Rhode Island HIT Strategic Roadmap

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EXECUTIVE SUMMARY

The Rhode Island Statewide Health Information Technology (HIT) Strategic Roadmap and Implementation Plan lays out the vision for HIT efforts over the next three years. It builds upon a long history of HIT innovation and progress, and will promote alignment among existing efforts, while guiding future investments in HIT. The HIT Roadmap reflects months of stakeholder engagement, policy analysis, research, and planning to improve healthcare services and quality, lower costs, reduce provider burden, and better serve the people of Rhode Island.

As part of this process, there were three overarching core values that surfaced and are imbued throughout the Roadmap and Implementation Plan: 1) HIT is an enabler of broader health transformation efforts; 2) a race equity lens must be applied to efforts in order to reduce health disparities; and 3) patients are key and must be considered with all initiatives.

More specifically, based on the large number of stakeholder opinions and recommendations focused on HIT efforts and needs, the Roadmap catalogs both a set of consensus issues, as well as a list of proposed projects about which more diverse opinions were noted. Some of the stakeholders' recommendations were clearly aligned, and others reflected a variety of perspectives, which will benefit from further consensus-building efforts. Given this, the strategies and tactics outlined in this plan include the development of a governance process, several high-priority consensus-based projects, and a set of additional initiatives that a Steering Committee can address during its first years of work.

INTRODUCTION

The Rhode Island Executive Office of Health and Human Services (EOHHS), in cooperation with stakeholders across state agencies and community partners and with the services of consultants from Briljent, has developed this Statewide HIT Strategic Roadmap and Implementation Plan to promote alignment among existing efforts and guide future investments in HIT. The HIT Strategic Roadmap reflects needs and opportunities to improve healthcare services and quality, lower costs, reduce provider burden, and better serve the people of Rhode Island.

In developing the HIT Strategic Roadmap, EOHHS engaged stakeholders across the state to learn about existing investments, identify gaps, and build support for collective action. This included conducting 80 organizational and individual interviews reaching over 100 people, and multiple presentations to working groups, state committees, and stakeholder meetings, and involved the following entities and stakeholder groups:

Public Sector: State Agencies

- EOHHS and Medicaid
- Rhode Island Department of Health (RIDOH)
- Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals (BHDDH)
- Department of Human Services (DHS)

- Office of the Health Insurance Commissioner (OHIC)
- HealthSource RI (HSRI)
- Division of Information Technology (DoIT)
- Rhode Island Commerce Corporation

Private Sector: Health Institutions and Community Partners

- Hospitals and health systems
- Health plans
- Physician practices
- Community health centers
- Employer representatives

- Medicaid Accountable Entities (AEs)
- Behavioral health agencies
- Long-term care associations
- Hospital and physician associations
- Consumer advocacy groups

Committees and Workgroups

- HIT Advisory Committee
- Health Information Exchange (HIE) Advisory Commission
- CTC Clinical Strategy Committee

- All-Payer All-Claims (APCD) Data Release Review Board
- Primary Care Physician Advisory Committee

Impact of the Coronavirus Outbreak on the Statewide HIT Roadmap

While developing the HIT Roadmap, the coronavirus (COVID-19) outbreak emerged, causing significant disruption across the state. As a result, many stakeholders shifted focus to respond, which caused two notable impacts to the HIT Strategic Roadmap. First, significant opportunities and challenges across the healthcare space have been identified as a result of the crisis, including many with technology and data impacts. While it is too early to know the full extent of the impact on this roadmap, EOHHS expects that portions will need to be updated and adjusted to meet these emerging needs. Secondly, the immediacy of the crisis has meant that some portions of this roadmap have not been fully vetted by all stakeholders. Because this roadmap is meant to reflect the shared needs of stakeholders across the state, additional engagement of stakeholders is planned as the state continues to adapt to the COVID-19 outbreak.

Philosophy of the Roadmap

The Rhode Island HIT Strategic Roadmap has been built upon a significant amount of public and private stakeholder input. As part of this process, there were three overarching core values that surfaced and are imbued throughout the Roadmap and Implementation Plan: 1) HIT is an enabler of broader health transformation efforts; 2) a race equity lens must be applied to efforts in order to reduce health disparities; and 3) patients are key and must be considered with all initiatives.

More specifically, the Briljent consultants collected large numbers of opinions and recommendations from across the state. Some of the stakeholders' recommendations were clearly aligned, and others reflected a variety of perspectives, which will benefit from further consensus-building efforts.

One of the most clearly aligned perspectives is that Rhode Island needs a process by which to continue to evaluate HIT needs and to decide upon the best strategy for meeting those needs. Stakeholders clearly articulated the need for an ongoing Governance structure with decision-makers from both the private and public sectors working together. This Roadmap describes a proposed Governance process, including the creation of a Steering Committee. It lays out a possible set of Steering Committee participants and a draft scope.

EOHHs staff and its Briljent consultants are well aware that a year-long planning effort should not end by being a "plan for a plan." In other words, the Roadmap should not just rely on the future proposed Steering Committee to determine which data and technology systems need to be developed and implemented, without reflecting upon the consensus that was already clear among stakeholders.

For these reasons, the Roadmap catalogs both a set of consensus issues based on the research conducted, as well as a list of proposed projects about which more diverse opinions were noted.

