation Manual and a Help Desk Support plan.

2.5.15 Defect Resolution & Solution Acceptance Requirements: Must provide an approach to address defect resolution and the methodology for system acceptance for the proposed CIE solution.

3. RFI Administration

3.1 Purpose

Responses to this RFI will not result in the award of a contract. The purpose of this RFI is to identify interested and qualified vendors to invite to participate in a future Request for Proposal (RFP). Vendor's RFI responses will inform the Project's requirements and help shape the RFP.

3.3 Schedule

The following chart represents SIP's best estimate of the schedule for this procurement. SIP reserves the right at its sole discretion to adjust the schedule as it deems necessary. SIP will post any schedule changes to the systemsintegration.org website.

Event	Date	Time
RFI Release	August 26, 2019	
Deadline for Written Questions	September 6, 2019	4:00pm Eastern
Response to Questions Published	September 10, 2019	
RFI Submissions Due	September 30, 2019	4:00pm Eastern

3.4 Designated Contact

The designated contact for this RFI is:

Angee Brown, Sr. Project Manager
Angee.Brown@uwrochester.org
(585) 242-6516

3.5 Vendor Instructions & Disclaimer

3.5.1 Joint responses from one or more vendors who are interested in working together on this project are encouraged. If submitting a joint response, the organization that will be the "integrator" must be specified.

3.5.2 To express interest in responding to the RFI, vendors are encouraged but not required to email the designated contact by 4:00pm Eastern on September 6, 2019.

3.5.3 To facilitate clarification of requirements, vendors are required to email their questions by 4:00pm Eastern on September 6, 2019. Responses will be published by September 10, 2019.

3.5.4 Vendors must email RFI responses to angee.brown@uwrochester.org by 4:00pm September 30, 2019.

3.5.5 All twenty (20) of the following questions must be answered in order to qualify for an added 25 points on the upcoming RFP. Incomplete responses will be returned to the submitter and will not be eligible added points on the upcoming RFP.

Systems Integration Project
Data Ecosystem
RFI Response

Instructions: In 10 pages or less (1" margins, Times New Roman Font size 12), provide your answers to the following twenty (20) questions.

1. Provide the primary RFI contact name, phone number and email address. *This is the person with whom the project team will correspond about the RFI and future RFP.*

2. Are you submitting this response on behalf of one or multiple organizations? Please list the company name(s) of participating organization(s). If you are submitting on behalf of multiple organizations, which organization will be the integrator?

3. How might we design, develop and implement a trusted technology solution to connect multidisciplinary network partners enabling them to deliver proactive, holistic, person-centered care to improve the health and economic well-being of individuals and families, especially those who are vulnerable and/or impacted by poverty?

4. Given your answer to #3 above, what components of your proposed solution may have the biggest cost to build? What components may have the biggest cost to maintain?

5. What is your best-in-class example of implementing an information exchange? Please describe the characteristics that qualify the solution as best-in-class.

6. As currently imagined, the Community Information Exchange requires either a single source solution purchased and built by one vendor or the integration of multiple solutions sourced from a variety of vendors. You may prefer another approach that we haven't yet considered. Which approach would you recommend and why?

7. Given the high-level future concept described in section 2.2, are there technology components you recommend that are not identified? Why?

8. Given the high-level future concept described in section 2.2, are there technology components identified that you recommend be eliminated (or deprioritized to a later phase)? Why?

9. Please describe your experience implementing Master Data Management solutions and please state the technologies used and volume of data managed. Describe the number of data source systems connected and the number of records in your Master Patient Index (MPI). Describe any experience developing MDM solutions for vulnerable populations or populations without key demographic data (e.g., Social Security Numbers).

10. What would be your recommendation for **hosting** the SIP's Community Information Exchange? Are there hybrid solutions that have proven effective? What liability limitations, if any, would you anticipate including in the hosting agreement?

11. Given the implementation requirements covered in section 2.5, are there any requirements that you believe are missing? Are there any that you believe are unnecessary?

12. What development/implementation approaches have you used to implement information exchanges similar in size, scope and complexity? Which method would you recommend for this project to minimize risk and maximize results while meeting the implementation requirements outlined in section 2.5? How does your recommended method affect our internal requirements for support?

13. How would you manage New York State's minority and women owned business enterprises purchasing requirements?

14. What are likely partnerships with subcontractors your firm may consider in responding to the RFP?

15. What are common risks and challenges your firm has encountered with similar projects?

16. What can the SIP do to reduce risk to implementation (both technology and operational)?

17. Are there specific technology considerations the SIP should be aware of?

18. Describe any integration work that you have done with Epic. How would you see a project like this integrating across cross-sector domains with Epic as the major data source for health information?

19. What information is missing from this RFI that you would need to see included in the upcoming RFP to facilitate more accurate scoping and pricing of a potential solution?

20. What are your firm's requirements for being able to successfully bid on this project when the RFP is issued? *(examples: hold a pre-bid conference, allow 3 weeks to respond)*