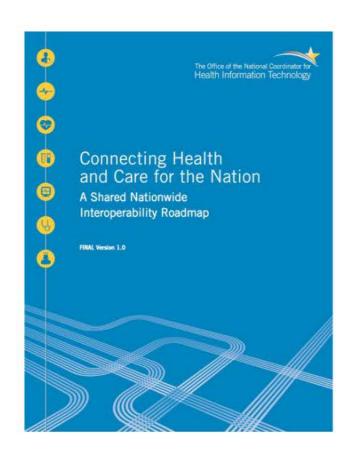


A Shared Nationwide Interoperability Roadmap: A Year in Review

December 2016

Nationwide Interoperability Roadmap

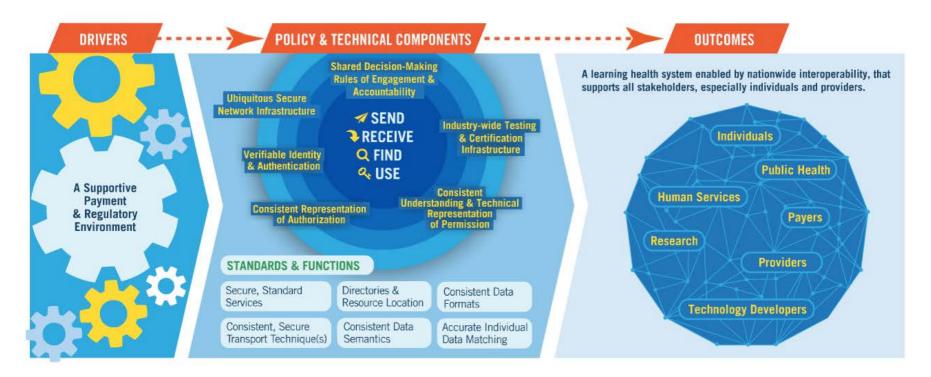


In 2015, ONC updated the Federal Health IT Strategic Plan. At the same time, ONC initiated a complementary planning effort with public and private partners to set a clear path for seamless and secure data flow with A Shared Nationwide Interoperability Roadmap.

https://www.healthit.gov/sites/default/files/hie-interoperability/nationwide-interoperability-roadmap-final-version-1.0.pdf

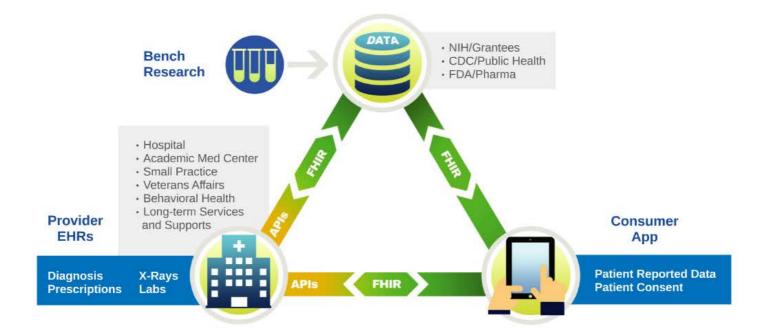
Nationwide Interoperability Roadmap

This 10-year Roadmap outlines the steps the public and private sector can take to achieve widespread and seamless interoperability.



Nationwide Interoperability Roadmap

The ultimate outcome of the Roadmap's implementation will be a learning health system enabled by nationwide interoperability that supports all stakeholders, especially individuals and providers.



Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

Focus On Value



This Past Year We Focused on Value

- By building the business case for interoperability
- By promoting common standards



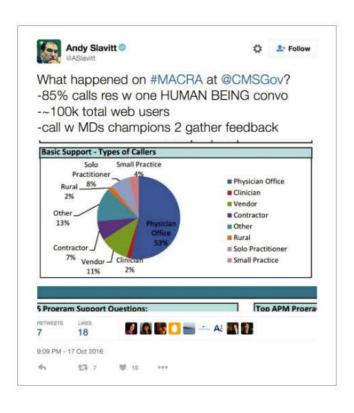
Building the Business Case for Interoperability

Health IT plays a crucial role in supporting person-centered and value-driven alternative care models. Seamless interoperability will support the goals of delivery system reform: better care, smarter spending, and healthier people.





