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Federal Health IT Mission and Vision

Federal Health IT Mission

Improve the health and well-being of individuals and communities using technology and health information that is accessible when and where it matters most.

Federal Health IT Vision

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A health system that uses information to engage individuals, lower costs, deliver high-quality care, and improve individual and population health.



Executive Summary

Health information technology (health IT) is an array of tools that enable the processing, storage, access, exchange, and use of electronic health information (EHI).ⁱ Health IT is used to promote health and wellness, enhance the delivery and experience of care, and accelerate research and innovation. The federal government can create systemic improvements in health and care by strategically aligning its health IT policies, programs, and investments.

2024-2030 Federal Health IT Strategic Plan

The 2024-2030 Federal Health IT Strategic Plan includes four goals:



Promote Health and Wellness



Enhance the Delivery and Experience of Care



Accelerate Research and Innovation



Connect the Health System with Health Data **Goals 1-3** address plans to improve the experiences and outcomes for health IT users.ⁱⁱ

Goal 4 focuses on the policy and technology components needed to support those various health IT users.



Improve Health IT Users' Experiences and Outcomes

2024-2030 Federal Health IT Strategic Plan

The 2024-2030 Federal Health IT Strategic Plan sets objectives to achieve a future state, where health IT and EHI are used to:



Promote health and wellness for individuals, populations, and communities



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\$ \$ Enhance the delivery and experience of care for patients, caregivers, health care providers,ⁱⁱⁱ public health professionals, and others in the health care continuum





Accelerate research and innovation through the collaborative efforts of researchers, technology developers, and other health IT users









Purpose of the Federal Health IT Strategic Plan

The 2024-2030 Federal Health IT Strategic Plan guides federal government efforts toward EHI access, exchange, and use that improves:



This plan emphasizes ethical and equitable design, implementation, and the secure and private use of health IT that serves all populations.

2024-2030 Federal Health IT Strategic Plan



Whole-person care delivery by connecting human services data



Federal Organizations' Use of the Federal Health IT Strategic Plan

2024-2030 Federal Health IT Strategic Plan

The 2024-2030 Federal Health IT Strategic Plan is a comprehensive and strategic effort developed by the Assistant Secretary for Technology Policy/Office of the National Coordinator for Health Information Technology (hereafter ASTP) in collaboration with more than 25 federal organizations. Federal government organizations will use the plan to:



Prioritize resources



Align and coordinate efforts



Benchmark and assess progress



Signal priorities to industry



Building on Past Government and Industry Progress

The <u>2020-2025 Federal</u> <u>Health IT Strategic Plan</u> promoted a modern health IT infrastructure and addressed barriers to the access, exchange, and use of EHI. Significant progress across government and industry occurred over the past several years. For example:



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Common standards, including the United States Core Data for Interoperability (USCDI) and Health Level Seven International[®] (HL7[®]) and Fast Healthcare Interoperability Resource[®] (FHIR[®])^v standards, allow for the electronic capture and exchange of clinical data

Hundreds of thousands^{vi} of physician offices, hospitals, and health systems use health IT certified through the ONC Health IT Certification Program that are capable of:

- · Capturing data elements using the USCDI standard
- Exchanging EHI via the Trusted Exchange Framework and Common Agreement[™] (TEFCA[™])
- Providing individuals access to their EHI
- Supporting standardized application programming interfaces (APIs) to advance patient and population services
- Exporting EHI for a single patient and for an entire patient population

According to a 2023 ASTP Data Brief, four in five non-federal acute care hospitals use APIs for three key functions: to enable provider applications to write data to certified health IT systems, to read data from certified health IT systems, and to grant patient access to data in those systems through patient-facing applications^{vii}

As of September 17, 2024, more than 41,500 facilities in all 50 states and two territories are actively sending electronic initial case reports to public health agencies using electronic case reporting as part of the Centers for Disease Control and Prevention (CDC) Data Modernization Initiative^{viii}



Congress' vision to make appropriate Electronic Health Record (EHR) sharing the expected norm in health care is being implemented through the U.S. Department of Health and Human Services (HHS) rulemaking, oversight, and enforcement

The 2024-2030 Federal Health IT Strategic Plan builds upon this progress and includes increased emphasis in areas such as health equity, public health, and artificial intelligence (AI).

2024-2030 Federal Health IT Strategic Plan

Federal Health IT Principles



Person-centered, inclusive design



Strengthen individuals' ability to securely access and use their own health information to take greater control over their own health, while ensuring that their data are accurate. Consider the whole individual, including their goals, preferences, values, culture, and privacy. Include health IT users in all aspects of the design, development, and use of health IT.

Promote the use of high-quality health data that are accurate and provide benefits to individuals and their communities. Promote the use of health IT that improves health care safety and quality. Bring together scientific, public health, and health care communities to efficiently translate evidence into better health experiences and outcomes.



