



The Office of the National Coordinator for  
Health Information Technology



# Discovery Infrastructure for Clinical Health IT Apps Cooperative Agreement

## Informational Session

March 25, 2016  
2 p.m.–3 p.m. ET



- Introductory Remarks.
- Office of the National Coordinator for Health Information Technology (ONC) Funding Overview.
- Discovery Infrastructure for Clinical Health IT Apps – Cooperative Agreement Description.
- Funding, Eligibility, and Application Information.
- Application Responsiveness and Objective Review.

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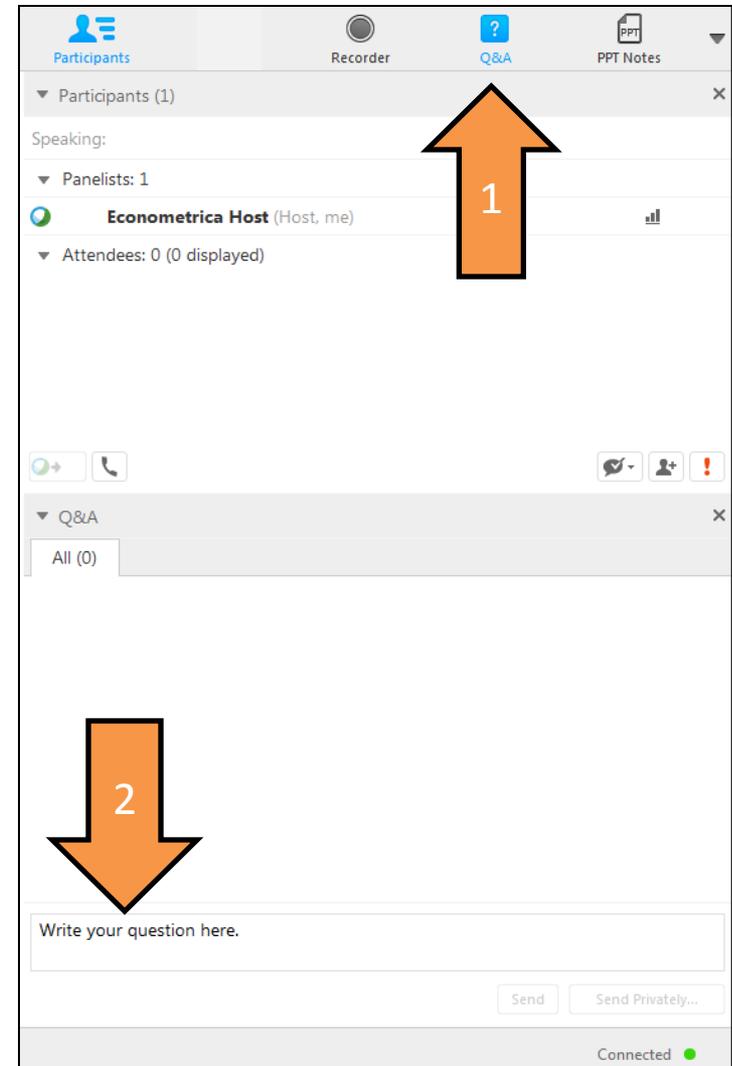
# INTRODUCTORY REMARKS

- Provide information on the Funding Opportunity Announcement (FOA) for Discovery Infrastructure for Clinical Health IT Apps (Grant No. NAP-AX-16-003).
- Describe the cooperative agreement purpose, activities, and desired outcomes.
- Explain the application and review processes.
- Gather questions from interested organizations and individuals for subsequent response via the Frequently Asked Questions (FAQs) on ONC's Web site.
- Provide links to additional information.

- This teleconference is being recorded. If you object, please disconnect now.
- Teleconference slides and recording will be available at <https://www.healthit.gov/> on **Tuesday, March 29, 2016**.
- Please submit questions during the presentation to the Q&A box. Any question not addressed in the FOA or the FAQs will be collected and evaluated, and the FAQs will be updated as needed.
- The FAQs can be viewed at <https://www.healthit.gov/>.

# How to Ask a Question

- If you have any questions during the presentation, please follow the instructions below.
- How to use the Q&A function:
  1. Make sure your Q&A function is enabled.
  2. Write your question to the panelists here.
- All questions will be answered in the form of an “FAQ” after the presentation is finished.