Building the Business Case for Interoperability



Medicare Access and CHIP Reauthorization Act of 2015 (MACRA)

To shift from volume-based to value-based payment, ONC works closely with CMS to implement key provisions of MACRA, which streamlines the existing patchwork of Medicare reporting programs, and provides opportunities for clinicians to earn more by focusing on quality patient care.



Promoting Common Standards

Standards help individuals, health care entities, public health agencies, health IT products, and medical devices consistently and accurately find, send, receive, and integrate electronic health information. Use of common technical standards and specifications are necessary for electronic health information to move seamlessly and securely.





Promoting Common Standards

The ONC Health IT Certification Program

The ONC Health IT Certification Program is a voluntary certification program to certify health IT standards, implementation specifications and certification criteria.

The 2015 Edition final rule also advances the movement toward common standards and the criteria needed for their certified use in health IT products. It builds on past



rulemakings to facilitate greater interoperability for several clinical health information purposes and enables health information exchange through new and enhanced certification criteria, standards, and implementation specifications. The 2015 Edition final rule has a strong focus on the interoperable exchange of data, including through the use APIs such as those built using Fast Healthcare Interoperability Resources (FHIR) and new transparency and accountability provisions.



Promoting Common Standards

The 2015 Edition Final Rule

The 2015 Edition final rule on certification criteria facilitates greater interoperability for several clinical health information purposes and enables health information exchange through new and enhanced certification criteria, standards, and implementation specifications. As part of this rule, ONC redesigned the Certified Health IT Products List (CHPL) with enhanced functionality to promote transparency.



Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

Be Person-Centered

This past year, we focused on person-centered solutions

- By highlighting HIPAA access educational tools
- By supporting cooperative learning efforts



HIPAA Access Educational Tools

To effectively manage their health, individuals need to be able to access and use their health information when, where, and how they want, including sending it to the people and tools helping them become or stay healthy (e.g., neighbors, friends, relatives, health care providers treating or consulting with the individual, or even third-party software tools used for self-management).









HIPAA Access Educational Tools

"If a patient wants their data for their personal use – to share for research or to look for a second opinion – it's clear that it's the patient's right to have that data set."

B. Vindell Washington, MD, MHCM, FACEP





HIPAA Access Educational Tools

OCR FAQs

The HHS Office for Civil Rights (OCR), the entity responsible for interpreting and enforcing Health Insurance Portability and Accountability Act (HIPAA), published an important set of Frequently Asked Questions (FAQs) clarifying how an individual's right to access their individual health information operates, including key points related to electronic health information sharing.

This guidance will help ensure that all Americans have access to their health information, in the form and format requested, when and where they need it most.







Cooperative Learning Efforts

Since ONC issued the Nationwide Interoperability Roadmap, HHS and other federal agencies implemented a wide range of actions in priority areas to bolster the person-centered foundation for a learning, interoperable health system. Some of these efforts include:





Cooperative Learning Efforts





The President's Precision Medicine Initiative

The President's Precision Medicine Initiative is a bold new research effort to revolutionize how we improve health and treat disease. This initiative is about empowering patients and researchers to use their data for common good. At ONC we are heavily involved in supporting this long-term initiative.

Sync for Science Pilot

In conjunction with the National Institutes of Health, ONC is coordinating Sync for Science pilots with leading EHR developers. The lessons learned from these projects will inform efforts to scale individual data access and donation for precision medicine research, and could be used to support implementation of consumer-mediated data access across the health care industry.

Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

Protect Privacy & Security/Respect Individual Preferences



GUIDING PRINCIPLE #3:

Protect Privacy & Security/Respect Individual Preferences

This past year ONC protected privacy & security and respected individual preferences

 By publishing and promoting a variety of materials informing stakeholders about the privacy and security of electronic health information



GUIDING PRINCIPLE #3:

Protect Privacy & Security/Respect Individual Preferences

ONC Released Materials to Promote Patient Privacy and Security



Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

Build A Culture Of Electronic Access And Use

This past year, we worked to build a culture of electronic access and use

- By establishing the Interoperability Pledge
- By creating the Interoperability Proving Ground



The Interoperability Pledge

In early 2016, ONC announced that the companies that provide 90 percent of hospitals their EHRs, and over two dozen professional associations and stakeholder groups, have signed the Interoperability Pledge and agreed to implement three core commitments that will help make sure health information flows.