Here are the consensus issues that the consultants have flagged:

- Developing a new governance and coordination process to ensure statewide alignment

- Adopting an e-referral system to help address social determinants of health (SDOH)

- Improving and enhancing CurrentCare, including a new opt-out consent policy to increase use

- Accessing and increasing data availability and sharing, including key demographic data such as race and ethnicity needed to address health disparities

- Enhancing behavioral health sharing through aligned interpretation of regulations and stakeholder convening

- Continuing the development of the Quality Reporting System (QRS)

- Continuing work to improve information sharing during transitions of care, such as between hospitals, primary care practices, and skilled nursing facilities

Additional issues that rose to the top of the discussion for further consideration by the HIT Steering Committee include:

- Data needed to support value-based care, including claims and clinical data linkages

- Core identity services, such as provider directory, statewide master patient index, single sign-on capabilities, and patient-provider attribution

- Federal policy alignment, including opportunities related to the Office of the National Coordinator for Health IT (ONC) and Centers for Medicare & Medicaid Services (CMS) Interoperability Rules around data blocking, alerts and notifications, and patient access to data

VISION, GOALS, AND PRINCIPLES

This Roadmap is meant to serve the state of Rhode Island in guiding and aligning HIT efforts to support the health and healthcare goals for the state. The background to this roadmap includes EOHHS' Strategic Priorities along with the recent community efforts to establish goals for Health in Rhode Island. These overarching set of goals and priorities have provided a framework for Rhode Island's statewide HIT Roadmap. As such, the Roadmap has been developed to support and align with the state's broader efforts to improve and transform healthcare across the state of Rhode Island.

Vision from Health in Rhode Island – A Long Term Vision

Rhode Island is the healthiest state in the nation. All Rhode Islanders:

- Have the opportunity to be in optimal health.
- Live, work, learn, and play in healthy communities.
- Have access to high-quality and affordable healthcare.

Goals

Linked Goals	Health in Rhode Island Goals	EOHHS Strategic Priorities
Access and cost	Eliminate disparities in health and contributing socio-economic factors.	Shift Systems and Investments to Prevention, Value, Choice, and Equity.
Health systems transformation	Provide access to high-quality, affordable healthcare for all.	Preserve and Improve Access to Quality, Cost-Effective, Physical and Behavioral Healthcare.
Opioid/ behavioral health		Curb the Opioid Epidemic, Address Addiction, and Improve Mental Health.
Efficient state operations	Focus resources to maximize health and reduce waste.	Promote Efficient, Effective and Fair Delivery of Services and Operations.

Guiding Principles from Health in Rhode Island

Health in Rhode Island has developed a list of guiding principles to help clarify work and maximize investments. The report notes that it "is a set of priorities and associated strategies—all critically important, all interrelated—that we believe our community, institutions, and sector can take on individually and collectively to advance a healthier Rhode Island. Our aim is that public- and private-sector stakeholders across the state will consider these priorities as they develop policies and make investments that impact the health of Rhode Islanders."

Therefore, EOHHS has made the Report's principles listed below central to the HIT Roadmap:

- Providing equal access to the highest quality healthcare for all Rhode Islanders is essential.
- Achieving health outcomes requires addressing social determinants.
- Focus on the long term and address root causes of inequality.

- Public-private partnerships are necessary to change the system.
- Collect and use actionable data wisely to drive and improve outcomes.
- Prioritize areas with the greatest opportunities.
- Invest in evidence-based programs, sustain efforts that are working, and garner best practices from initiatives in other states to inform our efforts.

HIT Values/ Principles

Building upon the Health in Rhode Island principles, and based on stakeholder input during the roadmap development process, the following list of **HIT values and principles** will help guide HIT work and provide guardrails to focus opportunities and initiatives.

- Use HIT to advance health equity and improve health
- Foster a collaborative environment among stakeholders, including state agencies and community partners, enabling alignment of HIT efforts
- Advance interoperability while protecting privacy and security of information
- Provide clarity and transparency into efforts
- Invest in initiatives that provide value, while prioritizing reusability of investments

COVID-19 AND IMPLICATIONS FOR THE STATEWIDE HIT ROADMAP

The COVID-19 pandemic creates new challenges and opportunties related to HIT, including the need to ensure integration with new and expanded technologies like public health reporting and telehealth; coordination with evolving public health needs like case reporting and contact tracing; and impacts to healthcare entity operations. The pandemic is also significantly affecting state budgets and will likely lead to delays or re-prioritization of roadmap tactics and implementation work. The newly proposed HIT Steering Committee and Rhode Island State HIT Staff team will work to incorporate learnings and updates from the evolving pandemic response and help ensure activities are coordinated with long-term efforts wherever possible.

HISTORY OF HIT INVESTMENTS AND LESSONS LEARNED

Rhode Island has a long history of developing and investing in HIT. In 1997, RIDOH inaugurated KIDSNET, the state's integrated child health information system. The aim of the system is to ensure that all children in Rhode Island received appropriate health screenings and preventive care at the right time, by allowing providers and other authorized users to access immunization and other key childhood preventive health data.

In 2003, Rhode Island Quality Institute[1] (RIQI), a non-profit organization focused on quality improvement, partnered with Surescripts to pilot and test end-to-end electronic prescribing with 40 physicians in multiple, unaffiliated practices. A year later, RIDOH received a grant from the Agency for Healthcare Research and Quality (AHRQ) to develop the governance and technical infrastructure necessary to support a statewide HIE, now known as CurrentCare. Following the passage of the Rhode Island HIE Act of 2008, a competitive request for proposals (RFP) process selected RIQI as the Regional Health Information Organization (RHIO), the state's designed entity for HIE, and work continued to develop ahead of the launch of CurrentCare. RIQI received additional investments through the State HIE Cooperative Agreement and state-led Health Information Technology for Economic and Clinical Health Act (HITECH Act) initiatives.

In 2012, the Rhode Island Medicaid Electronic Health Record (EHR) Incentive Program became operational, assisting Eligible Providers (EPs) and Eligible Hospitals (EHs) in achieving Meaningful Use (MU). Since that time, the program has supported 758 providers and 9 acute care hospitals, providing a little over $43.3 million in incentive payments.

In 2015, EOHHS received a 4-year $20 million State Innovation Model (SIM) grant from the CMS. EOHHS used those SIM funds to improve primary care and behavioral health infrastructure, engage patients in healthy behaviors, and support the ability of providers and policy makers to better use data. SIM supported numerous HIT initiatives and pilots, providing significant funding for the infrastructure necessary to advance value-based payment models.