If you have additional questions after today's webinar session, please direct them to the following email address:

[ONC.Techlab@hhs.gov](mailto:ONC.Techlab@hhs.gov)

# **ONC FUNDING OVERVIEW: *ACCELERATING A FHIR<sup>®</sup> APP ECOSYSTEM***

- \$625,000 available through three funding opportunities.
- Develop market-ready software applications (apps) for consumers and health care providers to improve health and care.
- Leverage the [Health Level 7 – Fast Healthcare Interoperability Resources \(FHIR®\) Web Site Disclaimers](#) standard and growing interest in an industry-wide approach to open, standardized application programming interfaces (APIs).
- Build a stronger health IT ecosystem where consumers and providers can get the health information they need when and where they need it most.
- Encourage innovative efforts to securely access and direct health information and support in an interoperable learning health system.

# Snapshot of Available Funding

Competitive Funding Opportunity	Funding	Awards	Performance Period
Consumer Health Data Aggregator Challenge	\$175,000	8	N/A

**Goal:** Spur the development of third-party, consumer-facing applications that use open, standardized APIs to help consumers aggregate their data in one place and under their control.

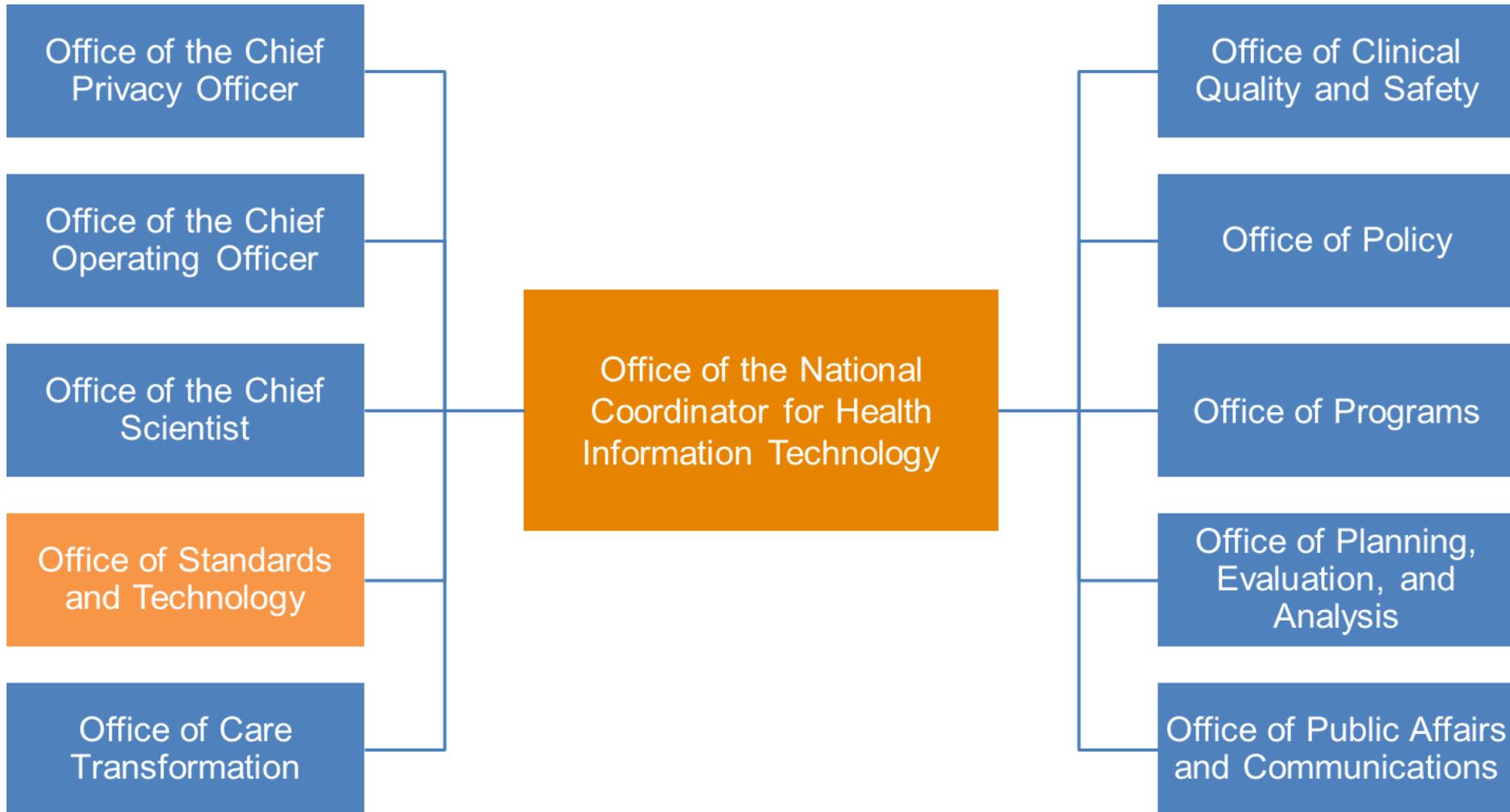
Provider User Experience Challenge	\$175,000	8	N/A
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**Goal:** Demonstrate how data made accessible to apps through APIs can positively impact providers' experiences with electronic health records (EHRs) by making clinical workflows more intuitive, specific to clinical specialty, and actionable.