Interoperability Proving Ground

The Interoperability Proving
Ground (IPG) is an open
community platform where you
can share, learn, and be inspired
by interoperability projects
occurring in the United States
(and around the world).



Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

Encourage Innovation And Competition



This past year we encouraged innovation and competition

- By spurring innovation
- By promoting transparency and competition
- By participating in the Cancer Moonshot

•

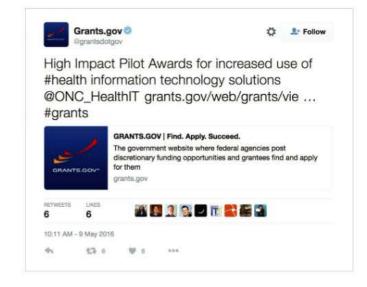
Encourage Innovation and Competition

Spurring Innovation

ONC encourages community-driven, user-focused innovation to allow individuals and providers to access, easily and securely, electronic information and direct it to any desired location. In 2016, ONC awarded HIE grants, contracts, and cooperative agreements to promote health IT innovation.

For more information about ONC's innovation challenges, visit the Year in Review web page.

https://www.healthit.gov/year-in-review









GUIDING PRINCIPLE #5:

Encourage Innovation and Competition

Promoting Transparency and Competition

2015 Edition Supports Transparency

The current health IT landscape has lacked reliable information about the costs, limitations, and trade-offs of competing health IT products and services. Without this information, health IT purchasers may find it hard to effectively understand and estimate the kinds of costs and implementation issues they may face.

ONC published the 2015 Edition final rule, which modified the ONC Health IT Certification Program, making it more open and accessible to more types of health IT that support various care and practice settings.





GUIDING PRINCIPLE #5:

Encourage Innovation and Competition

Promoting Transparency and Competition

2015 Edition Supports Transparency

The current health IT landscape has lacked reliable information about the costs, limitations, and trade-offs of competing health IT products and services. Without this information, health IT purchasers may find it hard to effectively understand and estimate the kinds of costs and implementation issues they may face.

ONC published the 2015 Edition final rule, which modified the ONC Health IT Certification Program, making it more open and accessible to more types of health IT that support various care and practice settings.





GUIDING PRINCIPLE #5:

Encourage Innovation and Competition

Promoting Transparency and Competition

Under the ONC Health IT Certification Program's enhanced transparency requirements, developers must fully disclose all known material types of costs and limitations—including technical and contractual restrictions—that a user may encounter when implementing or using the developer's technology. Developers' product disclosures, transparency attestations, and other transparency-related information is now available on the Certified Health IT Products List and will also be regularly updated at http://www.healthlT.gov/transparencv.





Promoting Transparency and Competition

ONC responded to stakeholder feedback and upgraded the Certified Health IT Products List to promote greater transparency. In addition, Certification Companion Guides help health IT developers understand new requirements.









GUIDING PRINCIPLE #5:

Encourage Innovation and Competition

Cancer Moonshot

Health IT plays a critical role in key national priorities such as the Cancer Moonshot, announced by President Obama at his final State of the Union in January 2016. During his remarks at the 2016 Health Datapalooza, Vice President Biden described how the flow of electronic health data is critical to accelerating efforts to cure cancer by, for example, providing access to millions of cancer pathologies, genomic sequences, family histories, and treatment outcomes.

The President's Cancer Panel's Connected Health Report highlights that, "cancer prevention, control, treatment and survivorship improve with greater connectivity and fewer discontinuities" when we achieve the Roadmap's goals of a national health information infrastructure by 2020.





GUIDING PRINCIPLE #5:

Encourage Innovation and Competition

Cancer Moonshot

Vice President Biden Delivers Remarks at the Cancer Moonshot Summit











Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

Build Upon The Existing Health Infrastructure

This past year, we built upon the existing health IT infrastructure

With the Interoperability Standards Advisory

GUIDING PRINCIPLE #6: Build Upon the Existing Health IT Infrastructure



Building upon what's already working is key to achieving full-scale interoperability.

The Interoperability Standards Advisory provides the industry with a single, public list of the standards and implementation specifications that can fulfill specific clinical health information interoperability needs. The Advisory is a single resource for those seeking federally recognized, national interoperability standards and guidance.

Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

One Size Does Not Ett All

This past year underscored that one size does not fit all. We supported diverse needs

- By supporting the Quality Payment Program
- By supporting providers across the care continuum



The Quality Payment Program

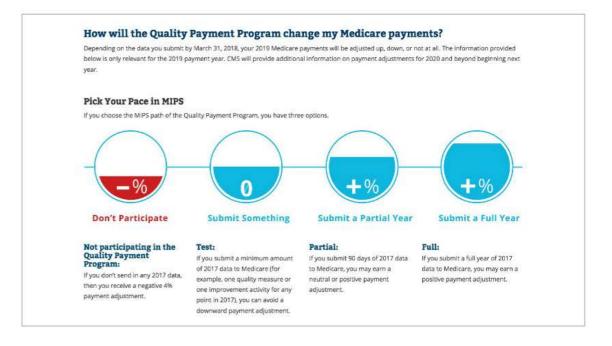
As part of MACRA, CMS issued the rule for the Quality Payment Program, which moves away from paying for each service a physician provides toward a system that rewards physicians for coordinating their patient's care and improving the quality of care delivered. The rule allows doctors to select the measures that reflect how technology best suits their day-to-day practice, and eliminates the requirement of all-ornothing EHR measurement for quality reporting, focusing instead on metrics that support the flow of patient data.





The Quality Payment Program

As part of MACRA, CMS issued the rule for the Quality Payment Program, which moves away from paying for each service a physician provides toward a system that rewards physicians for coordinating their patient's care and improving the quality of care delivered. The rule allows doctors to select the measures that reflect how technology best suits their day-to-day practice, and eliminates the requirement of all-ornothing EHR measurement for quality reporting, focusing instead on metrics that support the flow of patient data.





Supporting Providers Across the Care Continuum

The 2015 Edition final rule establishes a framework that makes ONC Health IT Certification Program open and accessible to more types of health IT, including health IT that supports a variety of care and practice settings, various HHS programs, and public and private interests.

Additionally, this rule addresses health disparities by providing certification to standards for more granular capture of race and ethnicity as well as sexual orientation, gender identity, social, psychological, and behavioral data. This information is critical for identifying and addressing any disparities.



Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

Simplify



This past year, we simplified

- By developing resources to support the provider and developer communities
- By making the Certified Health IT Product List more user friendly



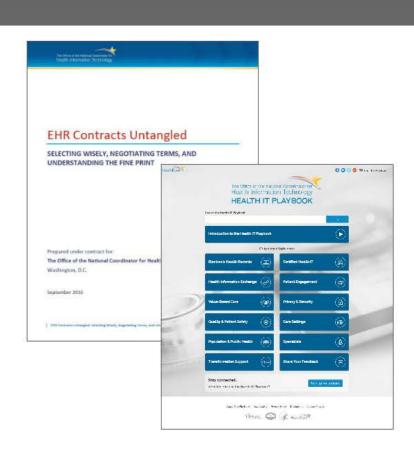
Resources for Provider and Developer Communities

Developed Resources to Support the Provider and Developer Communities

The release of the Quality Payment Program final rule called for in MACRA reforms Medicare payments for over 600,000 clinicians and simplifies reporting requirements.

In the past year, ONC released its Health IT Playbook, a web-based resource of practical, technical, and workflow assistance that should prove helpful to providers and practice staff. ONC's EHR Contracts Untangled: Selecting Wisely, Negotiating Terms, and Understanding the Fine Print helps clinicians and hospitals make sure that contract terms do not inhibit the utility of their EHR technologies.

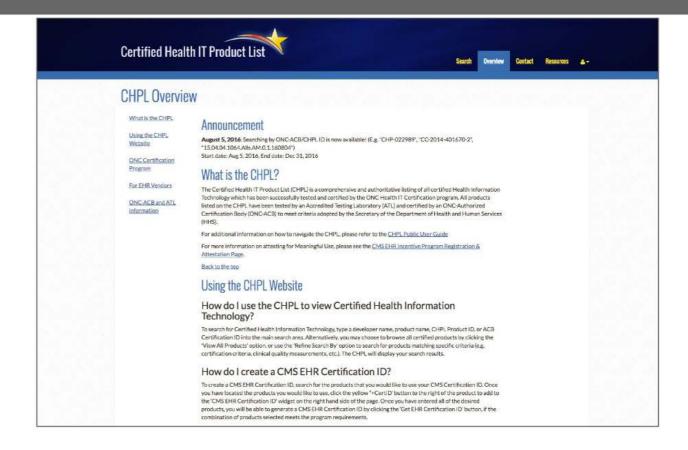
Finally, ONC released 2015 Edition reader-friendly fact sheets and Certification Companion Guides that provide guidance and clarifications to developers on certification criteria.