Throughout the years, Rhode Island's healthcare entities have also made significant investments in HIT. All of Rhode Island's hospitals, most large physician practices, many smaller practices and specialty groups, all Federally Qualified Health Centers (FQHCs), many behavioral health agencies, and various allied health and other provider types, have adopted EHRs. Organizations have also invested in a variety of other HIT infrastructures, including data warehouses and advanced analytic capabilities, population health and care management tools, and support for quality reporting and care gap management. The use of consumer and patient-facing HIT solutions is growing as well, as organizations seek to improve

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[1] https://www.riqi.org/

the access and convenience of healthcare options. Larger organizations and health systems tend to have more advanced HIT capabilities, as do organizations that are active in value-based care contracts.

Due to its long history of HIT investments, Rhode Island has learned numerous crucial lessons that will be incorporated into work moving forward to help to ensure future efforts are successful.

Lessons Learned

Planning and Approach

- **Consider pilots (with committed demonstrations/ volunteers):** Find initial partners who will validate concepts and provide feedback.

- **Develop a narrow use case first, build value incrementality, then scale out:** Start small, and incorporate feedback to ensure services provide real value to stakeholders.

- **Determine who you need buy-in from at the beginning of the project:** this includes determining the organizations that need to participate, and the roles and perspectives that each organization has.

Communication

- **Be clear on costs and other provider requirements (e.g. time or leadership engagement):** Organizations need to know upfront what will be expected of them.

- **Share value propositions and benefits:** Define the value and benefit to users during the use case development process

- **Identify and communicate roles:** Articulate how each organization will engage with specific roles and responsibilities

- **Deliver on expectations, communicate progress, and build trust:** HIT projects require trust and commitment to be successful and sustainable over time.

Flexibility

- **Anticipate changing leadership and develop mitigation strategies:** Provide ongoing education and communication to support leadership/ participant changeovers

- **Anticipate delays and ensure contingency (especially if funds are time-limited) since technical advances and technology solutions are constantly and rapidly evolving):** HIT projects are complex, technical advances and technology solutions rapidly evolve, and projects sometimes require more time to ensure participants and users are ready. Funding strategies should anticipate delays.

Federal Landscape Changes and Implications for the Strategic Roadmap

Aligning with federal policy and national HIT and interoperability efforts is crucial to the success of Rhode Island's HIT work. The roadmap envisions the HIT Steering Committee coordinating and convening stakeholders in advancing these efforts and ensuring that planning efforts respond to the changing federal policy landscape. Below are several of the key federal initiatives at this time:

CMS Interoperability and Patient Access Final Rule[2]

The CMS Interoperability and Patient Access Final Rule, released in conjunction with the ONC 21st Century Cures Act Final Rule Information Blocking Final Rule in March 2020, expands access requirements to health information held by providers and certain health plans. After July 1, 2021, hospitals will be required to send ADT notifications to other providers involved in the patient's care. Health plans will be required to provide claims, encounter, and clinical data (if managed by the plan) to beneficiaries. In addition, health plans will be required to provide access to Application Programming Interfaces (APIs) that will allow patients to use third-party applications to manage their data. Appendix B identifies specific policies and enforcement deadlines from the CMS Final Rule.

ONC 21st Century Cures Act[3] Final Rule: Interoperability, Information Blocking, and ONC Health IT Certification Form[4]

ONC's 21st Century Cures Act: Interoperability, Information Blocking, and the ONC Health IT Certification Program Final Rule implements certain provisions of Title IV of the 21st Century Cures Act to advance interoperability and stop information blocking. The implementation of this rule will support the access to, exchange of, and use of electronic health information Specific ONC Final Rule details can be found in Appendix B of the Roadmap. The 21st Century Cures Act also directed the Trusted Exchange Framework and Common Agreement (TEFCA) to create a "single on-ramp" for health information exchange by aligning participation requirements and technical standards across qualified networks. ONC released the first draft in January 2018 and a second draft in April 2019. The ONC Cures Final Rule did not include additional TEFCA details.

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[2] https://www.cms.gov/files/document/cms-9115-f.pdf
[3] https://www.congress.gov/114/bills/hr34/BILLS-114hr34enr.pdf
[4] https://www.healthit.gov/curesrule/

Health Insurance Portability and Accountability Act

CARES Act[5]

The Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"), [1] signed into law March 27, 2020, was the third major legislative initiative to address COVID-19. Besides the CARES Act dollars that were allocated to shore up public health infrastructure, which Rhode Island is using in our COVID-19 response, the Act also includes a number of health policy provisions. Additional regulatory actions from HHS were also modified to support the rapid response to curb the trajectory of COVID-19. Under the CARES Act, Congress also included the overhaul of the federal law that governs the confidentiality of substance use disorder ("SUD") records of 42 CFR Part 2 (42 U.S.C. §290dd-2), commonly referred to as "Part 2," to more closely align with information sharing allowed under HIPAA. Substance Abuse and Mental Health Services Administration (SAMHSA) is responsible for the rulemaking over the next 12 months. The new SUD confidentiality law is intended to advance interoperability of health information in an integrated health care system, while attempting to balance the privacy and security of sensitive SUD records.

Race Equity Lens and the Importance of Data

Rhode Island is making it a priority to address health disparities and view health priorities through a race equity lens. Through statewide community involvement, Rhode Island must work to eliminate disparities in access to care and health outcomes for racially, ethnically, and linguistically diverse populations, as well as all gender identities and sexual orientations. By increasing the collection and analysis of demographic data (race, ethnicity, gender identity, and sexual orientation), Rhode Island will be better positioned to improve health equity, reduce the disproportionate impact of COVID-19 on people of color, and develop and improve higher quality systems for physical and mental health care. Improved data activities include improving collection and reporting of race, ethnicity, language, gender identity, and sexual orientation data, using data to track and reduce disparities, and leveraging emerging federal policies requiring data collection and reporting for monitoring and measurement.

