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# CenteringCounts Online Phase II

Request for Proposals

**Letter of Intent due: December 17, 2018**

**Proposal due: January 28, 2019**

**Demonstrations and Q&A available upon request**

**Email to [info@centeringcounts.org](mailto:info@centeringcounts.org)**

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## Overview

### Centering Healthcare Institute (CHI) Overview

Centering Healthcare Institute is a 501c3 organization that has worked closely with healthcare providers from all sectors to change healthcare. With over two decades of experience as the go-to resource, we've developed and sustained the Centering group healthcare model in 560 practice sites and within some of the largest health systems in the world. Through this work, Centering group care reaches almost 60k patients per year.

We partner with a number of practices across the U.S. who have applied the proven Centering methodology for their patient populations, including groups for asthma, diabetes, chronic pain, cancer survivors, obesity, HIV, autoimmune conditions, adolescents, transgender care, sleep, lifestyle, opioid recovery, cardiac care and other health conditions. Patients come together to meet with their healthcare provider and develop a community that shares information and supports each other in living a healthier lifestyle. They talk about the challenges and triumphs that come with managing a serious chronic illness.

### CenteringCounts Overview

CenteringCounts is a HIPAA compliant group management and quality assurance tool for streamlining Centering data tracking and reporting. CenteringCounts online was launched in early 2018 to track our flagship care models CenteringPregnancy and CenteringParenting after nearly three years of development with the following core features:

- Group management and outcomes tracking support for two models/patient populations (CenteringParenting and CenteringPregnancy)
  - Group management
    - Schedule group
    - Assign providers and facilitators to groups
  - Add patients to groups
    - Capture demographic and health information about patients at time of enrollment
    - Record attendance
    - Track outcomes
      - One-time outcomes for CenteringPregnancy
      - Ongoing outcomes per session for CenteringParenting
- Practice information management
  - Update address/phone number
  - Add/update staff records and user access
  - Update steering committee
- Annual Reporting
  - Sites administer surveys to their staff electronically to capture model fidelity and staff support for Centering



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- Sites are given an opportunity to review the survey data before they submit their results to CHI along with comments to provide context to areas of need or where they may ask for our support.
- Reporting
  - Original development included creating predefined reports containing all outcomes and demographic data for a given model/population on a single report for each model/population.

*The CenteringCounts [help site](#) can be used as a reference to understand the current functionality of the application from the user perspective.*

### Current Technology Stack

#### Presentation layer:

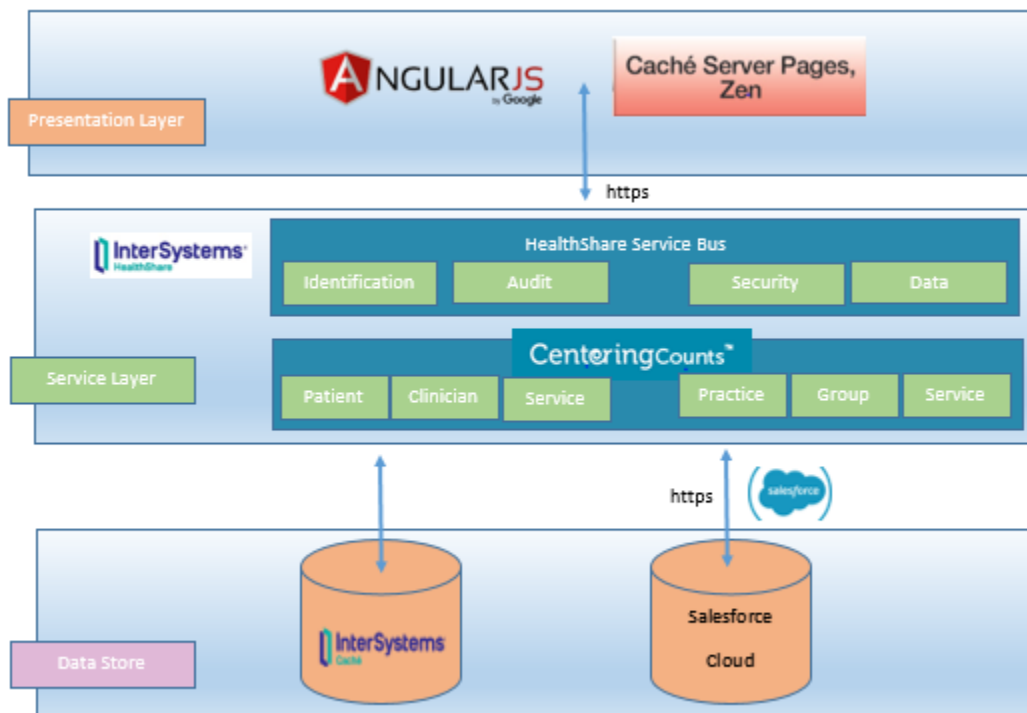
Combination of AngularJS, HTML, CSS3, and Javascript which make up the individual pages built on the Cache Server Pages (CSP) and Zen architectures all served over HTTPS

#### Service Layer:

InterSystems HealthShare

#### Data Layer:

InterSystems Cache database with limited bi-directional integration with Salesforce.