Provide tools, guidance, and regulations to build trust and protect individuals' health information from compromise, loss, or unauthorized access.^{ix}

Data-informed decision-making



Increase health equity across all populations



Encourage innovation and competition

2024-2030 Federal Health IT Strategic Plan

Support health information sharing among individuals, health care providers, payers, public health professionals, researchers, and other health IT users so they can make informed decisions and create better health outcomes.

Promote the use of data to address health equity, social needs, and the conditions in which people live, learn, work, and play. Factors such as race, ethnicity, sexual orientation, gender identity, religion, age, national origin, disability, Veteran status, genetic information, economic status, broadband connectivity, language, and location all impact the quality of, access to, and experience with health and human services for individuals.

Support and protect innovation and competition in health IT that result in new solutions and business models for better care and improved outcomes.



Federal Health IT Strategic Plan Framework GOALS AND OBJECTIVES

2024-2030 Federal Health IT Strategic Plan

GOAL 1 OBJECTIVES

- A Individuals are empowered to manage their health
- Individuals and populations experience modern and equitable health care
- c Communities are healthier and safer

GOAL 2 OBJECTIVES

- Providers deliver safe, equitable, highquality, and improved care
- B Patients experience expanded access to quality care and reduced or eliminated health disparities
- Health care is improved through greater competition and transparency
- Providers experience reduced regulatory and administrative burden
- The health care workforce uses health IT with confidence



- GOAL 3 OBJECTIVES

- Researchers and other health IT users have appropriate access to high-quality health data to drive individual and population health improvement
- Individual and population-level research, analysis, and its application are enhanced by health IT
- Researchers advance health equity by using health data that includes underrepresented groups

GOAL 4 OBJECTIVES

- Development and use of health IT capabilities continues to advance
- B Health IT users have clear and shared expectations for data sharing
- C Underserved communities and populations have access to infrastructure that supports health IT use
- Individuals' EHI is protected, private, and secure
 - Communities are supported by modern and
- integrated public health data systems and infrastructure



Promote Health and Wellness

Goal 1 focuses on improving health experiences and outcomes for individuals, populations, and communities

2024-2030 Federal Health IT Strategic Plan

OBJECTIVES

- A Individuals are empowered to manage their health
- B Individuals and populations experience modern and equitable health care
- Communities are healthier and safer



OBJECTIVE A

Individuals are empowered to manage their health

STRATEGIES

The federal government plans to ...

Support individuals in accessing and using their EHI securely, privately, and without special effort

Expand access to affordable smartphones, broadband, and other connected technologies

Improve the security and portability of EHI through APIs and other interoperable health IT

Protect individuals' right to share their EHI with third parties, including third-party applications, of their choice

Protect EHI when required by the Health Insurance Portability and Accountability Act (HIPAA)^x and other federal laws and regulations^{xi, xii}

Develop educational resources for choosing and using secure technologies that incorporate privacy protections

So that ...

••• Individuals, including patients and authorized caregivers, develop trust in the platforms on which they want to access usable EHI to understand and inform their health decisions, and can engage with their own health information in their preferred ways

Individuals (including unserved or underserved populations, such as people with low income; members of racial, ethnic, Tribal, and rural communities; and persons with disabilities) can securely and conveniently access and use EHI

- ••• Individuals trust that their data remains protected, and they can readily access, exchange, and use their own EHI across various technology platforms
- Individuals gain timely access to person-specific tools and information to manage and improve their health with assurance and understanding of how their data will be accessed and used by third parties
- ••• Individuals are better informed about how their information will be used in circumstances where the HIPAA Privacy, Security, and Breach Notification Rules (HIPAA Rules) do not apply (e.g., consumer health applications) and understand the safeguards that do apply
- ••• Individuals, providers, payers, communities, and public health agencies have a shared understanding of how and when individuals' health information may be used



Federal Health IT

Strategic Plan

2024-2030

OBJECTIVE B

2024-2030 Federal Health IT Strategic Plan

Individuals and populations experience modern and equitable health care



The federal government plans to ...

Build on the collection of evidence needed to improve the use of EHI

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Promote equitable access to health IT literacy resources, including cybersecurity awareness and programs
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Advance the use of validated and safe evidence-based digital therapeutics^{xiv, xv} and diagnostics^{xvi, xvii}

Apply digital tools to improve individual-level health management and population health

Promote education, outreach, and transparency about the use of Al technologies and how analyses and outputs of these technologies are applied across the health care ecosystem

So that . . .