Financing and Sustainability

Rhode Island has been successful in leveraging substantial federal funding and grant support for statewide HIT efforts. As described above, many efforts have been funded through the HITECH program, which will end on September 30, 2021. Beyond that, federal funding may still be available through the Medicaid Enterprise System (MES), which allows for 90% federal funding of planning and implementation activities and 75% federal funding of ongoing operations of HIT systems that support

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[5] https://www.congress.gov/bill/116th-congress/senate-bill/3548/text

Medicaid program objectives. Leveraging community investments and acquiring grants and other funding sources will also be crucial to support the efforts described in the roadmap.

Two Roadmap Strategies (Statewide Planning, and Governance and Coordination) both include specific actions to identify and secure funding to support long-term sustainability of HIT efforts. In addition, state agency staff have secured funding for several Roadmap initiatives through grants and HITECH requests.

HIT Fund

The HIT Infrastructure Development Fund exists to promote the development and adoption of HIT to improve the quality, safety, and efficiency of healthcare services and the security of individual patient data. The fund can receive money from state appropriations or from private donations. Money from the fund can also be used as state funds for the purpose of obtaining federal matching dollars through Medicaid.

In addition to publicly funded HIT investments, the HIT Steering Committee should explore a sustainability funding model for ongoing shared investments.

RHODE ISLAND HIT STRATEGIC ROADMAP - STRATEGIES AND KEY TACTICS

Building upon the long and rich history of HIT investments, Rhode Island will advance work along six broad strategies:

Rhode Island HIT Strategies	
1. **Governance and Coordination**	*Create a new statewide public/private governance function in order to better align statewide HIT planning, development, and implementation with existing HIT systems and support collaborative decision-making.*
2. **Statewide Planning**	*Develop HIT in sync with the rest of the state's health planning, and not in a vacuum. Consider HIT needs during (and not after) program development to maximize efficiency, avoid duplication, promote long-term sustainability, and ensure that decisions about HIT development and implementation successfully support the statewide goals listed above.*
3. **Data Availability and Technology Alignment**	*Support the use of actionable data by improving and streamlining data collection across systems and users, with a focus on identifying data gaps, including quality, completeness, portability, reuse, and adherence to federal and industry standards.*
4. **Health Systems Transformation and Quality of Care**	*Ensure that HIT activities and investments help Rhode Islanders receive the highest quality care in the right place at the right time.*
5. **Public and Population Health**	*Use HIT to improve public and population health by supporting its role in the efficient collection, sharing, and analysis of key data.*
6. **Best Practices**	*Implement technology best practices and industry standards throughout the HIT environment in Rhode Island.*

1. Governance and Coordination

The Roadmap begins with Governance, as the cornerstone of our ongoing planning and implementation effort. EOHHS envisions a robust public/private partnership working together to make strategic decisions about the future of safe, secure, and sustainable HIT in the state.

Governance and Coordination: Create a new statewide public/private governance function in order to better align statewide HIT planning, development, and implementation with existing HIT systems and support collaborative decision-making.

Clearer governance and better coordination within state agencies and between the state and community partners is crucial for the long-term success of HIT efforts. A cohesive, overarching governance entity (HIT Steering Committee) will convene stakeholders, build upon the work identified in statewide planning, and bring greater communication and transparency around statewide HIT efforts. The HIT Steering Committee will be developed to evolve over time, beginning small and with a defined scope and expanding where there is demonstrated need and stakeholder commitment. The HIT Steering Committee will also play a key role in bringing together stakeholders to determine the most effective ways to finance statewide HIT needs, including how to maximize funding from federal sources, where appropriate.

The HIT Steering Committee will consist of, at a minimum, members representing state agencies, hospitals, physicians, health plans, Accountable Entities (AEs), behavioral health providers, long term services and supports (LTSS), oral health/ dentists, community-based/ social service organizations, and consumers. Members should also reflect the racial, ethnic, gender, and geographic diversity of Rhode Island. The HIT Steering Committee will initially oversee selected state-led and statewide projects, as well as provide input to state agencies on state-led ones. As a new governance entity, it is anticipated that evaluation and adjustment will be required over time.

Because the HIT Steering Committee will play a pivotal role in statewide coordination and governance, additional work will be needed to define membership, confirm scope and authority, and coordinate start-up activities. The state will convene a short-term Governance Initiation Development Team, with representatives and input from both state agencies and community partners, to develop recommendations to the state's Health Cabinet on the following:

- Committee size and stakeholder constituencies represented
- Process for selecting stakeholder representatives
- A community co-chair to serve alongside a State agency co-chair

Supported by the state HIT staff, the role of the short-term Governance Initiation Development Team is set the HIT Steering Committee up for success.

Coordination with existing statutory committees is also essential. Chairs of each of these existing committee should be invited to participate on the HIT Steering Committee. Over time, it is expected that the HIT Steering Committee may examine and make recommendations to further align or consolidate committees as needed.

To assure coordination and align efforts across state agencies the state will also convene a HIT Interagency Coordination Committee. This reduce the risk of having unaligned or competing HIT priorities from state agencies that could increase the burden on the health care community.

Here are the tactics and opportunities identified by stakeholder feedback within the roadmap development processes:

a. **Create a coordinated governance structure for statewide HIT initiatives:**

    i. **Create a public/private HIT Steering Committee**

    ii. **Create an HIT Interagency Coordination Committee**

    iii. **Identify roles and responsibilities of stakeholders engaged in new and existing HIT governance groups**

b. **Develop a standardized approach** to collecting, evaluating, prioritizing, and initiating new technology investments and initiatives

c. **Develop a long-term sustainability plan** to fund statewide HIT efforts, considering the sunsetting of HITECH funding.

2. Statewide Planning

From Governance, the Roadmap moves to Planning, which will be the key role of community partners and state leadership working together.

Statewide Planning: HIT is developed in sync with the rest of the state's health planning, and not in a vacuum. Consider HIT needs during (and not after) program development to maximize efficiency, avoid duplication, promote long-term sustainability, and ensure that decisions about HIT development and implementation successfully support the statewide goals listed above. For example, when considering investments in community organizations for social determinants of health (SDOH), identify data and technology needs and work to ensure access to needed HIT.