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## Project Goals

CHI is looking to expand the functionality of the current CenteringCounts application as follows:

- Update and improve the current system based on feedback from current users for CenteringPregnancy and CenteringParenting
- Expand group and outcomes tracking for additional patient populations
- Provide a way for sites to track patients across multiple patient populations and/or recurrence of care in a single population
- Enhanced calendar functionality for group management
- Provide sites access to flexible and customizable reporting
- Develop patient-entered evaluation function
- Improve control of user permissions for sites

## Business Requirements

The scope of this project will be determined based on meetings between the project team and the chosen development partner.

## Project Budget

While we anticipate that RFP submissions will drive the budget, we anticipate the overall project budget will be \$150,000.

## Change Requirements

### Group Management

*Currently, CenteringCounts allows sites to create groups and capture data for the CenteringPregnancy and CenteringParenting models. The patient information and outcomes data captured are defined by CHI and are not customizable by the site or by CHI without code modifications.*

### Support for additional patient populations

We want to build in support for additional patient populations as well as the ability for CHI to define new model/population schemas from an administrative interface without the need for any additional code or involvement of developers.

CHI would need to define the following for each field:

- Global or specific model/population
- Patient info or outcome measure
- Field Name
- Data Type
- Max # of Chars
- Validation rules with errors
- Help context
- Goal and Baseline for each outcome field



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*Something to consider: Would it be possible to manage the metadata for each model/field if instead of creating an interface to manage this, Salesforce is used? If a custom object or custom metadata exists solely to contain all metadata for the models/patient populations and field types as well as the field attributes and validation rules, could it then be possible to use the Salesforce API to query that object and make necessary updates to the CenteringCounts UI and database fields.*

### Customizable group templates

We want to provide sites with the option to customize the patient information and outcomes they capture for each patient population as part of the site's practice configuration. CHI needs the ability to mark certain patient information or outcome data points as required for all patient populations. Group templates should also include setting a maximum number of patients as well as the frequency and number of group sessions. Sites should be able to create multiple templates for a single model/patient population and provide a name for each template.

When a site is creating a new group, they will be given the option to choose from one of their own configured templates or create the group from scratch. Choosing a template should populate the [group creation](#) screen based on the template they chose while still allowing for changes to be made prior to creation.

### Group Scheduling

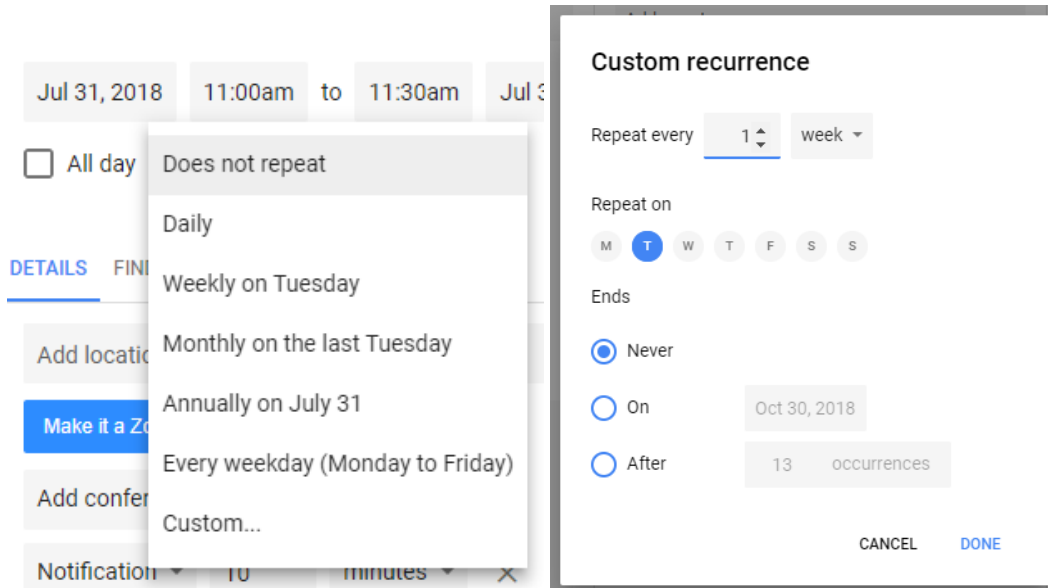
*Currently, sites are not able to view their scheduled groups in any calendar form or easily determine if there are already group sessions scheduled on a given date*

As part of both the group templates and group creation screens, we would like to provide some more options for easily scheduling group sessions. For example, if the site wants to schedule the group to meet every 2 weeks, or every 3<sup>rd</sup> week, or the first Monday of the month, they should be able to easily choose that option. We were inspired for this by calendar tools such as Google Calendar. Max number of sessions per group cohort will be defined by CHI from the admin interface.