- ••• Data classes and data elements that improve clinical and social determinants of health^{xiii} are standardized and included in health and human services systems
- ••• All populations can safely participate in, understand, and realize the benefits of health IT
- ••• Individuals can safely use digital therapeutics and diagnostics to prevent, manage, or treat certain health conditions with the help of smartphones, tablets, and other personal devices
- ... Individuals and communities are equitably served by the latest technologies
- ••• Individuals and health care providers are better informed about the use of AI technologies in health care, and have transparency into performance, quality, and privacy practices



OBJECTIVE C

Communities are healthier and safer

STRATEGIES

The federal government plans to ...

Improve the use of public health data to address community health challenges^{xviii} through collaboration with community organizations and networks^{xix}

Leverage individual, population, and public health data to inform action at federal, state, local, Tribal, and territorial levels

Support EHI sharing across the care continuum and organizations serving communities

Use health IT to distribute health education, awareness of federal programs, and disease prevention measures to communities in the languages and formats best suited to their populations

Improve health IT use in resource-limited health care settings

So that . . .

- ••• Public health professionals can prepare for, respond to, and recover from emergencies and disasters; inform and monitor public health activities that improve quality of life; and address disease occurrence and preventable deaths^{xx}
- ••• Public health professionals can foster greater assessment, transparency, inclusion, resilience, and learning within and across the health system and the communities and populations they serve
- Health care, public health, and human services professionals securely exchange data to improve care and effectively administer social programs
- ••• Public health professionals and communities promote health literacy and achieve a more equitable care experience for all
- Health IT users in these settings not only have access to digital health tools, but also have the skills and resources to best use and optimize these tools









Enhance the Delivery and Experience of Care

Goal 2 focuses on improving how patients and caregivers experience care, how health care providers and others across the health care continuum deliver safe, highquality care, and how health plans reimburse for care **2024-2030 Federal Health IT** Strategic Plan

OBJECTIVES

- A Providers deliver safe, equitable, high-quality, and improved care
- B Patients experience expanded access to quality care and reduced or eliminated health disparities
- C Health care is improved through greater competition and transparency
- Providers experience reduced regulatory and administrative burden
- The health care workforce uses health IT with confidence



OBJECTIVE A

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Providers deliver safe, equitable, high-quality, and improved care



The federal government plans to ...

Promote the use of health IT and other modern technologies in clinical workflows

Promote interoperable and secure health information sharing through nationally adopted standards

Use health IT to support payment for high-quality, value-based care

Increase transparency and understanding of health data that goes into algorithm-based Decision Support Interventions (DSI)

Support efforts to address patient identity and record linking solutions

Advance standardization and interoperability of social determinants of health data

2024-2030 Federal Health IT Strategic Plan



So that ...

	>	Health IT supports clinicians in providing high-quality, safe, efficient, and evidence-based care and in experiencing more effective workflows
		Individuals' health information is available across care settings for use in their care and the provision of public health; emergency medical services; research; and emergency and disaster preparedness, response, and recovery efforts are improved
are		Health care providers deliver high-quality care in a transparent, modern, and competitive market
es into		Health care providers, as well as patients and other health IT users, have confidence that decision support tools facilitate more accurate and safer treatment options
lutions		Potential medical errors are avoided, and burden related to manual data matching is reduced ^{xxi}
		Patients and health care providers benefit from data that provides a more complete view of a person's health

STRATEGIES

OBJECTIVE B

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Patients experience expanded access to quality care and reduced or eliminated health disparities

2024-2030 Federal Health IT Strategic Plan



The federal government plans to	So that	
Support expanded and affordable use of secure telehealth, including audio-only telehealth	Health care providers and patients can easily access and use telehealth, w appropriate, to reduce disparities in health care access and health outcome	
Expand health IT use beyond hospitals and clinician offices	Health care providers across care settings and locations where care is delivered, XXIII, XXIIII use technology to access, exchange, and use EHI	
Promote health IT that supports greater integration of health care and human services	Patients experience more seamless support across their health and human services interactions, including appropriate information flowing effortlessly a accurately among their care teams	
Advance the collection and use of standardized social determinants of health data (including preferred languages and disability-related services) to reduce health and health care inequities and disparities	 Patients experience person-centered ethical and consistent high-quality cal (including intake, referrals, interpreters, and integration of medical and soci care) in their preferred ways 	
Use digital engagement technologies beyond portals to connect patients to their health information	••• Patients can connect more easily with their health care providers through re time collaboration, improved access to expert knowledge, and self-scheduli	



OBJECTIVE C

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Health care is improved through greater competition and transparency



The federal government plans to ...

