

# Questionnaires for [pro]gress™

Jan. 2017 - Dec. 2017

## scenario

Healthcare providers across Canada regularly ask staff to answer anonymous questionnaires related to work-life satisfaction as well as patient safety compliance. Many questionnaires are based on academically produced templates, but healthcare providers often want to customize their questionnaires for the following reasons:

1. Templates are one-size-fits-all, but some questions may not apply to an individual provider.
2. Providers often need to add their own customized questions to a template.
3. Providers like to add their own demographic questions so they can perform more relevant data cuts and analyses.

Providers also like to compare their results against their peers. In Canadian healthcare, there is no overarching or standardized system allowing peers to compare themselves on work-life balance or patient safety questionnaires.

## project details

My role: Design Lead

Deliverable: Web application

Devices: Desktop, tablet, mobile

## design activities

Problem Definition

Concept Design

Task Analysis

User Interviews

Storyboarding

Interaction Design

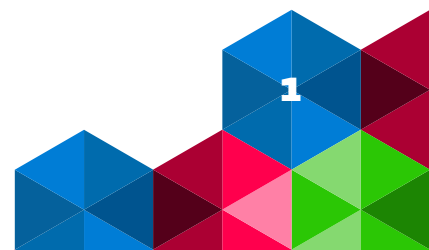
UI Design

Prototyping

Visual Design

Usability Testing

Usability Reviews



### action

We set out to create *Questionnaires for [pro]gress*, a unique, anonymous questionnaire deployment and analysis tool. It allows healthcare providers to quickly and easily set up a standardized questionnaire to be answered anonymously by any number of respondents. It then analyzes the responses, and provides the results in an easy-to-use dashboard.

Questionnaires are initially set up using pre-canned templates, but questions can be added or removed to create a tailor-made questionnaire for each healthcare provider. Standardized demographic questions allow providers to compare their results with those of their peers in an analysis feature. Providers can also create their own demographic questions, which allows them to perform relevant data analyses.

Working with client and user representatives from Doctors of BC (the British Columbia Medical Association) and IWK Health Centre in Nova Scotia, our product design team performed the following activities:

- User and customer interviews to understand context and current problems.
- Compiled user stories based on our customer and user research
- Feature road-mapping
- Task analysis and user flows
- Paper and electronic prototype development
- Prototype reviews and usability tests with users in Ottawa, and British Columbia
- Defined interaction and visual design specifications for developers in Ottawa and India.
- Usability reviews

### one challenge we ran into...

We had a very compressed schedule. We also were collaborating heavily with users in BC who had busy schedules which made it difficult to book meetings, design consultations, and user testing.

To combat this, we had to meticulously plan the various stages of design and development, and stick to our timeframes.

We also had to decide where we wanted to compromise to meet our deadlines: scope of design work, scope of features to include, number of testing/consultations with users, and/or number of iterations for design refinements.

Ultimately, we decided as a team that we would cut scope on a little bit of all the above factors while maintaining the maximum amount of time allocated for usability testing and customer consultations possible. In our opinion, compromising here simply would have posed the greatest risk to the success of the project.

Our customers appreciated this transparency, but the frequent touch points also allowed us to maximize the user experience as much as we could in the time allotted.

## case studies

Questionnaires for [pro]gress™

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experience design



Our product team gathers to compile our user stories into requirements.

## result

The questionnaire response engine was completed in April of 2017. The engine was then deployed to customers in Nova Scotia and British Columbia and immediately deployed to several thousand users in British Columbia and Nova Scotia. Hundreds answered our feedback surveys, and data showed high levels of satisfaction with the efficiency and efficacy of our tools, as well as the visual look of the engine in both desktop and mobile formats.