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When the site chooses their schedule, the bottom of the group [create screen](#) should display all of the group sessions based on their chosen schedule and be editable as necessary. There should also be an easy way to determine if there are other groups scheduled for the same time slot when looking at the generated group schedule. This may require changing the display format of the dates or some alerting/highlighting of dates.

New scheduling fields to capture at group creation:

- **Session time** – We need to add a field to capture the time for group sessions.
- **Room** – We need to add a field to capture the room a group session is being held.
  - Rooms will be defined by the site in their practice settings and should be available for use within group templates.
    - If there is only 1 room configured for a site, the group creation screen should default to that room. If none are configured, the site will not be required to choose a room.

Additionally, we want to provide sites with a calendar view of their groups. Currently, groups are only visible in a tabular format. This new page/screen should function like a typical calendar tool would, with the ability to look at day, week, month and be filterable by group data. The attributes to display on the calendar would be group time, group name, and provider. If possible, we would like color code each entry on the calendar view by provider and provide a key above the printed calendar so only the time and group name are displayed within the calendar boxes. The calendar page should be print-ready.

### Patient Tracking

*Currently there is no way for a site to track a single patient between two models/populations or to track a patient returning in the same model/population.*

We need to provide an interface for sites to be able to reference their CenteringCounts patient database. There should be a screen from which the sites can access their patient registry. From this



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screen they will be able to view a summary of data for each patient and when clicking a patient, view the groups they have been part of. When adding patients to a group, there needs to be a way to reference patients already in the registry either by using name matching or the external identifier field.

*This will be important for CHI going forward to have the ability to aggregate data and identify trends for patients who have returned to Centering groups or have continued from one model to another.*

## Customizable Reporting

*Currently, the reports available to sites in CenteringCounts are static configurations created during development and require developer intervention to maintain. Because of this, reports are very large as they contain every patient demographic and every outcome measure in a crosstab/matrix report.*

We want to empower our sites to build the reports that suit their needs. We would like to see a business intelligence/reporting solution implemented so that a site can easily create their own reports or customize predefined reports made by CHI. An example flow for a user creating a report would be as follows:

1. User clicks "Create Report"
2. User chooses model/patient population
3. Report builder displays all patient data and outcome data points available for chosen population/model
4. User can drag-and-drop fields onto their report
5. User can implement simple filters into the report
  - a. Date Filters
  - b. Demographic filters
  - c. Outcome filters
  - d. Etc.
6. User can save the report to be used later by themselves or anyone at their site

*\* All reports should be exportable to excel*

The current annual reporting process for CenteringPregnancy and CenteringParenting will be updated and improved as part of this scope of work, based on feedback from current users.

## User Permissions

We want to add an additional layer of permissions settings to the user model. Right now, sites can provide users with one of 3 permission levels (Full, Manage Groups, Read only). In addition to these, sites should be able to set a user's permission based on patient population/model. This will be effective in helping sites make sure that the individual responsible for one patient population does not accidentally edit data for another. The model/patient population permissions should be set individually and will impact functionality across all pages/screens.

## User Experience

We want to update the notification system by providing a history of notifications a user receives and set the notification history to display at the account level, not just the user level.



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Some users have the ability to access data for multiple sites. Currently the user would have to log out and log back in then choose another site in order to access another site. We would like to add an option to switch the site they're accessing via the navigation pane. Perhaps a dropdown at the logout button for users with multi-site access could provide a quick access list of sites to switch to.

### Patient surveys

We will include an option to send patient satisfaction surveys to patients. We need to capture email addresses for each patient *or* generate a unique URL/code for each site (or group within a site) that patients could use to access the survey. All responses would be viewable to the user and have an aggregating function for annual reporting (similar to the staff survey).

### Administration Interface

We would like an interface which would allow us to easily manage the system metadata including, but not limited to:

- Creation and editing of outcome fields
  - Field types, validation rules, help text, etc
- Creation and editing of other fields which may sync data to or from Salesforce based on field mapping
- Management of fields in the UI if possible