Encourage pro-competitive business practices for the appropriate sharing of EHI

Expand methods to measure and make care quality and price information available electronically

Educate health care consumers and providers on the availability and use of quality and price information

Support efforts to merge clinical and administrative data streams, including payment data

Foster a safe and secure health application market

So that . . .

the appropriate...>EHI flows without constraint or special effortity and price...>Individuals can easily access, understand, and use quality and price
information to make care planning decisionsa the availability...>Health care consumers can use this information to shop for care based on
value and providers are aware of price informationave data streams,...>Health care providers and patients have access to real-time financial and
administrative data at the point of care and can leverage patient trust models
to ensure patients are enabled to make informed decisions regarding their careet...>The entire care continuum benefits from easy selection and routine use of
standardized APIs to appropriately and securely share EHI without special
effort



2024-2030 Federal Health IT Strategic Plan



OBJECTIVE D

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2024-2030 Federal Health IT Strategic Plan

Providers experience reduced regulatory and administrative burden



STRATEGIES

The federal government plans to ...

So that ...

Simplify and streamline electronic documentation requirements for provider …) payments	 Health care providers can reduce "note bloat"xxiv and create more useful and coherent patient health records
Leverage health IT to standardize data and processes related to electronic …) prior authorizations, such as via APIs, to allow for increased automation	 Health care providers, payers, and patients experience reduced administrative burden and improved timeliness of prior authorization decisions
Advance health IT and related policies to improve alignment and increase …) automation related to administrative tasks, health care data collection, and health care data reporting	 Health care providers experience reduced burden and costs (e.g., manual chart abstraction), especially those associated with federal clinical quality and public health reporting requirements
Provide education and outreach on applicable regulations and expected business practices related to EHI sharing	 Health IT users understand when they are required or expected to share EHI, who they should share it with, and the mechanisms they are expected to use when sharing EHI
•••• Promote the safe, secure, and responsible use of AI tools and standards ^{xxv}	 Health care providers and patients can expect trustworthy, relevant, and representative results from AI tools that provide better, more streamlined care delivery
Promote the incorporation of automation tools in health IT to improve workflows that require judgment in care planning and delivery	Health IT users benefit from tools, such as AI and Natural Language Processing (NLP), that relieve the burden of routine tasks in a safe, transparent manner

STRATEGIES

OBJECTIVE E

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The health care workforce uses health IT with confidence

The federal government plans to ...

Support health care professionals, including public health professionals, with using health IT as a tool that supports their practice needs and workflows

Engage health IT users across the health industry in health IT development, optimization, and usability testing

Implement health IT education and training programs

Leverage health IT expertise from different health care settings

Study and seek to optimize the use of health IT in supporting health care, public health, and human service provider workflows

Provide frameworks, standards, and education to prevent and mitigate cybersecurity issues and other threats

So that . . .

- ••• Health care professionals have improved experience with health IT throughout the cycle of acquisition, implementation, go-live, upgrades, and ongoing use in a manner that provides awareness of health IT clinical and financial value
- ••• The needs and perspectives of health IT users, including those related to health equity, are reflected in health IT development and implementation
- A strong, cross-functional health IT workforce can support technology in both health care delivery and administrative functions across settings, especially in underserved communities
- ••• Health care professionals can share lessons-learned and improve data sharing across different settings
 - Health care, public health, and human service providers experience better efficiency, convenience, and outcomes in workflows supported by health IT
- Health IT users experience minimal to zero outages or interruptions when using health IT as intended



2024-2030 Federal Health IT Strategic Plan





Accelerate Research and Innovation

Goal 3 focuses on advancing opportunities for individuals, researchers, technology developers, and other health IT users to accelerate scientific discovery and innovation

2024-2030 Federal Health IT Strategic Plan

OBJECTIVES

- Researchers and other health IT users have appropriate access to high-quality health data to drive individual and population health improvement
- Individual and population-level research, analysis, and its application are enhanced by health IT
- C Researchers advance health equity by using health data that includes underrepresented groups



STRATEGIES

OBJECTIVE

Researchers and other health IT users have appropriate access to high-quality health data to drive individual and population health improvement

2024-2030 Federal Health IT Strategic Plan



The federal government plans to ... So that . . . Provide ways for individuals to securely share their own health ... Individuals can participate in a consent process consistent with their preferences to information via applications and other health IT for research enable their participation in research ... Researchers, technology developers, and other health IT users can produce richer insights to support clinical research with data that includes emerging health and health-Advance individual- and population-level transfer of health data related data such as "omics" (e.g., genomic, proteomic, metabolomic), medical device, patient-generated, social determinants of health, and environmental data ··· Researchers, technology developers, and other health IT users can conduct enhanced Streamline the secure access, exchange, and use of linked health population health planning, analysis of quality and patient outcomes across settings and and human services datasets programs, and clinical research ··· Researchers, innovators, and other health IT users can rapidly apply data from clinical Increase access to tools for analysis of health care data for health research and post-market surveillance use discovery to clinical decision-making and treatment ··· Researchers, technology developers, and other health IT users can leverage existing Evaluate common data elements for accuracy and opportunities common data elements - or create new ones through collaboration with standards to harmonize for improved interoperability development organizations - to improve data quality for additional uses (such as public health) ··· Technology developers protect sensitive health information while supporting Foster data governance that reinforces privacy protections for appropriate access to large volumes of health data from health IT, claims, registries, large datasets and other data sources

OBJECTIVE B

2024-2030 Federal Health IT Strategic Plan

Individual and population-level research, analysis, and its application are enhanced by health IT





The federal government plans to ...