User Friendly Certified Health IT Products List

Improvements to the Certified Health IT Product List (CHPL)
Granular information about certified health IT is publicly available through the open data CHPL which was been upgraded this year.



Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

Vaintain Modularity

This past year, we maintained modularity

 By connecting and accelerating a FHIR app ecosystem



Connecting and Accelerating a FHIR App Ecosystem

Because of medicine and technology advances, systems must also evolve and take advantage of that progress. Modularity creates flexibility that allows innovation and adoption of new, more efficient approaches over time without overhauling entire systems.

Fast Healthcare Interoperability Resources (FHIR) is an important standard for achieving interoperability, and ONC has developed a strategy for promoting development of FHIR apps.







Connecting and Accelerating a FHIR App Ecosystem

Rolling Out a FHIR-App Strategy

The strategy seeks to leverage the growing interest in an industry-wide approach to open, standardized APIs.

The strategy has three goals:

- 1. Help consumers get and use their data.
- 2. Improve user experience and utility for individuals and clinicians.
- Coordinate open information about EHR app solutions.



Nationwide Interoperability Roadmap Guiding Principles

The Roadmap identifies clear principles for interoperability efforts in the next ten years, centered around the following principles:



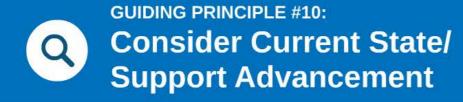
The Roadmap has positively influenced nationwide interoperability, achieving progress in each of its ten guiding principles in the first year. This presentation is a snapshot of some of ONC's and our federal partners' progress and does not include all of the significant work being done in the field by stakeholders and across the federal family.

Consider Current State Support Advancement



This past year, we considered the current state and supported advancement

 By promoting programs and policies that foster innovation and progress



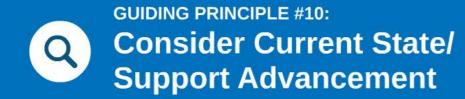
Promoting Advancement

Promoting Programs and Policies for Advancement

As information and technology demands evolve, the federal government has the opportunity to create pathways for the private sector to innovate, using programs and policies that do not impede the marketplace's progress.

ONC's Health IT Playbook and EHR Contract Guide are tools that help the market advance in its adoption and use of interoperable health IT.



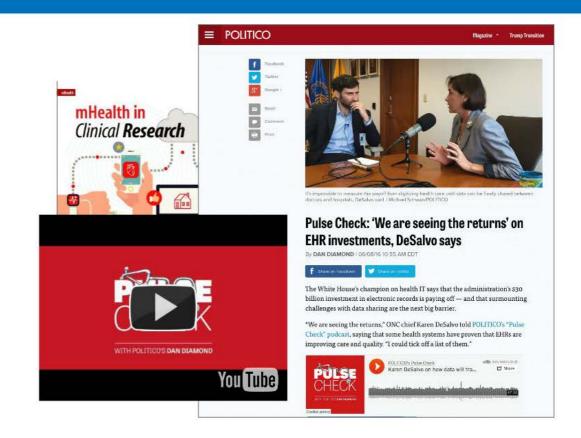


Promoting Advancement

Promoting Programs and Policies for Advancement

As information and technology demands evolve, the federal government has the opportunity to create pathways for the private sector to innovate, using programs and policies that do not impede the marketplace's progress.

ONC's Health IT Playbook and EHR Contract Guide are tools that help the market advance in its adoption and use of interoperable health IT.







The efforts of our public and private sector partners continue to move the country forward on a path to seamless interoperability.

While the nation has made considerable progress in the past year, ONC is committed to achieving the goals outlined in *A Shared Nationwide Interoperability Roadmap*. The long term results of these efforts will be better health care, smarter spending and healthier people.

To learn more about the information and resources in this presentation, visit

www.healthit.gov/year-in-review