Discovery Infrastructure for Clinical Health IT Apps	\$275,000	1	1 year
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**Goal:** Develop an app discovery site that makes it easier for developers to publish their apps and for providers to discover and compare them.

# ONC Organizational Chart



Discovery Infrastructure for Clinical Health IT Apps

NAP-AX-16-003

# **DISCOVERY INFRASTRUCTURE FOR CLINICAL HEALTH IT APPS – COOPERATIVE AGREEMENT DESCRIPTION**

- Providers wish to take advantage of online clinical decision support tools but face challenges that prevent them from optimally using health IT:
  - Vast amount of health data presented in complex ways that are difficult for providers to review and act on.
  - Difficulty in finding the information they need to make informed choices before embarking on a resource-intensive process of app integration.
- Improve providers' abilities to discover health IT apps that integrate with EHRs.

- ONC will select one awardee to:
  1. Conduct ***market research*** to collect information from the provider community on what users need to understand in order to compare FHIR-enabled apps.
  2. Create an interactive, engaging ***online resource*** for providers to find and compare EHR applications.
  3. Develop of an ***innovation sandbox*** to allow providers to test EHR applications using sample data.

## Deliverable:

- A publicly available report of the market research findings that will present and analyze the types of information providers are most interested in learning about for EHR applications.
- This research should:
  1. Incorporate human-centered design principles and focus on improving EHR usability and provider user experience.
  2. Take into account the various roles on the care team (i.e., physicians, physician assistants, nurses, specialists).

### Deliverable:

- An online resource (e.g., interactive Web site) where providers can easily view and understand relevant information about applications for their EHR.
- Awardee must obtain the necessary rights, permissions, and licenses for the online resource prior to the time that these deliverables are published online and accessible to the public.
- User testing of the online resource should be conducted to ensure the highest possible standard for quality user experience, including a dynamic, engaging, and interactive interface.

## Deliverable:

- An online sandbox environment with sample, de-identified data in which providers can “test drive” different applications that they find in the online resource produced under Task 2. Data should be structured where applicable and appropriate.
- Awardee must obtain the necessary rights, permissions, and licenses for the innovation sandbox (e.g., licensing requirements for demonstration apps) prior to the time that these deliverables are published online and accessible to the public.
- The different data types that could be included should be informed by the market research conducted in Task 1, but may include:
  1. Clinical.
  2. Claims.
  3. Biospecimen-derived.
  4. Patient-generated health data (e.g., from wearable or mobile devices).
  5. Patient-reported outcomes (e.g., PROMIS measures or similar).

## Deliverable:

- In order to ensure the financial sustainability of the project beyond the cooperative agreement funding, the recipient must submit a business plan that clearly sets out the recipient's strategy to achieve sustainability by the end of the period of performance and projecting 3 years beyond the end of the cooperative agreement.
- The business plan may include, but is not limited to:
  1. Pricing strategies
  2. Market research
  3. Public and private financing strategies
  4. Financial reporting
  5. Business planning
  6. Audits
  7. Controls

- Develop an initial work plan, delineating short-term projects that will be complete in 6 months and those that will be complete by the end of the period of performance.
- Establish a network of multi-stakeholder relationships.
- Establish plans to utilize expertise to help lead nationwide coordination efforts that will ensure long-term sustainability of the app discovery infrastructure.
- Implement the plan to translate market research into app discovery infrastructure product(s) and service(s) (e.g., online resource) in a timely manner.
- Establish guidelines and/or proposals for accelerating the translation and integration of FHIR-enabled apps into available discovery infrastructure product(s) and service(s) (e.g., online resource) within the health care marketplace.
- Schedule, conduct (as appropriate), and participate in expert panel meetings, ONC team meetings, and stakeholder meetings.
- Conduct and manage the projects to significant, demonstrable progress in 1 year.
- Communicate market research findings through appropriate mechanisms and make them available as they are generated.