Apply digital health tools to advance research into targeted therapies

Broaden use of new technologies and analytic approaches that utilize structured and unstructured data

Increase use of health IT capabilities for data integration and research

Protect de-identified health information from re-identification

Investigate the impact and effectiveness of health IT development and implementation on care, safety, health, and other types of outcomes

Promote increased transparency into the development and use of AI algorithms in health care settings for providers and patients

So that ...

- Researchers and other health IT users can use real-time data to make faster discoveries and deliver better care at the bedside
- ••• Researchers and other health IT users can use machine learning and predictive modeling in ethical ways across more diverse groups to harness the power of data to inform decisions and improve care quality
- ··· Technology developers can integrate disparate datasets
- ••• Researchers, technology developers, and other health IT users are confident their methods and analyses will not compromise individuals' privacy
- Researchers, technology developers, and other health IT users can advance insights and evidence on the benefits of health IT as well as unintended consequences
- ••• Researchers, technology developers, and other health IT users understand how the AI systems work, what kinds of data they are being trained on, and how they are being used in decision-making to mitigate biases, risks, and inaccuracies in AI outputs

OBJECTIVE G

2024-2030 Federal Health IT Strategic Plan

Researchers advance health equity by using health data that includes underrepresented groups



The federal government plans to ...

Promote the use of health IT interventions that address health disparities and promote health equity

Address algorithmic discrimination in health IT

Address bias in guidelines used in health IT

Use health IT to increase participation for all populations and match individuals to health research studies

Advance research design and application of findings driven by diverse, vulnerable communities and populations

Expand research infrastructure to better understand health equity data

Ensure data collection involves consent for and understanding of secure sharing and use, as appropriate

So that ...

- ••• Researchers, technology developers, and other health IT users can generate insights on how to support care needs across socioeconomic, environmental, and system-level landscapes
- ••• Researchers and other health IT users can identify best practices for data and algorithmic use and perform ongoing monitoring to ensure algorithms are supporting intended goals and outcomes
- ••• Researchers, technology developers, and other health IT users actively address potentially explicit and implicit bias in the delivery of evidence-based care
- ••• Researchers, technology developers, and other health IT users can produce research and scientific advancements that are applicable to, and trusted by, all demographic, social, and lived experience communities
- ••• Researchers and other health IT users can increase our understanding of how personalized therapies can benefit individual groups
- ••• Researchers and other health IT users can produce findings on how to optimize care for underserved populations, rural populations, and other groups historically underrepresented in clinical research
- Researchers and other health IT users are protecting sensitive health information, while accessing more diverse datasets



Connect the Health System with Health Data

Goal 4 focuses on the policy and technology components needed to support various data needs of health IT users

2024-2030 Federal Health IT Strategic Plan

OBJECTIVES

- A Development and use of health IT capabilities continues to advance
- B Health IT users have clear and shared expectations for data sharing
- C Underserved communities and populations have access to infrastructure that supports health IT use
- D Individuals' EHI is protected, private, and secure
- Communities are supported by modern and integrated public health data systems and infrastructure



OBJECTIVE

Development and use of health IT capabilities continues to advance

\$ \$ STRATEGIES

The federal government plans to ...

Advance health IT modernization, adoption, and use across the health care system^{xxvi}

Collaborate across public and private sectors on health IT standards' maturity, adoption, and use and identify opportunities where standards may improve documentation, address AI bias, reduce burden, and minimize or undo unintended harm

development, use, and ongoing maintenance of health IT

Promote data governance and provenance mechanisms to improve health data quality

Improve portability of EHI and competition in the health IT industry

Encourage transparency on health IT product usability

Reduce financial and regulatory barriers to innovation

Study and communicate with the public about health IT via government reports, public use datasets, and other methods

So that . . .