The statewide HIT planning strategy is a coordinated approach supporting the state's broader health policy, program, and stakeholder priorities with data and technology. This includes developing a process to evaluate existing and proposed programs and policies for data and technology needs, determining and prioritizing these needs, and leveraging existing work and investments, wherever possible. Statewide HIT planning requires deep coordination and collaboration between state agencies, healthcare stakeholders, and other community partners. Some functions of statewide planning are best coordinated by the proposed statewide HIT governance entity (see below), while others are led by the EOHHS HIT team (depending on the particular projects being addressed). Workgroups can be used to evaluate use cases and opportunities and to recommend action. Clear roles and responsibilities are developed and detailed in the HIT Roadmap Implementation Plan.

Here are the tactics and opportunities identified by stakeholder feedback within the roadmap development processes:

a. **Establish ongoing planning processes to evaluate and prioritize state and community HIT needs** that:
    i. **Support Rhode Island's health policy, population health, and health system transformation goals** all aimed at improving health outcomes and promoting a more equitable healthcare system, as described throughout these planning documents
    ii. **Address State program and policy data and technology needs**
    iii. **Promote patient perspectives and needs** in statewide planning efforts
    iv. **Align with health and community-based provider perspectives and needs**, with a focus on efforts that help reduce provider burden and promote administrative simplification

b. **Include policy, technical, and financial analysis in all planning efforts by:**
    i. **Identifying efficiencies** including those available by developing shared technical services. Examples of these include a centralized provider directory, master patient index, or single sign-on capabilities for multiple uses

ii. **Considering the implications** of federal policy changes, including 21st Century Cures Act, the CMS Interoperability final rule, and the CARES Act, on the HIT Roadmap and statewide health priorities

iii. **Developing financial sustainability planning** for all technical investments

c. **Build upon learnings from the COVID-19 pandemic crisis** to identify and implement technology and policy needs needed to address public health threats

3. Data Availability and Technology Alignment

The foundation of an effective HIT system is the data that it houses and the analysis that it facilitates. Therefore, the next strategy in the Roadmap is Data Availability and Technology Alignment.

Data Availability and Technology Alignment: Support the use of actionable data by improving and streamlining data collection across systems and users, with a focus on identifying data gaps, including quality, completeness, portability, reuse, and adherence to federal and industry standards. For example, identify data gaps in existing systems, and prioritize efforts to fill gaps based on how the data will be used to provide care or drive policy.

State and community partners are building upon the existing HIT systems investments across the state, while advancing efforts to expand access to HIT services to all stakeholders and populations. Improving data completeness and quality can improve the usability and efficacy of existing and new HIT systems. Through coordinated statewide planning and in collaboration with the evolving governance structure, Rhode Island will explore opportunities to simplify data collection, reporting, and sharing to reduce provider burden, ensure patient information is available to providers at the point of care and to patients when needed, promote equity, and other appropriate purposes as needed.

A coordinated data governance framework for cross-sector and public and private agency data sharing is important in defining the agreed upon rules for data collection, data management, data security, and data storage to meet Rhode Island's health priorities. These processes and controls are necessary to ensure the appropriate data use, availability, and completeness in a community data environment. Building from the RI Data Ecosystem and engaging community stakeholders, the HIT Governance process will develop a data governance framework.

Additionally, Rhode Island's work on health system transformation and the move towards value-based care requires examining clinical, claims, and social determinants of health data sources and identifying ways to connect data where appropriate. As part of the implementation work, the HIT Steering Committee will oversee efforts to identity where data can be collected, reused, and shared. In some cases, this may involve linking data across systems. In others, data may be centrally collected and combined. The statewide planning process will help evaluate pros and cons of different approaches and guide the HIT Steering Committee to develop the best path forward.

Here are the tactics and opportunities identified by stakeholder feedback within the roadmap development processes:

a. **Identify data sources and address data needs across systems and users** by developing and implementing a plan to improve data collection, availability, and use

b. **Improve data quality and close data gaps** by increasing adherence to federal and industry standards and aligning incentives to promote adoption and use

c. **Assess and inventory existing data availability, HIT systems, capabilities, and technologies** to promote better alignment and coordination across organizations, and to determine potential for expansion or reuse

d. **Evaluate data system integration opportunities** to simplify collection and sharing of patient-level and community level data

e. **Promote the use of standardized data use agreements** to reduce administrative burden

f. **Develop an approach to connect claims, clinical, social determinants of health data,** and other high priority data needs

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Data Governance

The roadmap envisions significant work to align efforts and initiatives and promote the reuse of technology and data wherever possible. With this will come a need for clear data governance to manage the associated policy, legal, and practical implications of data use. The HIT Steering Committee may look to the work underway with the Rhode Island State Data Ecosystem as a model for advancing data governance. The Data Ecosystem consist of a Governing Board that represents agency leadership, that is responsible for setting policy and direction. It also has created a Data Stewards Group, representing data owners, that advises on proper data, interpretations, data limitations, and related issues.

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4. Health System Transformation and Quality of Care

One of Rhode Island's top priorities over the past five years has been health system transformation – moving from volume to value to ensure the highest quality of care. This includes looking beyond physical health and incorporating behavioral health, oral health, and social determinants of health. HIT is a significant facilitator of this transformation, and thus it is the next strategy in the Roadmap.

Health System Transformation and Quality of Care: Ensure that HIT activities and investments help Rhode Islanders receive the highest quality care in the right place at the right time. For example, HIT should support behavioral health data-sharing needs between treating providers, improve efforts to address health disparities, and assist providers and patients during Transitions of Care (ToC).

Rhode Island has been a leader in health system transformation work and has long leveraged HIT to advance those efforts. Going forward, there is a strong desire to build upon existing infrastructure and services such as CurrentCare, the Care Management Alerts and Dashboards, and the QRS, as well as to explore high priority needs. Stakeholder alignment around information sharing laws, regulations, and practices will help Rhode Island support the integration of physical and behavioral health. The state can also explore opportunities to support technology to enhance care coordination and communication between care team members.

