Cover page

Project: Discovery to MVP - Improved Research Data Request Form **Submitted by**: Jonathan Prugh, Design Manager, UCSF SOM Tech, <u>jonathan.prugh@ucsf.edu</u> **Location**: UC San Francisco

Award Categories: Operational Excellence and Design

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Background

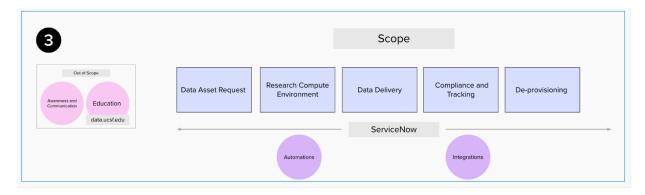
Late in 2020, based on user feedback and administrative inefficiencies, UCSF's Clinical and Translational Science Institute's (CTSI) Informatics and Research Innovation (IRI) program and UCSF's Academic Research Systems (ARS) identified a need to improve an established ServiceNow form used to request de-identified clinical data. At the same time, the Population Health Data Initiative began exploring a standardized form to support access to data sets like Medicare. In planning conversations for the 2021 annual research data colloquium, we seized the opportunity for a broad design-led discovery effort to improve access and supported the organization of a larger group of stakeholders to explore options to improve the research data request process and overall UCSF researcher experience.

Discovery

Discovery participants were a wide number of stakeholders representing various research programs and support groups. Through a series of design activities including brainstorming, card sorting, synthesis, and participatory design, the group sought to answer the question: "How might we improve the researcher user experience?"

Scope and effort

Before beginning, the group and leaders agreed on scope and expected effort and coalesced around a business process document that compared requesting and provisioning various data sets. The document highlighted the immediate opportunity to create a greatly improved ServiceNow form.



Go broad on pain points

SOM Tech facilitated three participatory design workshops with stakeholders focused on researcher experience, business process, and security and compliance. Using a digital whiteboard and sticky notes, the team brainstormed, organized, and themed pain points and opportunities around the technical systems, policies, backend process, researcher expectations, and staffing.

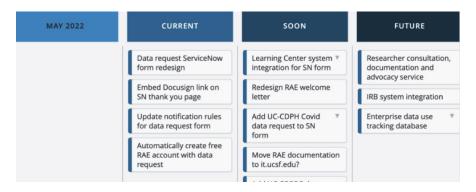
Prototype solutions into an "ideal" flow and identify feasible opportunities

Pulling from our service design toolkit, we identified and combined potential solutions into an idealized experience using a service blueprint that captures both user needs and the support necessary to meet them. We worked with stakeholders to identify and prioritize features/enhancements for a minimal viable product (MVP). In this case, feasibility drove most of the prioritization although value, risk, and user delight also contributed to our rankings.

| Purple | Box Service Bl | ueprint | | | | | | | |
|--|--------------------|---|--|--|---|--|-------------------|--|---------------------------|
| Current state Current state In scope for MVP Future state | RESEARCHER JOURNEY | Meets with researcher consulting group to address needs of project | Fills out and submits SN form requesting UCSF ID-Data | Request form thank you page displays with next steps (training required, attestation, approval, RAE) | Receives re-designed RAE welcome letter and logs into account | Schedules consult with CTSI | Signs Attestation | RESEARCH Completes required training | Gets director approval |
| i dure aute | | | | | | TOUCHPOINTS | | | |
| | TOUCHPOINTS | In person | ServiceNow form | Email | Email | Email | Docusign | UC Learning center | |
| | Line of interacti | on | | | | | | EDONTET | AGE ACTIONS |
| Actions that occur directly i of the researcher | PROVIDENCE ACTIONS | | Request form thank you page displays with next steps (training required, attestation, approval, RAE) | | | | | | |
| Things that occur behind th scenes to support frontstag happenings | EACKSTAGE ACTIONS | | Free RAE acount provisioned automatically | | | CTSI confirms IRB approvals and adds to SN log | | BACKSTA | GE ACTIONS |
| | | | Email notification to approver | | | Project entered into CTSI tracking system | | | |
| | | | Added to enterprise tracking database | IRB - ServiceNow integration | | | | | |

Size and prioritize features for an initial release

Working closely with our technical and operational contacts we created a roadmap of features for implementation and used those to estimate and secure funding.



Build

Our design work and vision guided an Agile build process to drive collaboration across the ServiceNow, IRI, SOM Tech, and ARS teams and launch the initial MVP of a new research data request process including:

- Updated ServiceNow form
- Improved triggers and automation for notifications
- Security tracking
- API integration with UCSF's Research Analysis Environment (RAE), a secure data hosting and compute service

The team included project management, a ServiceNow developer, a quality assurance engineer, a designer, and a product owner plus additional development efforts from the ARS team.

Results and Metrics

- Improved number of form submissions by 24%
- Improved provisioning time (to come from ARS)
- Increased requests for access to Information Commons (19 to 35)