- ... Health care providers across all care settings can more easily adopt, implement, and use secure health IT and have a clear understanding of how to use these technologies safely and securely
- ••• Nationally supported standards, implementation specifications, and certification criteria are expanded, improved, adopted, and implemented throughout the care continuum

Encourage equity, safety, and user-centered design principles in the ... The design lifecycle of health IT is equitable, safe, accessible, usable, and addresses the needs of its users

- ---> Data quality is improved, and errors are mitigated through all stages of care
- Costs associated with transitioning to new health IT systems are reduced ••••
- ... Users of health IT can make informed decisions on which health IT systems work best for them
- ... New health IT developers can enter and compete in the health IT marketplace
- ... There is a greater understanding of how health IT supports health and health care delivery





OBJECTIVE B

Health IT users have clear and shared expectations for data sharing





STRATEGIES

The federal government plans to ...

Promote information sharing practices across health care, public health, payers, and community organizations

Develop and disseminate educational resources on best practices and policies for EHI sharing, uses, and disclosures

Advance TEFCA[™] to create a universal governance, policy, and technical floor for nationwide interoperability; enabling individuals to access their EHI and simplifying connectivity for organizations to securely exchange information

Participate in international, state, local, Tribal, and territorial collaborations to advance health IT standards, cybersecurity, and EHI sharing

Improve the quality of data for interoperable exchange among different health systems, devices, and applications and maintain the ability to exchange and use health information seamlessly

So that ...

- Health information is appropriately, accurately, and securely exchanged using structured data; information blocking conduct is reduced or eliminated; and patients trust that their information is being shared appropriately
- ••• Health information exchange workflows are interwoven into everyday health care delivery and population health operations
- ••• The progress of nationwide interoperability continues, participation in secure interoperable exchange increases, and barriers for low-resource organizations are reduced
- ••• International, state, local, Tribal, and territorial collaborations advance and inform health IT and EHI sharing efforts in the U.S. and globally
- ••• All health IT users can participate in and benefit from the advances in health IT and health care, with assurance that interoperable data is of high quality for use

OBJECTIVE G

Underserved communities and populations have access to infrastructure that supports health IT use

STRATEGIES

The federal government plans to ...

Assess current and expected health IT and broadband and cellular service infrastructure demands

Enhance and expand broadband access, adoption, and use, and promote the availability of critical communications infrastructure and services

Advance equitable access to affordable technology and broadband

Support adoption and development of infrastructure needed for telehealth

Support the advancement of secure, cloud-based services

So that . . .

- The needs and gaps in health IT infrastructure are identified and addressed
 All health IT users, including those in rural and underserved areas, have access to and can use high-speed internet
- All individuals can use applications and health IT to access health information and communicate with their care teams
- ... Individuals in underserved care settings have electronic access to health care
- ··· Compliance with federal standards modernizes and streamlines how EHI is stored and exchanged



2024-2030 Federal Health IT Strategic Plan



OBJECTIVE

Individuals' EHI is protected, private, and secure

STRATEGIES

The federal government plans to ...

Increase individuals' understanding of and control over their EHI

Provide guidance and resources to help health care organizations integrate high-impact cybersecurity practices, such as the Healthcare and Public Health Cybersecurity Performance Goals,^{xxvii} the National Institute of Standards and Technology Cybersecurity Framework,^{xxvii} and the Health Industry Cybersecurity Practices^{xxix} in the design and use of health IT while also prioritizing the improvement of the confidentiality, integrity, and availability of connected systems containing health data

Implement appropriate standards and consent mechanisms for privacy and security to protect EHI

Mitigate individual health information security and privacy risks

Provide guidance and technical assistance on policies and regulations related to the access, exchange, and use of EHI

Encourage collaboration between federal, state, local, Tribal, and territorial partners on improving safe and secure EHI access and interoperability

So that . . .

- ••• Individuals know how to access and use their EHI, are aware of potential additional uses of their data, and can make informed decisions concerning consent and data exchange
- Health care providers can strengthen cyber preparedness, improve cyber resiliency, and protect individuals' health information and safety, and individual- and population-level data are protected from cybersecurity attacks, fraud, misuse, and other harms
- ••• Individuals can trust that their EHI is protected from unauthorized access, use, and disclosure
- Individuals can trust that they will not be discriminated against or exploited because of inappropriate disclosures of their health information
- Health IT users safeguard personal health information, incorporate privacy and security practices, and perform privacy and security risk assessments
- Health IT users have access to EHI at the right time and in the right way to ensure that care delivery is safe, private, and of high quality

2024-2030 Federal Health IT Strategic Plan



OBJECTIVE

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Communities are supported by modern and integrated public health data systems and infrastructure

STRATEGIES

The federal government plans to ...

Implement health IT policies that promote the secure exchange of EHI for public health initiatives when appropriate

Implement health IT policies and tools that support rapid, scalable reporting and use of public health data

Develop, align, test, and implement data standards to increase interoperability across public health data systems

Support standards and technology development and testing for improved adverse events detection and reporting, and rapid postmarket surveillance of approved drugs, vaccines, biologics to drugs, and medical devices with attention to data for vulnerable populations

Advance the use of forecasting and predictive analytics

Increase data linkages across diverse data assets

Improve public health workforce data science capacity and capabilities

So that . . .

