Question 27: Will new awardees have access to the source code and systems currently managed by the incumbent?

Response 27: In the event of a transition of award partners or platforms, the current platform will be supported by the existing PTSC awardee during the period of transition. Collaboration in the transition will be required between existing and new award partners including all aspects necessary for continuity of operations of existing systems or services support by the current PTSC award for the All of Us Research Program.

Question 28: Does consortium F&A count against the direct cost limitation?

Response 28: For the purpose of this funding opportunity, consortium F&A does not count against the direct cost limitation.

Question 29: What items would be considered during the financial analysis of an organization?

Response 29: There is not a set measure used to determine the financial capability of an organization. Some examples of items that may be requested are as follows: submission of audited or unaudited financial statements, line of credit status, income/loss analysis, plans for the organization to raise capital, calculation of the organization’s current ratio, and whether there are any outstanding lawsuits against the organization.

Question 30: Can the Program please provide further information about the architecture and tools used within the current PTSC platform?

Response 30: The All of Us Research Program participant portal supported by the PTSC utilizes an n-tier architecture to provide the participant user experience to include registration, consent, surveys, health data capture, return of information and protocol-based notifications and communications back to the participant. Elements of the architecture include the user-facing applications, server-side application and business rules engine, back-end administration tools, database management solution, and data exchange capabilities, all of which utilize a variety of technologies.

The participant portal user-facing capabilities are provided via mobile applications running on Apple/iOS and Android mobile phones, and via browser-based responsive web experience. The participant portal server-side application and business rules engine, back-end administration tools, and database management solution provide the ability to generate forms, capture data, and enable IRB-protocol based experiences using the embedded business rules framework. Through these backend services, participants receive notifications and communications based on the activities they have completed and new activities available to them. Participant data is shared among internal system components and transmitted to external partners using a messaging infrastructure and standards-based protocols (e.g., FHIR).

The participant portal architecture includes user-facing and server-side applications all of which utilize a variety of technologies. Client-side technologies include - (AngularJs, React, iOS, Android, etc.), webpack for module packaging and bundling, Npm for dependency management, esLint, sonarQube for code quality check, chai, phantomjs, karma, jasmine, mocha for testing, bootstrap, SaSS, PTSC SASS for CSS, d3, c3 for dynamic graph generation, etc. among many other tools. Server side technologies include - Tomcat for J2EE container, Spring framework, Hibernate for Object Relational Mapping, Redis for Caching, Kafka for messaging, SLF4j for logging, RDS with Aurora for database, S3 for static data storage, Rest over https for client/server, Swaggar Tech stack on devops - Jenkin, Nexus, Ansible, Helm Charts, Pingdom, tech stack for logging and auditing, among other tools.
The participant portal integrates with 3rd party partners primarily through industry standard OAuth for authorization and FHIR-based messaging protocols. The participant portal stores all health-related data in a secure health data repository and utilizes a standardize set of data exchange workflows to enable the storage and retrieval of data. Integration with the external data provides are enabled using microservices which subsequently integration with the standardize data exchange workflows and the secure health data repository. PTSC is utilizing many open source libraries in support of its platform engineering, product delivery, and DevOps processes that are well known and used widely.

Question 31: Can the NIH please provide the following information for the PTSC system and Program; average number of daily users, current data types, total data storage for the current PTSC system and daily volume of input/output.
Response 31: Average number of daily users for the portal is variable but ranges from 1,000-1,500 users per day on typical business days and roughly half of those are new user. Communication campaigns can increase daily users dramatically for peak usage days. Current data types include user credentials, consent form responses, user signature image files, consent form PDF files, user profile data, user communication preferences data, survey form responses, wearable device data, audit logs, and user metadata. Current data storage is approximately 9TB including all application and user logs. Data input/output is modest in comparison to the total storage and reflective of the user population and portal functions.

Question 32: Are program director/principal investigator, project manager, and key investigators all considered key?
Response 32: Designation of Key Staff/Investigators is at the discretion of the applicant. Additional staff can be named in the application and included in the budget but not designated as Key Staff, including those that will make significant time, scientific or technical contributions to the project’s success.

Question 33: How many key investigators are currently on the project?
Response 33: Structure of the current awardees budget and award management approach are not public information. Designation of Key Staff/Investigators is at the discretion of the applicant.

Question 34: Does the government require any particular certification for the key individual with primary responsibility for information systems security oversight?
Response 34: Applicants should use their discretion regarding selection of individuals with the experience to support security implementation steps leading toward operational readiness and Authority to Operate (ATO), and ongoing systems oversight for a FISMA Moderate cloud enterprise.

Question 35: What kind of transition period will be allowed between the incumbent and the incoming contractor?
Response 35: Please review the Funding Opportunity Purpose section of the funding announcement for details. Any alternative systems would need to be implemented in collaboration with All of Us consortium award partners, with full security controls, within 6 to 12 months of the award.

Question 36: If there is more than one awardee, how will the awardees work together?
Response 36: In the event of multiple awardees, all awards issued under this funding opportunity will collectively represent the All of Us Participant Technology Systems Center (PTSC). At the time of award, terms and requirements associated with collaboration between PTSC awardees will be addressed within the notice of award. It is expected that operational management between NIH and award partner(s) will be established based on a combination of award terms and award milestones.