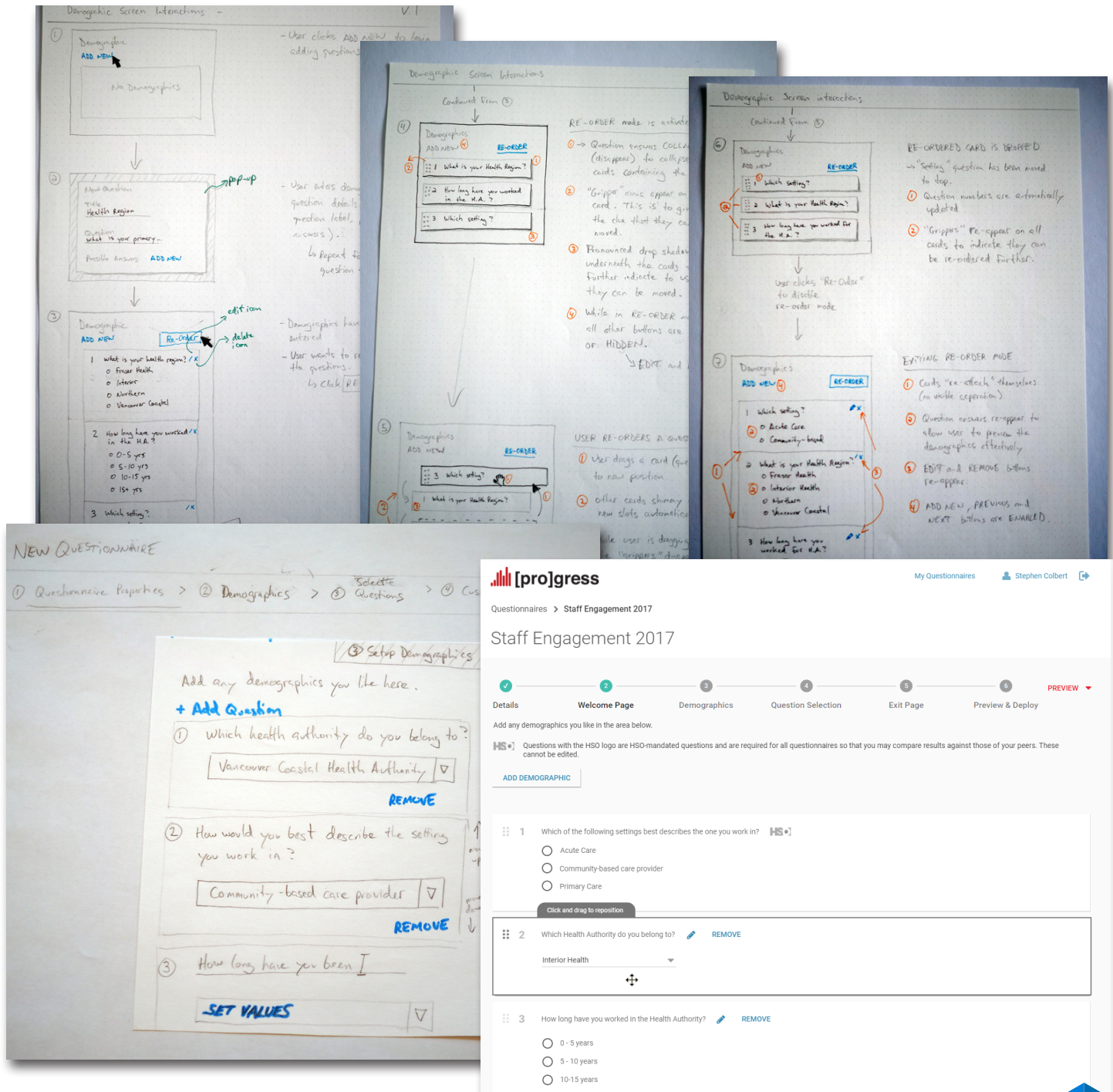
We then completed the design specifications for data analysis features at the end of 2017. The feedback gathered from users was also very positive.