- ••• Timely, actionable data are exchanged among federal agencies; state, Tribal, local, territorial, and public health agencies; health care and other data providers; and other partners
- ••• The foundational public health infrastructure fills data gaps and improves to better respond to emerging health hazards and environmental health trends
- ••• Flexible services for timely, secure, and appropriate access to data are available, including person-matching, to increase interoperability across public health data systems
- ••• Potential adverse events can be quickly identified, addressed, responded to, and resolved
- ••• Efficient and effective decisions can be made to respond to outbreaks, emerging threats, and exposures
- ••• Health IT users have more complete evidence to inform decisions
- Health information is seamlessly available to and effectively used by public health professionals



Federal Health ITStrategic PlanAppendix A: Considerations in Developing the

Public Health Data Systems:

The identification of gaps in the technology, modernization opportunities, and policies needed to support real-time data exchange between public health and health care during the global COVID-19 pandemic.

Health Equity:

Ongoing disparities in health care access and health outcomes that require action, including equitable access to EHI and communications technology, representation in research, and building equity into the design of health IT.

Artificial Intelligence:

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The rapid evolution of machine-based systems that can make predictions, recommendations, or decisions influencing real or virtual environments for a given set of humandefined objectives; and the incorporation of these technologies into health care practice, health IT tools, and individuals' everyday lives.

Increased Use of Health IT and EHI:

Building on

tremendous

progress over the

past decade, patient

access and clinical

practice routinely

relies on health IT

and common data

business practices to

electronically capture

and share health

information. This

increasingly occurs

using modern APIs.

standards and

Privacy and Security:

Ongoing need to bolster and evolve the tools and policies that protect the privacy and security of EHI and enable individuals to determine when and how their health data are used.

Federal Government

Use Cases:

With the increased use of health IT and EHI, federal government agencies are increasingly reliant on these systems and the data captured to provide services to the public.

Collaboration and Coordination:

2024-2030

The 2024-2030 Federal Health IT Strategic Plan focuses on federal health IT activities; however, collaboration and coordination broadly across the public and private sectors is essential to achieving the plan's objectives.



Appendix B: Measuring and Communicating Progress on the 2024-2030 Federal Health IT Strategic Plan

2024-2030 Federal Health IT Strategic Plan

ASTP annually updates Congress by describing actions taken by the federal government, barriers, and recommendations to achieve a nationwide system for the access, exchange, and use of EHI. These <u>reports to Congress</u> will communicate progress on the 2024-2030 Federal Health IT Strategic Plan. ASTP will prioritize the following areas for measuring progress:

- United States Core Data for Interoperability (USCDI): Adoption and use of a standardized set of health data classes and constituent data elements for nationwide, interoperable health information exchange
- **USCDI+**: Adoption and use of standardized sets of domain or program-specific data elements for federal quality measurement and public health interoperable data sharing
- **Certified Health IT:** Widespread use of modern health IT capabilities of Health IT Modules certified through the ONC Health IT Certification Program, including:
 - Standardized APIs for patient and population services
 - EHI export for a single patient and for an entire patient population
 - DSI information to improve transparency on how a predictive DSI was designed, developed, trained, evaluated, and should be used
- **TEFCA[™]:** Qualified Health Information Networks[™] support secure EHI exchange for the purposes of treatment, payment, health care operations, public health, government benefits determination, and individual access services
- Information Sharing Consistent with the Information Blocking Regulations: Health information is appropriately exchanged across care settings, and information blocking conduct is reduced or eliminated
- **HHS Health IT Alignment:** HHS uses its spending power and regulatory authorities to drive alignment with and use of HHS adopted health IT standards



Appendix C: About the 2024-2030 Federal Health IT Strategic Plan

Section 3001(c)(3) of the Public Health Service Act requires ASTP to update the Federal Health IT Strategic Plan in consultation with other appropriate federal agencies and in collaboration with private and public entities. The Federal Health IT Strategic Plan establishes goals, objectives, and strategies for the entire federal government. Federal organizations will execute the strategies according to their own missions.

To develop the *2024-2030 Federal Health IT Strategic Plan*, ASTP convened federal organizations with authorities, oversight, or investments in health IT and EHI. Designated federal representatives from more than 25 federal organizations contributed to the development of the *2024-2030 Federal Health IT Strategic Plan*. ASTP also gathered input through public comments and its Health Information Technology Advisory Committee.^{xxx} The *2024-2030 Federal Health IT Strategic Plan* reflects feedback received from a diverse range of organizations, including health care systems, associations, specialty societies, health IT developers, patient advocates, and others.^{xxxi}



Appendix D: Federal Contributors

Federal agencies regulate, purchase, develop, and use health IT to help deliver care and improve patient health. They fund and contribute to health IT development, deployment, and research at the local, Tribal, state, and national levels. Federal agencies also facilitate coordination across the public and private sectors to align standards, promote innovation and competition, and share best practices.