A key component of this work is updating CurrentCare's consent model to an opt-out model which will improve usability and usefulness while still ensuring strong protections for privacy and security

of patient healthcare information. Patient, consumer, and advocate input will be crucial to maintaining the trust of the community, and existing governance workgroups, such as the HIE Advisory Commission, will play an important role during implementation.

Behavioral health information sharing is also crucial to health system transformation work underway, and the implementation plan includes specific work to align interpretations of privacy and data-sharing laws, convene stakeholders to identify barriers and best practices, and identify technology needed to support providers. The federal CARES Act, described above, will lead to significant changes in 42 CFR Part 2 requirements for SUD treatment information sharing and will be a high priority topic as the implementation rule is developed in late 2020/early 2021.

Here are the tactics and opportunities identified by stakeholder feedback within the roadmap development processes:

a. **Leverage data improvements noted above to expand data use and sharing** to support the state's health system transformation priorities, including supporting team-based care among healthcare, behavioral health, and social service providers

b. **Encourage the adoption and use of robust health information interoperability** efforts by building upon current investments and enhancing CurrentCare to meet community and patient needs – and by ensuring ongoing close collaboration between the public-private governance entity and RIQI

c. **Allow the effective and appropriate sharing of behavioral health information**, including aligning policy interpretations and educating providers about them.

d. **Support improvements in patient care** by:
    i. **Expanding access to existing HIT services** that support care coordination, patient safety, quality and patient engagement
    ii. **Improving patient transitions of care across care settings** by streamlining information sharing and implementing community-driven recommendations
    iii. **Increasing patient and provider access to health information** by aligning efforts with federal policy changes
    iv. **Use required data** to identify care gaps and address health disparities
    v. **Identify SDOH data needs and sources, and incorporate into technology planning**

e. **Advance telehealth initiative investments from the COVID-19 response** by working to align efforts across payers, including Medicaid and commercial health plans and systems, including physical and behavioral health providers

5. *Public and Population Health*

The majority of the factors influencing people's health come from where they live, work, and play – and only 20% of health comes from the healthcare system, or a doctor's office. Rhode Island is committed to addressing SDOH and understanding the health of its population as a whole. And now, with the COVID-19 Pandemic, the state's understanding of the importance of investments in public health is stronger than ever. HIT has a large role to play in both of these disciplines, and thus Public and Population Health is the next strategy in the Roadmap.

> *Public and Population Health:* Use HIT to improve public and population health by supporting its role in the efficient collection, sharing, and analysis of key data. For example, help eliminate health disparities by increasing the ability to collect data to inform policy and interventions using a race equity lens.

Public health serves a crucial role in enabling a healthy population. This strategy builds upon extensive prior work in building Rhode Island's public health informatics infrastructure and progress made towards the state's population health goals begun during the SIM grant. Going forward, work will focus on streamlining data collection and reporting, including the efficient reuse of data and systems where possible, and expanding capabilities to leverage health data to improve health equity and outcomes. The current COVID-19 outbreak has highlighted additional needs and opportunities to build robust, scalable solutions that support increased surveillance, test and case reporting, and real time sharing of crucial health information necessary to protect public health, including race and ethnicity data. There is also a strong desire across the public and private sectors to address SDOH and leverage technology to improve information sharing and to reduce the burden on healthcare system capacity where possible. Technology plays a key role in the collection and sharing of patient information, such as needs assessments and referrals, across health and community-based organizations.

Here are the tactics and opportunities identified by stakeholder feedback within the roadmap development processes:

a. **Evaluate the lessons learned and opportunities from the public health data response to COVID-19** to develop and implement HIT solutions enhancing the existing public health surveillance, preparedness, and emergency response technical infrastructure

   i. **Align and integrate health data reporting requirements** across stakeholders to support electronic laboratory testing, case reporting, and clinical investigations

   ii. **Augment available data from other data systems** to inform public health response efforts for syndromic surveillance, contact tracing, and containment efforts

b. **Streamline data collection and reporting to reduce provider burden** including leveraging existing technical investments that report data, measure quality, and support bi-directional exchange data (e.g., the QRS)

c. **Expand solutions for efficient use and reuse of health data** as noted above, to better understand and improve population health and eliminate health disparities

d. **Promote technology adoption improving patients' access** to their health information

6. Best Practices

The safety and security of our healthcare system is the state's highest priority in the development of HIT, and therefore, the Roadmap concludes with a commitment to following the highest industry standards and technology best practices.

> *Best Practices:* Implement technology best practices and industry standards throughout the HIT environment in Rhode Island. For example, ensure secure,

HIT is rapidly advancing, and Rhode Island is committed to adopting best practices to ensure technology continues to support statewide needs. This work includes incorporating federal and industry-standard data collection and privacy and security practices into statewide HIT systems and convening stakeholders to share best practices as technology and policy changes. As technology increasingly becomes interwoven into healthcare, we must meet the additional demands to educate and prepare both the general public and the workforce to ensure HIT is used effectively.

Assuring baseline privacy and security requirements of healthcare technology is both expected and necessary. These include following the HIPAA Privacy and Security rules as well as other federal and state statutes. Rhode Island must also adhere to relevant ONC and CMS certification criteria, and promote best practices to help ensure stakeholder confidence in the safety and security of Rhode Islanders' healthcare information.

With improved statewide planning and coordinated governance, Rhode Island HIT stakeholders have also identified ensuring data quality, completeness, accuracy, and timeliness as critical tasks. Ensuring that technology advances crucial health equity work is also essential, as is paying particular attention to the collection and use of data on race, ethnicity, sexual orientation, gender identity, and other groups facing health disparities.