In addition, advisory groups were also delighted to be engaged throughout all stages of the design process, from storyboarding to prototyping to beta testing - with regular usability reviews and tests.



## artifacts

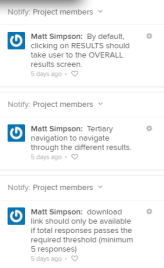
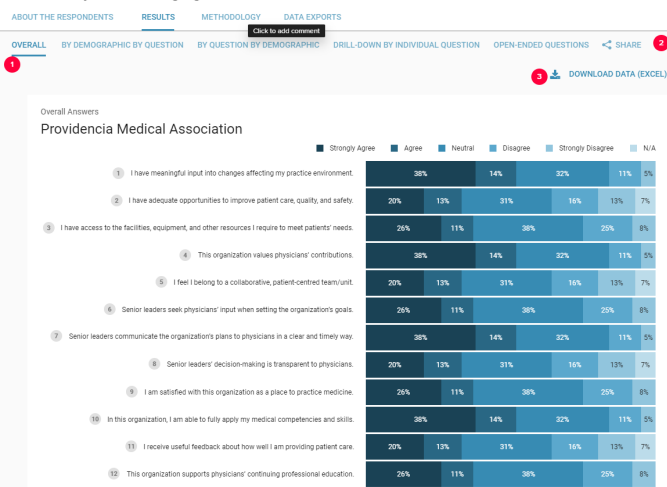
First, we see below the progression of our Demographic Setup feature for the tool. We started with the storyboard (3 top-most images), through to paper prototype, to high fidelity mock-up.