Because of these activities, this 2024-2030 Federal Health IT Strategic Plan serves as a roadmap for these initiatives and activities, and as a catalyst for complementary activities in the private sector.





Appendix E: References

i. https://www.healthit.gov/sites/default/files/page2/2021-12/Understanding_EHI.pdf

- Health IT users in this document include individuals, populations, communities, patients, caregivers, health care providers, others in the health care continuum who experience the process of delivering and receiving care, researchers, and health IT developers.
- Health care providers in this document encompasses all providers of health care and is not just limited to hospitals and clinician offices. This includes, but is not limited to, specialty care, such as behavioral health, long-term post-acute care, pediatric care, and dentistry. In addition, it is not just limited to physicians, including, but not limited to, nurses, in-home caregivers, and pharmacists.
- Health equity in this document refers to addressing and reducing ongoing disparities in the quality, outcomes, cost, or use of health care services, as compared to the general population, taking into account such factors as socioeconomic status, attitudes toward health, the language spoken, the extent of formal education, the area or community in which the population resides, and other factors deemed appropriate that impact health and health care.
- v. https://www.healthit.gov/sites/default/files/2019-08/ONCFHIRFSWhatIsFHIR.pdf
- vi. https://www.healthit.gov/data/quickstats/national-trends-hospital-and-physician-adoption-electronic-health-records
- vii. https://www.healthit.gov/data/data-briefs/hospital-use-apis-enable-data-sharing-between-ehrs-and-apps
- viii. https://www.cdc.gov/ecr/php/healthcare-facilities/?CDC_AAref_Val=https://www.cdc.gov/ecr/facilities-map.html
- ix. Note that different federal privacy and security laws and regulations may apply to health IT
- x. https://www.hhs.gov/hipaa/index.html
- xi. https://www.ftc.gov/business-guidance/resources/collecting-using-or-sharing-consumer-health-information-look-hipaa-ftc-act-health-breach
- xi. Note that protecting EHI when required by HIPAA is not applicable to EHI that leaves the HIPAA sphere.
- xiii. Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.
- xiv. Digital therapeutics are a subset of digital health tools that deliver evidence-based therapeutic interventions to patients that are driven by high-quality software programs (<u>https://dtxalliance.org/understanding-dtx/</u>).



Appendix E: Referencescontinued

- x. https://store.samhsa.gov/product/advisory-digital-therapeutics-management-and-treatment-behavioral-health/pep23-06-00-001
- xvi. https://dtxalliance.org/wp-content/uploads/2023/06/DTA_FS_ISO-Definition.pdf
- xvii. <u>https://www.iso.org/obp/ui/#iso:std:iso:tr:11147:ed-1:v1:en</u>
- xviii. This includes environmental health challenges, such as pollution, housing quality, food deserts, transportation availability, etc.
- xx. Such as state-designated health information exchanges, regional health improvement collaboratives, and recognized multi-stakeholder frameworks such as emerging health data utilities.
- xx. https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2806963
- xxi. Registries for Evaluating Patient Outcomes: A User's Guide (AHRQ: https://www.ncbi.nlm.nih.gov/books/NBK208618/)
- xxii. Examples of where care is delivered include but are not limited to pharmacies, corrections, schools, Substance Use Disorder (SUD) treatment and residential centers, dental, employer/occupational/work comp, optometry, surgery centers, dialysis, child welfare, ambulance/Emergency Medical Services (EMS).
- xxiii. Long-term post-acute care includes home health and several other settings, such as long-term acute care hospitals, inpatient rehabilitation facilities, and skilled nursing facilities.
- xxiv. https://www.acpjournals.org/doi/10.7326/M14-2128; https://healthjournalism.org/glossary-terms/note-bloat/
- xxv. For example, the NIST AI Risk Management Framework (<u>https://www.nist.gov/itl/ai-risk-management-framework</u>)
- xxvi. The health care system includes federal health facilities such as those affiliated with the Bureau of Prisons (BOP) and Indian Health Service (IHS).
- xxvii. https://hphcyber.hhs.gov/performance-goals.html
- xxviii. https://www.nist.gov/cyberframework
- xxix. https://405d.hhs.gov/cornerstone/hicp
- xxx. https://www.healthit.gov/hitac/committees/health-information-technology-advisory-committee-hitac
- xxxi. https://www.healthit.gov/topic/2024-2030-federal-health-it-strategic-plan/comments-summary