Here are the tactics and opportunities identified by stakeholder feedback within the roadmap development processes:

a. **Ensure statewide HIT systems meet applicable state and federal laws, regulations, and best practices** with a special focus on privacy and security requirements by:

    i. **Creating a privacy and security workgroup** under the new governance structure that can serve as a resource across the state

    ii. **Promoting the use of federal and industry standards** and best practices to improve interoperability

    iii. **Assessing whether existing state laws** need to be amended to support best practices, and developing shared interpretations of regulations

b. **Use state policy levers to promote best practices and support community and academic collaboration** to:

    i. **Educate the healthcare workforce and the general public** on the role, value, and use of HIT

    ii. **Leverage lessons learned** locally as well as from other states

FUTURE STATE FOR KEY CONSENSUS ISSUES

As described in the Philosophy of the Roadmap, the following initiatives had strong stakeholder consensus and buy-in. Work described in the Implementation Plan will help achieve the following outcomes:

Governance and Coordination

Rhode Island's coordinated governance efforts, led by the proposed new HIT Steering Committee, will bring stakeholders together and leverage repeatable planning and implementation processes to advance HIT efforts statewide.

Community Referrals (eReferrals)

Working across state agencies and with community partners, a proposed statewide e-referral solution supports care coordination and efforts to address SDOH by linking healthcare and social service providers through a common platform.

CurrentCare

CurrentCare supports information sharing needs across the state and provides secure access to longitudinal health records and crucial healthcare information to authorized users. Key work proposed over the next three years will include adopting an updated opt-out consent model, increasing connectivity to healthcare providers, and improving the availability and usability of information at the point of care.

Data Availability and Sharing

Key health data, including clinical information, public health reporting, and demographic data such as race and ethnicity, is available to support efforts to improve patient care and population health, and to help address health disparities and inequity.

Quality Reporting System

The QRS will simplify reporting for state programs and across health plans, creating a single solution for quality measurement needs to reduce administrative burden and increase availability of outcome data to support health system transformation efforts.

Transitions of Care

Crucial information needed for the effective transition of care is exchanged seamlessly between different settings, such as hospitals, primary care practices, and skilled nursing facilities. Technology implementations and practices are aligned with state regulations, and statewide infrastructure, such as CurrentCare, is leveraged to reduce administrative burden where possible.

APPENDIX A

The Stakeholder Assessment and Gap Analysis organized needs and recommendations into four main functional buckets: technology; health systems transformation; policy alignment; and coordination and governance. The HIT Strategic Roadmap is tied to broader health policy goals through the six strategies described above. This table shows how the strategies link across the four functional areas and subtopics contained in the Gap Analysis.

Strategic Priorities						
1. Governance and Coordination						
2. Statewide Planning						
3. Data Alignment and Quality						
4. Health Systems Transformation and Quality of Care						
5. Public and Population Health						
6. Best Practices						
Initiatives						
Technology						
CurrentCare		X	X	X		
Other HIE Services			X		X	X
Core-Shared Services				X	X	X
E-Referrals for SDOH			X		X	X
QRS		X	X	X		X
Security	X					X
PDMP Improvements	X	X	X			
Health Systems Transformation						
BH Information Sharing	X		X			X
Transitions of Care	X		X			
Data to Support Value-Based Care Arrangement		X	X	X	X	X
Patient Engagement	X		X		X	X
Policy Alignment						
Federal Policy Alignment	X				X	X
State and Cross-State Policy Alignment	X				X	X
Coordination and Governance						
Governance, Oversight and Coordination					X	X
Use Case Planning					X	X
HIT Project Management				X	X	X
Communication	X	X	X	X	X	X
Sustainable Technology Funding					X	X

APPENDIX B FEDERAL HEALTH IT POLICIES

Aligning with federal policy and national HIT and interoperability efforts is crucial to the success of Rhode Island's HIT work. The roadmap envisions the HIT Steering Committee coordinating and convening stakeholders in advancing these efforts and ensuring that planning efforts respond to the changing federal policy landscape. Below are several of the key federal initiatives at this time:

CMS Interoperability and Patient Access Final Rule[6]

The CMS Interoperability and Patient Access Final Rule, released in conjunction with the ONC 21st Century Cures Act Final Rule Information Blocking Final Rule in March 2020, expands access requirements to health information held by providers and certain health plans. Hospitals would be required to send ADT notifications to other providers involved in the patient's care. Health plans would be required to provide claims, encounter, and clinical data (if managed by the plan) to beneficiaries. In addition, health plans would be required to provide access to Application Programming Interfaces (APIs) that would allow patients to use third-party applications to manage their data. The following policies and enforcement deadlines are summarized in the Final Rule:

1. Improving the Dually Eligible Experience by Increasing the Frequency of Federal-State Data Exchanges (*applicable April 1, 2022*)
2. Admission, Discharge, and Transfer Event Notifications (*applicable fall 2020*)
3. Patient Access API (*applicable January 1, 2021*)
4. Provider Directory API (*applicable January 1, 2021*)
5. Payer-to-Payer Data Exchange (*applicable January 1, 2022*)
6. Public Reporting and Information Blocking (*applicable late 2020*)
7. Digital Contact Information (*applicable late 2020*)

ONC 21st Century Cures Act[7] Final Rule: Interoperability, Information Blocking, and ONC Health IT Certification Form[8]

The 21st Century Cures Act, passed by Congress in November 2016, contains numerous HIT provisions, including:

- Developing or endorsing a trusted exchange framework and common agreement to support health information exchange
- Reducing the regulatory and administrative burden related to the use of EHRs

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[6] https://www.cms.gov/files/document/cms-9115-f.pdf
[7] https://www.congress.gov/114/bills/hr34/BILLS-114hr34enr.pdf
[8] https://www.healthit.gov/curesrule/

- Defining information blocking and requiring HHS to develop a rule of allowable exceptions to this definition

ONC's [21st Century Cures Act: Interoperability, Information Blocking, and the ONC Health IT Certification Program](#) Final Rule implements certain provisions of Title IV of the 21st Century Cures Act to advance interoperability, addressing occurrences of information blocking, improve patient access, exchange, and use of electronic health information, and health IT certification through the following provisions and updates:

1) Changes to Information Blocking
   - o Definitions of Health IT actors, Electronic Health Information (EHI), Health Information Network (HIN) and Health Information Exchange (HIE)
   - o What it means to "interfere with" access, exchange, or use of EHI
   - o Exceptions structure
2) Changes to ONC Health IT Certification Program
   - o Electronic Health Information (EHI) Export Certification Criteria
   - o FHIR Standard for Application Programming Interface (API) for patient and population Services
   - o Conditions and Maintenance of Certification requirements for health IT developers
3) United States Core Data for Interoperability (USCDI)

Information Blocking Rule

Section 4004 of the 21st Century Cures Act defines information blocking as practices by a health care provider, HIT developer, health information exchange, or health information network that—except as required by law or allowed by HHS rule—is likely to interfere with, prevent, or discourage access, exchange, or use of electronic health information.[9]

HHS released the Information Blocking Final Rule, which defines allowable exceptions, in March 2020. These proposed exceptions include protecting patient safety, promoting the privacy or security of electronic health information, allowing for the recovery of reasonably incurred costs, excusing an actor from infeasible requests, permitting the licensing of interoperability elements on reasonable and non-discriminatory terms, and bolstering maintenance or improvement efforts. The Cures Act defined and prohibited information blocking by covered actors, which include health care providers, health IT developers of certified products, health information exchanges (HIEs), and health information networks (HINs). Office of Inspector General (OIG) and ONC are developing enforcement procedures and rules for civil money penalty (CMP) for information blocking.

Changes to ONC Health IT Certification Program

- **[Electronic Health Information (EHI) Export Certification Criteria](#)** – Focuses on the ability to export the electronic health information stored in and by certified health IT to support patient EHI access

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[9] https://www.healthit.gov/topic/information-blocking

requests as well as to support a health care provider interests in exporting an entire patient population to transition to another health IT system. The new EHI export criteria include:

- o **Single Patient EHI Export ((§170.315(b)(10)(i)):** The single patient export functionality includes the capability for a user to execute a single patient export and must be able to be limited at least one of two ways: (1) to a specific set of identified users, and (2) as a system administrative function. A user must be able to execute the single patient EHI export capability at any time the user chooses and without subsequent developer assistance to operate regardless of whether the developer is operating the export for a healthcare provider or a healthcare provider is maintaining and operating the technology in their own production environment.
- o **Patient Population EHI Export ((§170.315(b)(10)(ii)):** The patient population EHI export functionality supports patient data transitions in instances of healthcare providers switching health IT systems. Certified health IT developers are required to provide reasonable cooperation and assistance to other persons, such as customers, users, and third-party developers, to ensure the capability is deployed in a way that enables the successful migration of patient.

FHIR Standard for Application Programming Interface (API)

The Final Rule requires the use of the HL7® Fast Healthcare Interoperability Resources (FHIR®) Release 4 standard and several implementation specifications. The United States Core Data for Interoperability standard (USCDI) is the scope of patients' electronic health information that must be supported via certified API technology. Two types of API-enabled services are required for 1) services for which a single patient's data is the focus and 2) services for which multiple patients' data are the focus. New provisions for certified health IT developers will be required to establish a secure, standards-based API for use by providers and to support a patient's access to core data in their electronic health record.

United States Core Data for Interoperability (USCDI)[10]

The Final Rule sets a new baseline for interoperability and replaces the Common Clinical Data Set (CCDS). The USCDI establishes a minimum set of data classes to improve the flow of EHI and helps ensure that the information can be effectively understood when it is received. Over time, it will be updated to expand the baseline set of interoperable data available nationwide.

Use of the USCDI standard is required as part of the new application programming interface (API) certification criterion, "standardized API for patient and population services" (§ 170.315(g)(10)). Additionally, the USCDI standard ultimately replaces the Common Clinical Data Set (CCDS) in the following certification criteria:

- "transitions of care" (§ 170.315(b)(1));
- "clinical information reconciliation and incorporation" (§ 170.315(b)(2)) (Only three CCDS data elements - Medications, Medication Allergies, and Problems);
- "view, download, and transmit to 3rd party" (§ 170.315(e)(1));

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[10] https://www.healthit.gov/isa/united-states-core-data-interoperability-uscdi

- "transmission to public health agencies – electronic case reporting" (§ 170.315(f)(5));
- "consolidated CDA creation performance" (§ 170.315(g)(6)); and
- "application access – all data request" (§ 170.315(g)(9)).

ONC Cure's Final Rule USCDI v1 Data Elements

- Allergies and Intolerance
- Clinical Notes (New)
- Discharge Summary Note
- History & Physical
- Progress Note
- Consultation Note
- Imaging Narrative
- Laboratory Report Narrative
- Pathology Report Narrative
- Procedures Note
- Provenance (New)
- Author time stamp
- Author organization
- Allergies and Intolerances (New)

- Substance (Drug Class)
- Reaction
- Patient Demographics (Expanded)
- Current Address
- Previous Address
- Phone Number
- Phone Number Type
- Email Address
- Vital Signs (Expanded to include pediatrics)
- Head Occipital-frontal circumference percentile (Birth to 36 Months)
- Weight-for-length percentile (Birth to 36 Months)
- BMI percentile (2-20 Years of Age)

Trusted Exchange Framework[11]

ONC released the first draft of the Trusted Exchange Framework and Common Agreement (TEFCA) in January 2018 and a second draft in April 2019. TEFCA aims to create a "single on-ramp" for health information exchange by aligning participation requirements and technical standards across qualified networks.

ONC designated the Sequoia Project as the national Recognized Coordinating Entity (RCE), which will be responsible for developing and maintaining the common agreement. The common agreement will set the minimum technical and legal requirements for participating HIE networks. The RCE will also work collaboratively with ONC to oversee Qualified Health Information Exchange Networks (QHINs), which will form the backbone of the national trusted exchange framework.

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[11] https://www.healthit.gov/topic/interoperability/trusted-exchange-framework-and-common-agreement