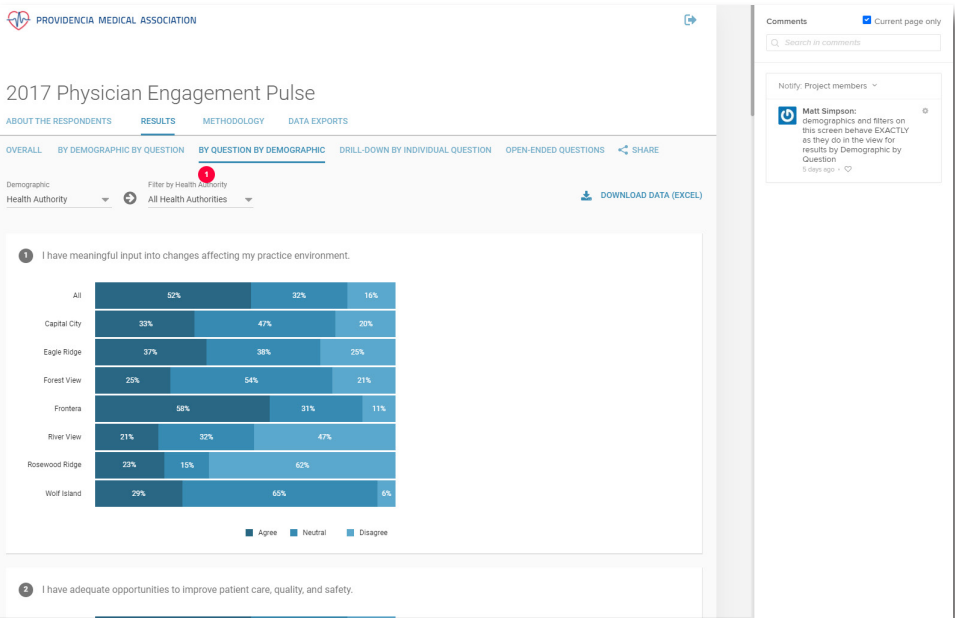
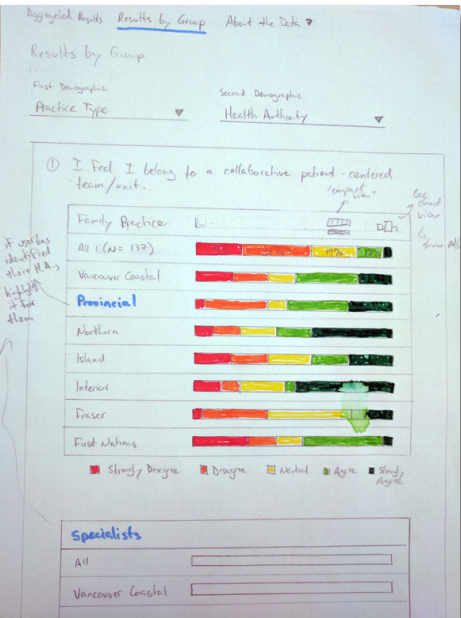
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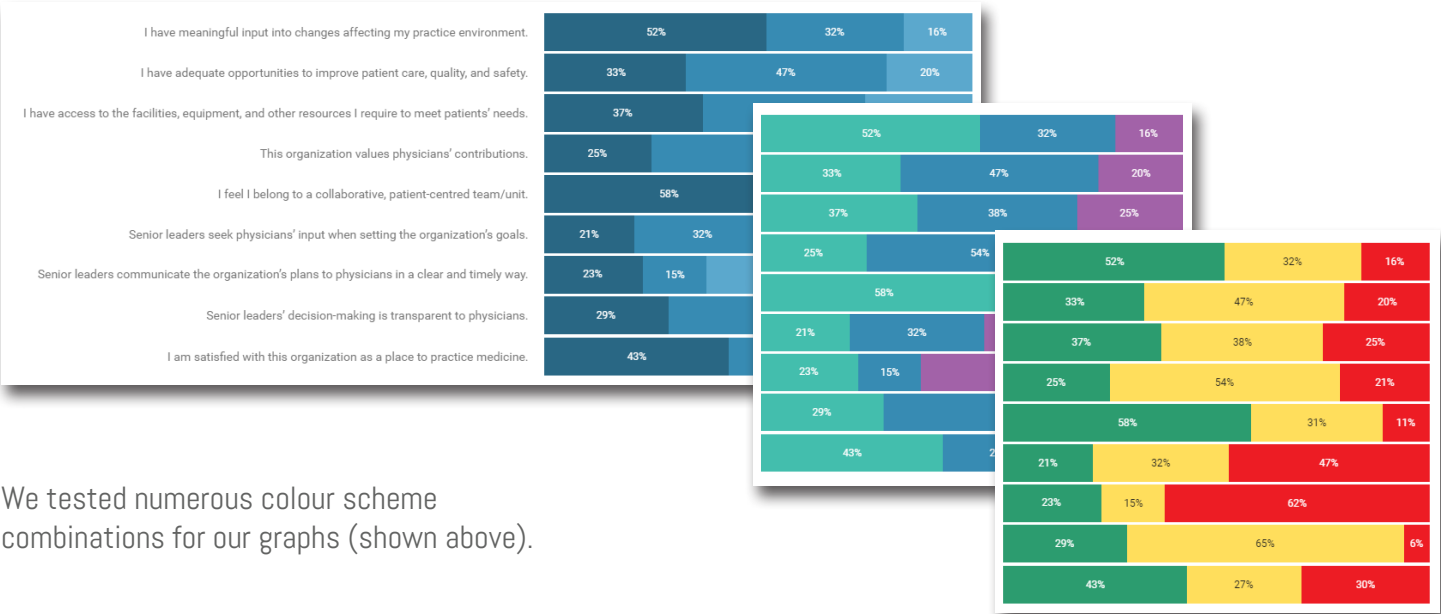
BOTTOM-RIGHT: High fidelity mock-up







ABOVE: Paper prototype for a data cut (left), then a high fidelity mock-up built later.