Discovery Infrastructure for Clinical Health IT Apps

NAP-AX-16-003

# **FUNDING, ELIGIBILITY, AND APPLICATION INFORMATION**

# Summary of Key Details

<b>Type of Award</b>	Cooperative Agreement
<b>Available Funding</b>	\$275,000
<b>Number of Awards</b>	1
<b>Application Due Date</b>	April 30, 2016
<b>Anticipated Award Date</b>	May 25, 2016
<b>Performance Period</b>	1 year
<b>Anticipated Start Date</b>	June 8, 2016

- Applicants are encouraged to submit a nonbinding email notice of intent to apply.
- Submit by March 30, 2016, 11:59 p.m. ET.
- Identify:
  - Name of applicant organization.
  - Organization type.
  - City and State.
  - FOA No. NAP-AX-16-003.
  - Title: Discovery Infrastructure for Clinical Health IT Apps.
- Send to: [ONC.TechLab@hhs.gov](mailto:ONC.TechLab@hhs.gov).

- Eligibility:
  - Private nonprofit institute/organizations, public nonprofit institution/organizations, and private or for-profit organizations with proven knowledge of and familiarity with the FHIR® standard.
- Applicants must:
  - Submit all material electronically through [Grants.gov](http://Grants.gov); this process is outlined in the FOA.
  - For assistance with submitting applications on [Grants.gov](http://Grants.gov), please contact the [Grants.gov](http://Grants.gov) Helpdesk at [support@grants.gov](mailto:support@grants.gov) or call at (800) 518-4726.
  - Have a Dun & Bradstreet (D&B) Universal Numbering System (DUNS) number.
  - Register in the System for Award Management (SAM) at [www.sam.gov](http://www.sam.gov); allow a minimum of 5 days to complete the registration. If you are already registered in SAM and have not renewed your registration in the last 12 months, you must renew your registration.
  - Ensure the application meets application requirements and page limits.

Component	Limit
Project Abstract	< 500 words
Project Narrative	10 pages
Form SF-424, Application for Federal Assistance	No limit
Form SF-424 A, Budget Information for Non-Construction Programs	No limit
Form SF-424 B, Assurances for Non-Construction Programs	No limit
Budget Narrative	No limit
Form SF-LLL, Disclosure of Lobbying Activities	No limit
Letters of Commitment	No limit
Proof of Nonprofit Status (if applicable)	No limit
Indirect Cost Agreement(s)	No limit
Work Plan	No limit

The abstract represents a high-level summary of the project that can be understood without reference to other parts of the application and that provides a description of the proposed project, including the project's goal(s), objectives, overall approach, anticipated outcomes, products, and duration.

## Format:

- Not more than 500 words single-spaced.
- Project title.
- Applicant name.
- Physical address.
- Contact name.
- Contact phone numbers (voice, fax).
- Email address.
- Web site address, if applicable.

- The Project Narrative should address the elements articulated in the Program Description/Purpose and Structure and Approach sections of the FOA.
- Align with the Performance Goals/Program Milestones and Merit Review Evaluation criteria presented in the FOA.
- If an application does not follow the outlined format, it will not be considered for further review.
- Format:
  - Double-spaced and no more than 10 pages.
  - Formatted to 8 ½" x 11" (letter size) plain white pages.
  - Either Cambria or Times New Roman font.
  - 1" or larger margins and font size 11 or greater

- Complete the following budget forms to document costs of proposed project activities:
  - Budget Narrative on how the proposed budget aligns with the applicant's project narrative.
  - Application for Federal Assistance, Form SF-424.
  - Budget Information for Non-Construction Programs, Form SF-424A.
  - Assurances for Non-Construction Programs, Form SF-424B.
  - Disclosure of Lobbying Activities, Form SF-LLL.
- Detailed budget instructions are provided in the FOA.

- A high-level work plan should:
  - Detail the proposed subtasks that will be undertaken to complete each task and associated timelines.
  - Address the elements articulated in the Program Description/Purpose and Structure and Approach sections of the FOA.
- Format:
  - Formatted to 8 ½" x 11" (letter size) pages.
  - 1" or larger margins.
  - Font size 11 or greater.

