DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the National Coordinator for Health Information Technology

Announcement of Requirements and Registration for "Blockchain in HealthCare Code-A-Thon"

AGENCY: Office of the National Coordinator for Health Information Technology, HHS.

ACTION: Notice.

SUMMARY: The Office of the National Coordinator for Health Information Technology (ONC), in collaboration with the Chamber of Digital Commerce announces a health standards and data innovation Code-A-Thon. The competition will be held March 14-15, 2017. Code-A-Thon contestants will use open source distributed ledger technology and health-specific standards to address one of the following health IT Tracks:

- 1. Identity Management and Application Program Interfaces (API)
- 2. Metadata Tagging and Policy Expression
- 3. Data Aggregation and Linkage

Winners of the Code-A-Thon will be announced at the DC Blockchain Summit and select winners may be invited to present their submission at a subsequent ONC webinar. The statutory authority for this Challenge is Section 105 of the America COMPETES Reauthorization Act of 2010 (Public L. No 111-358).

DATES: (All times referenced in this notice are in Eastern Standard Time [EST])

- Registration period begins: January 23, 2017
- Registration period ends: March, 7, 2017 (11:59 pm)
- Code-A-Thon and Winner Announcement: March 14, 2017, 8:00 am to March 15, 2017
 12:30 pm.

LOCATION OF CODE-A-THON:

The Fisher Colloquium in the Rafik B. Hariri Building, Georgetown University Campus, located at 37TH & O ST., N.W., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Debbie Bucci, debbie.bucci@hhs.gov (preferred), 202-690-0213.

SUPPLEMENTARY INFORMATION:

Background of Challenge

In September 2016, the Office of the National Coordinator for Health IT (ONC) announced the "Use of Blockchain in Health IT and Health-related Research" Challenge. The Challenge solicited white papers that investigated the relationship between blockchain technology and its use in health IT and health-related research which was later used to inform the "Use of Blockchain in Healthcare and Health-related Research Workshop" in September 2016. The purpose of the workshop was to convene public and private stakeholders to receive briefings from federal and industry leaders utilizing blockchain and/or alternative distributed ledger technologies. Participants heard presentations from eight of the blockchain challenge winners who shared successes and new ideas generated around blockchain technology solutions in the health care. One of the next steps identified during the workshop was for ONC to support demonstrations and trial implementations to determine whether blockchain had a place in health IT and if so, ascertain its role.

Purpose of Challenge

Continue ONC's exploration into blockchain by hosting a Code-A-Thon challenging contestants to create projects that incorporate distributed ledger technology concepts to support specific health IT related needs.

Details of Challenge

Concepts should be innovative. This should be a forward-thinking project that enhances interoperability and focuses on demonstrating the potential to seamlessly incorporate blockchain solutions into existing health IT Systems.

Contestants will create projects that address at least one the following tracks:

- Identity Management and APIs: Demonstrate the use of blockchain to support the identity
 management requirements for APIs for both provider to provider and patient-mediated
 exchange.
- 2. Metadata Tagging and Policy Expression: Demonstrate the use of blockchain for security metadata and tagging to manage access, provide auditing and provenance information.
- 3. Data Aggregation and Linkage: Use of blockchain technology to securely aggregate, link, and share patient data to the destination of their choice.

Scope

The scope of this Code-A-Thon is limited to projects that address the three tracks mentioned in this notice.

<u>Data</u>

Contestants will access open data sources for test data and leverage openly available blockchain and health IT tools and resources.

Eligibility for Challenge

To be eligible to win a prize, teams:

- Shall have registered to participate in the Code-A-Thon under the rules promulgated by ONC.
- 2. Shall have complied with all the stated requirements of the Code-A-Thon.
- 3. All works presented to the judges must be created at the Code-A-Thon unless it is publicly available under a Creative Commons or other comparable open source license. This means that you can brainstorm app ideas and sketch wireframes ahead of time but all the actual code for your project must be written at the event.
- 4. In the case of a private entity, shall be incorporated in and maintain a primary place of business in the United States, and in the case of an individual, whether participating singly or in a group, shall be a citizen or permanent resident of the United States.
- 5. Shall not be an HHS employee or relative.
- 6. May not be a federal entity or federal employee acting within the scope of their employment. We recommend that all non-HHS federal employees consult with their agency Ethics Official to determine whether the federal ethics rules will limit or prohibit the acceptance of a COMPETES Act prize.
- 7. Federal grantees may not use federal funds to develop COMPETES Act challenge applications unless consistent with the purpose of their grant award.
- Federal contractors may not use federal funds from a contract to develop COMPETES Act challenge applications or to fund efforts in support of a COMPETES Act challenge submission.
- 9. All individuals and entities must meet the eligibility requirements.

- An individual or entity shall not be deemed ineligible because the individual or entity
 used federal facilities or consulted with federal employees during a Challenge if the
 facilities and employees are made available to all individuals and entities participating in
 the Challenge on an equitable basis.
- 2. Contestants must agree to assume any and all risks and waive claims against the Federal Government and its related entities, except in the case of willful misconduct, for any injury, death, damage, or loss of property, revenue, or profits, whether direct, indirect, or consequential, arising from participation in this prize contest, whether the injury, death, damage, or loss arises through negligence or otherwise. Contestants must also agree to indemnify the Federal Government against third party claims for damages arising from or related to Challenge activities.
- 3. Contestants must comply with the Code-A-Thon Code of Conduct.

