

## QPP Human Centered Design Statement of Objectives

### Objectives:

Human-Centered Design (HCD) is the process CMS uses to understand the people for whom we are writing policies, and creating programs and services. At the center of our HCD process is participatory design, where we work directly with clinicians, beneficiaries, third-party vendors, federal partners, and CMS employees to collaboratively understand the context of their work and engagement with CMS, as well as the solutions we are creating to support them. Thus, the Contractor must employ HCD to understand what people need from a policy, product or service before beginning design work. CMS recognizes six HCD phases: initiate, immerse, synthesize, ideate, prototype, and implement, which are defined as follows:

1. **Initiate:** the first phase, in which existing data is collected, scope is defined, Points of Contact and Subject Matter Experts are identified, and a project brief is created.
2. **Immerse:** the second phase, in which the team develops a research plan, and immerses themselves in the end user's experience and journey. Immersion activities may include interviews, contextual inquiry, focus groups, and direct observation.
3. **Synthesize:** the third phase, in which analysis and interpretation of data occurs. Customer journey maps, as well as personas, are sometimes created during this phase. Themes and insights are identified, as well as customer pain points.
4. **Ideate:** the fourth phase, in which a broad set of ideas is generated. Co-creation sessions with stakeholders and users are encouraged during this phase. In ideation, quantity is preferred over quality, and team members are encouraged to build on the ideas of one another, with no attempt to judge or evaluate them.
5. **Prototype:** the fifth phase, in which a low-fidelity initial design is created to capture initial concepts and to gather user feedback. A prototype may be physical, digital, an environment, or a service (often represented via storyboard). Prototyping is an iterative process, with each set of feedback refining the proposed solution.
6. **Implement:** the last phase, in which a product or service is put into effect, or executed. Implementation might consist initially of a pilot project for which metrics are captured and feedback is collected, before a full-scale implementation is performed.

The Centers for Medicare and Medicaid Services (CMS) seeks a contractor to support all existing and future QPP system development and policy development with user research and human center design. The GSA task order aims to solve current challenges faced by the Quality Payment Program (QPP), to identify and implement a consistent user experience for the clinician market, based on comprehensive user insights through market research with clinicians as well as to create a unified product strategy, visual identity, and smooth user experience across QPP products based on industry best practices.

QPP recently moved to adopt the Scaled Agile Framework (SAFe) model to plan, work and deliver products. This transition has created an opportunity to think holistically about the user experience for clinicians and ways in which our QPP teams can identify a product strategy, establish measurable objectives, and execute a plan aligned with the overall QPP vision through program increment planning.

The main objective of this contract is to replace the existing user research teams embedded within each of the existing QPP work streams. Work closely with policy team to ensure HCD in policy writing. This would occur over time, as contracts come up for renewal. Initially, this contract would

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assume the task of assimilating to each embedded team and work to unify the design process across all teams.

### **Background:**

CMS has partnered with several vendors on multiple, parallel work streams including the Front-End, Submissions, Web Interface, Performance Scoring & Feedback, and Analytics & Reporting teams. The contracts have been organized to place responsibility on each team for the entire product lifecycle: research design, development and usability testing. The efforts have included user facing work, most specifically the QPP portal. Enhancements to the portal include submission API gateway, data warehouse structure, final score calculator (which takes in scores calculated for the Quality, Cost, Promoting Interoperability (PI), and Improvement Activity (IA) categories and rolls them up into the final QPP score), and a results feedback API and clinician feedback reports. As a result, the QPP series of products has been accomplished quickly but the overall user experience has been somewhat disjointed, creating unnecessary user burden. Additionally, insights from market research on the users gleaned from one team may not be utilized by all teams, therefore, resulting in duplicated efforts and/or fractured design direction.

### **Guided by the United States Digital Service (USDS) Playbook, Play 1 states:**

We must begin digital projects by conducting research and pinpointing the needs of the people who will use the service, and the ways the service will fit into their lives. Whether the users are members of the public or government employees, policy makers must include real people in their design process from the beginning. The needs of people — not constraints of government structures or silos — should inform technical and design decisions. We need to continually test the products we build with real people to keep us honest about what is important.

### **To achieve Play 1, QPP will complete the following checklist:**

1. Early in the project, spend time with the market of current and prospective users of the service
2. Use a range of qualitative and quantitative research methods to determine people's goals, needs, and behaviors; be thoughtful about the time spent
3. Test prototypes of solutions with real people, in the field if possible
4. Document the findings about user goals, needs, behaviors, and preferences
5. Share findings with the team and agency leadership
6. Create a prioritized list of tasks the user is trying to accomplish, also known as "user stories"
7. As the digital service is being built, regularly test it with potential users to ensure it meets people's needs

### **Functional Goals:**

A point of emphasis for this GSA task order is build out the existing user research and design effort to establish the overall design and functionality of the user interface for QPP feedback. These efforts include:

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- Stand up a unified team to implement consistent branding initiatives and design across all QPP products
- Build a user research and design process that will, over-time, subsume the design and user experience work from multiple QPP contracts with the goal of gaining efficiency and reducing redundancy
- Uncover opportunities for consistency and consolidation through user research and analysis
- Create a backlog for alignment with the SAFe PI cadence
- Supplement design teams to iterate on the design of all QPP products and work with QPP development teams to implement the design consistently across the existing Web Interface, Measure Scoring & User Feedback, Analytics & Reporting and QPP Frontend work streams.
- Supplement policy teams to iterate on the design of QPP policy
- Develop an ongoing, cyclical process for conducting market research on users and translating it into QPP product upgrades, new content and new functionality
- Develop the brand initiative and product design
- Perform qualitative and quantitative market research on users in support of the Quality Payment Program
- Establish a governance framework that details the appropriate strategy on the process, roles/responsibilities in regards to how embedded design teams will interact with development teams to produce work on a predictable and sustainable cadence