Discovery Infrastructure for Clinical Health IT Apps

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# **APPLICATION RESPONSIVENESS AND OBJECTIVE REVIEW**

- Submit all application materials electronically through [Grants.gov](https://www.grants.gov).
- [Grants.gov](https://www.grants.gov) issues an email receipt upon successful submission.
- ONC issues receipt upon successfully obtaining files from [Grants.gov](https://www.grants.gov).
- Applications are reviewed for responsiveness and categorized as pass/fail.
- All applications that pass the review for responsiveness are forwarded for objective review.
- Once objective review is complete, ONC may make award.
- ONC is not obligated to make an award if none of the applications meet the intent of program requirements or if funding levels or availability changes.

Applicants **not** meeting the following completeness criteria will be administratively eliminated and not sent for merit review:

- The applicant meets the eligibility criteria.
- The application is received by the deadline required by April 30, 2016, 11:59 p.m. ET through <http://www.grants.gov>.
- The application contains all required components (e.g., Program Narrative, SF-424).
- The application meets all formatting and length requirements.
- Appendices and attachments are not used as a mechanism to exceed page limits of the Project Narrative.

- Responsive applications are forwarded for merit review.
- Merit review conducted by a review panel of at least three experts in their field from academic institutions, nonprofits, and local and Federal Government agencies.
- Applications can receive a maximum of 100 points, using the following scale:

Merit Review Criteria	Points
Technical Approach and Work Plan	30
Knowledge of Health IT	10
Organization Capability	20
Collaboration and Facilitation	20
Innovation, Development of Open Resource	10
Budget Narrative/Justification	10

- Addresses the identified challenges.
- Proposed methods promise to address the challenges with breakthrough findings on the proposed timeline, including a detailed plan for user testing.
- The balance and appropriateness of the characterization of projects as short term and longer term, and the balance between them.
- Plan to transition results of short-term projects to products and best practices is complete and feasible.
- Envisions the release of the outcomes of their research into open-source communities.

- Knowledge of and familiarity working with the FHIR<sup>®</sup> standard, including hands-on technical expertise.
- Identified a thoughtful and coherent set of challenges associated with market adoption of FHIR-enabled apps and building app discovery infrastructure, clearly identifying issues that are—or, if not addressed, will be—clear barriers to the use and sustainability of a market in which FHIR-enabled apps are the norm.

- Strength of evidence that the project brings the very highest level of talent for the chosen focus area and that the project will integrate the efforts of these experts.
  - Description of talent should include: full-stack development, project management, and proven user-centered design experience, including examples of previous work that demonstrates capability to create a dynamic, engaging user interface.
- Proposed activities bring all the resources necessary to perform the proposed work and the identification of proposed strategies to sustain efforts beyond the project timeframe.

# Merit Review: Collaboration and Facilitation



- Demonstrates ability to facilitate unhindered dialogue from provider and developer communities to gain the information necessary to build products that will most adequately address challenges.
- Ability to effectively translate market research findings into effective product design.

# Merit Review: Innovation, Development of Open Resource



- Open resource shows innovation and creativity, as well as demonstrated alignment with the goal of widespread implementation of standardized APIs to facilitate better user experiences for providers and patients and interoperability in health IT.

- Proposed levels of effort of the project director, key personnel, and consultants are adequate to advance the project in accordance with timelines.
- Budget is justified with respect to the adequacy and reasonableness of resources requested, and the amount of the budget allocated to administration is minimized while still allowing coherent management of an integrated project.
- Adequate justification to support costs included in the budget.

- Thank you for attending!
- We will remain online for 5 minutes – please submit any remaining questions via the Q&A function on this webinar page.
- Any questions not already addressed will be added to the FAQ.
- For the FAQs and additional information on this FOA, go to <https://www.healthit.gov/>.
- To see the FOA on [Grants.gov](http://www.grants.gov) or to apply, go to <http://www.grants.gov/web/grants/view-opportunity.html?oppld=281872>.
- For assistance with submitting applications in [Grants.gov](http://www.grants.gov), please contact the [Grants.gov](mailto:support@grants.gov) Helpdesk at [support@grants.gov](mailto:support@grants.gov) or call at (800) 518-4726.

- Please submit your questions.

# 5 Minutes Remaining

- Please submit your questions.

# 3 Minutes Remaining

- Please submit your questions.

# 1 Minute Remaining

- Please submit your questions.

# 30 Seconds Remaining

Thank You



Please email any additional questions to  
[ONC.TechLab@hhs.gov](mailto:ONC.TechLab@hhs.gov).

**The moderator will now  
end this session.**

**Thank you for attending.**