Registration

The event is limited to the first 150 registrants with a maximum of 100 contestants; observers are welcomed. Registration for both contestants and observers for this event will be accomplished online at the following link: {INSERT LINK} and shall remain open until Tuesday, March 7, 2017, at 11:59 p.m. All registrants will receive a confirmation email upon completion.

Check in at the Registration table on Tuesday, March 14, 2017, will begin at 8:00 a.m.; team formations will begin at 9:00 am.

Contestants

Contestants will be asked to form teams that consist of 2-5 contestants; there will be a maximum of 20 teams eligible to participate. Although informal formation of teams is encouraged prior to the event, contestants will officially determine their team and sign-up the morning of the event.

Modification to team make-up may occur based on team skill make-up at the direction of the competition host to ensure all of those wanting to be a contestant have the opportunity to participate.

Demonstration Requirements

- 1. Contestants must make any source code created accessible to the public via GitHub;
- 2. The author(s) must allow modifications and derivations of the work under the solution's original name;
- 3. No person, group, or field of endeavor can be denied access to the solution;
- 4. The rights attached to a project's solution must not depend on the solution being part of a particular software distribution;
- 5. The project must be online, interactive and meet the goals and objectives provided in this document;
- 6. The project slides must include links to documentation of all data sources and open source tools used;

General Submission Requirements

In order for a submission to be eligible to win this Challenge, it must meet the following requirements:

- No HHS or ONC logo The product must not use HHS' or ONC's logos or official seals and must not claim endorsement.
- Functionality/Accuracy A product may be disqualified if it fails to function as
 expressed in the description provided by the Submitter, or if it provides inaccurate or
 incomplete information.

3. Security – Submissions must be free of malware. Submitter agrees that ONC may conduct testing on the product to determine whether malware or other security threats may be present. ONC may disqualify the submission if, in ONC's judgment, it may damage government or others' equipment or operating environment.

Amount of the Prizes

The award approving official for this Competition is the Project Lead for the Patient Matching Aggregation and Linking Project (Debbie Bucci). This effort is funded by the *Patient-Centered Outcomes Research Trust Fund* (PCORTF) through a partnership between ONC and the Office of the Assistant Secretary for Planning and Evaluation (ASPE).

Total purse – Up to \$15,000, with the following ceilings on the number of prizes of each amount:

- 1 First Prize \$5,000
- 2 Second Prize, \$2,000 each
- 3 Third Prize \$1,000 each
- 6 Honorable mentions \$500 each

Payment of the Prizes

Prizes will be paid by contractor.

Basis Upon Which Winners Will be Selected

There will be five Judges, each with expertise in Government-Wide Health Policy, Standards, and Information Technology. Judges will award a score to each submission. The winner(s) of the competition will be decided based on the highest average overall score. Judges will only participate in judging competitions for which they do not have <u>any</u> conflicts of interest.

A panel of judges will assess each solution based on the following criteria:

Technical Competence and Capabilities/Weight 35%

The demonstration addresses the primary goals of the Code-A-Thon and exhibits interoperability with existing technologies.

Use of Data To Provide Effective Outcomes/Weight 20%

The demonstration was presented in a way that is easy to understand, visually appealing, and will help drive understanding of current trends as well as recommendations.

Creativity/Innovation/Weight 20%

The project exceeds expectations through its incorporation of creative design elements and innovative capabilities.

Valuable Information and Insights Regarding Data/Weight 25%

Team identifies gaps in standards and utilizes blockchain to demonstrate how the technology may be used to enhance/improve existing privacy and security functions, and share data across the health ecosystem.

ADDITIONAL INFORMATION

<u>General Conditions</u>: ONC reserves the right to cancel, suspend, and/or modify the Challenge, or any part of it, for any reason, at ONC's sole discretion.

Access: Submitters must keep the submission and its component elements public, open, and available for anyone (i.e., not on a private or limited access setting) on GitHub.

Open Source License: Winning submissions must use the open source MIT License.

Representation, Warranties and Indemnification

By entering the Challenge, each applicant represents, warrants and covenants as follows:

- (a) Participant is the sole author, creator, and owner of the Submission;
- (b) The Submission is not the subject of any actual or threatened litigation or claim;
- (c) The Submission does not and will not violate or infringe upon the intellectual property rights, privacy rights, publicity rights, or other legal rights of any third party;
- (d) The Submission does not and will not contain any harmful computer code (sometimes referred to as "malware," "viruses," or "worms"); and
- (e) The Submission, and contestants' use of the Submission, does not and will not violate any applicable laws or regulations, including, without limitation, HIPAA, or applicable export control laws and regulations of the U.S. and other jurisdictions.

If the submission includes any third party works (such as third party content or open source code), participant must be able to provide, upon request, documentation of all appropriate licenses and releases for such third party works. If participant cannot provide documentation of all required licenses and releases, ONC reserves the right, at its sole discretion, to disqualify the applicable submission.

Contestants must indemnify, defend, and hold harmless the Federal Government from and against all third party claims, actions, or proceedings of any kind and from any and all damages, liabilities, costs, and expenses relating to or arising from participant's submission or any breach or alleged breach of any of the representations, warranties, and covenants of participant hereunder. Contestants are financially responsible for claims made by a third party.

ONC reserves the right to disqualify any submission that it deems, in its discretion, to violate these Official Rules, Terms & Conditions.

Authority: 15 U.S.C. 3719

Dated:

Paul Jonathan White, MD

Acting National Coordinator for Health Information Technology

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