### **To accomplish these goals, CMS will adopt a two phase approach:**

1. Phase One: Consolidation Discovery and Backlog Build Out
2. Phase Two: Consolidation Execution & Continuous Improvement

### **Phase One: Consolidation Discovery & Backlog Build Out (Up to 6 Months)**

- Understand the current challenges faced on QPP through specific research on the user market
- Perform individual Stakeholder interviews to understanding of the current gaps observed and felt by all teams
- Review and analyze existing work done on defining the QPP brand and product strategy
- Conduct preliminary user market research to understanding user needs
- Create a consolidated product backlog for a consistent QPP user experience that aligns the work to the SAFe Program Increment (PI) timeline
- Create user journey maps that showcase each user segment's full journey through the QPP product suite
- Create a Roadmap of the vision and strategy with mid-term and longer term HCD goals that are in alignment with the SAFe PI cadence
- Create an Epic backlog and PI plan that breakdown product backlog by program increment.
- Understand QPP policy

### **Phase Two: Consolidation Execution & Continuous Improvement**

- Create wireframes that show improved functionality of the full user experience and user flow for the QPP product suite
- Collaborate with existing teams to compile existing, reusable HTML, JavaScript, and CSS code snippets and post them to a shared repository where they can be picked up and used by all development teams

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- Collaborate with existing teams to create a customized measurement plan for each QPP product
- Continuously update and add to the functional style guide code base as features are designed, tested, and rolled out to the users for reuse across development teams
- Collaborate closely with existing team to conduct visual quality assurance of all developed features and consolidation efforts to ensure developed work matches design standards
- Understand QPP policy

### **Additional Capacity**

- The Center for Clinical Standards & Quality (CCSQ) is responsible for overseeing the ongoing development and delivery of software applications that directly support CMS's quality programs and Lines of Business. CCSQ may determine additional capacity is required to help normalize Human Center design across multiple programs. These resources will work with UX, HCD and policy personnel from development contractors to create and implement standards for all CCSQ applications. These resources can also be asked work with policy experts in other programs to help them create regulations using Human Center Designed.

### **Determining a Vendor**

A key factor to determine a vendor for this GSA task order will be relevant experience with Human Centered Design derived from user market research. Prior experience can be from the private or federal sector, however, the ideal candidate will have previously worked in the healthcare community. CMS expects vendors to describe how resources will be split across teams or over time and should be noted in their roadmap and staffing plan. Vendor plans should separate technical and subject matter expertise, as well as dependencies, across this set of often tightly related tasks.

The following bullets describe the high level goals of this GSA task order. Additional functionality may be added as sprint capacity allows. CMS priorities may modify or replace the functional goals/tasks noted below.

- Consistent and continuous usability testing with the user community (e.g., clinicians, CMS users) for all software releases
- User market research with the clinician community should drive decisions about how to provide feedback to users to improve their quality of care and their measure scores
- While the QPP year 2 UI services will be mature at the time of the transition to the new vendor, we anticipate that there will be an existing feature backlog that the new vendor will inherit. Those backlog items will need to be prioritized and worked into the additional new work discussed in this statement of objectives.
- Work with incumbents to transition all previous completed user interviews, UX design and UX feedback
- Continue to respond to UX feedback to refine the UIs
- Assume responsibility to the existing backlog developed by incumbent contractors
- The final rule for year four of the QPP will be posted in November 2019 and will certainly bring changes to scoring and new feature requests for the UI. There are always new

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measures and alterations to existing measures to account for.

- Adapt the design to account for new and changed measures, changes to measure scoring parameters, new provider exemptions/exceptions, or any other year 4 program policy requirements that necessitate system modifications or new development.
- Usability testing of the multiyear UI will be in full swing and continue to provide for areas of improvement. Contribute to the usability testing and prioritize the backlog with system features/enhancements that fall out of that research

### **Goals for Feedback Reporting**

- A strong plan for extensive user market research is vital to designing a feedback process that benefits the various QPP user personas. How do we differentiate the feedback for a solo clinician from a small group from a large group from an ACO?
  - At a minimum the feedback will incorporate details regarding submitted measures and activities and reflect how those measures with benchmark data fared in comparison to the QPP community at large.
  - The feedback needs to remove the shroud of mystery surrounding what clinicians view as very complex, very algebraic measures and scoring. We can't change the manner in which legislation, special interest groups and policy decisions have set up the current QPP environment, but we can do our best to implement the appropriate strategies that inject plain language and intuitive explanations of clinician outcomes. Understanding what data elements outside of the top-line scores will be important to present to users.
  - The Cost performance category feedback presents the greatest challenge for providing feedback, since the measures are highly complex, the data is extracted from claim submissions and is not consciously submitted by clinicians. There is complex patient attribution rules, and cost normalization processes which are completely foreign to the average clinician. Feedback for this category will need to be as much a guided tour as it is a presentation of measure results. There has also been a lot of user requests to incorporate patient level data to these measures in order to make the data more actionable; CMS is supportive of this request, and would like to understand how to best present this data to clinicians.
  - There is some formative market research on user feedback that has been conducted, establishing some baseline understanding of the type of data and mechanisms for communicating it that will be useful to the clinical community. The awardee of this GSA task order would be expected to review and consume this research and design, using it as a starting point to inform their future work. However, the awardee is not required to exactly follow the designs established by the formative user research – those designs should inform, not bind.
    - The content and form of the user feedback is largely driven by the user research performed by this team.
    - The vision is an interactive user interface that allows users to assess their

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performance, understand its relevance across the clinician community, and learn how to take strides to improve performance over time.

**Prototype Exercise:**

There will not be a prototype exercise for this task order.

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