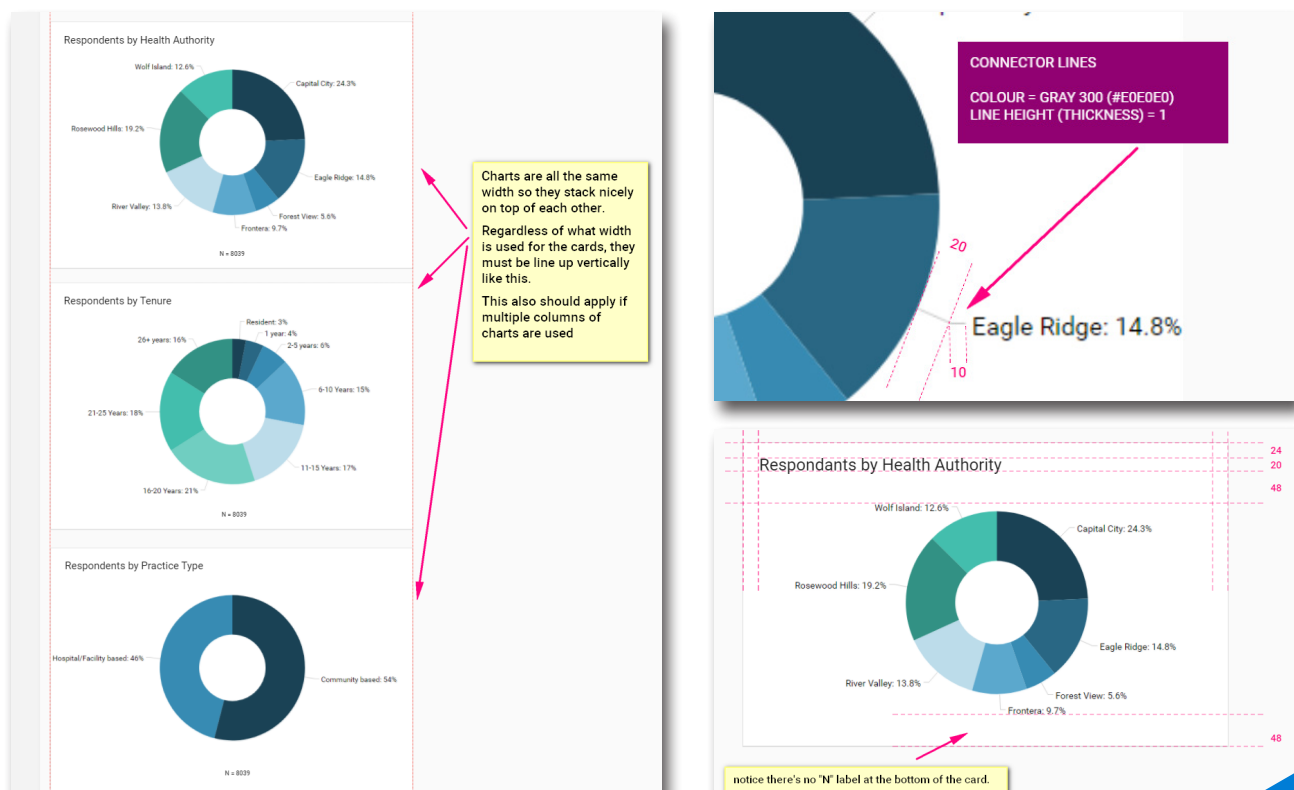


We tested numerous colour scheme combinations for our graphs (shown above).

USABILITY TEST - Progress - M						
Dec 7-8, 2017 HSO Headquarters, Ottawa, ON (Tests were conducted remotely)						
TANYA (DOB)						
TASK #	TASK	OBSERVATIONS	RESULT	TIME REQUIRED	SEVERITY	EMOTIONS
1	Find Overall Results starting from ABOUT RESPONDENTS screen.	User said her first inclination was to start clicking through the charts shown in the ABOUT RESPONDENTS screen.  The user referred to the overall results as "Overall Results by Individual Questions"  The user started clicking the other views (that show breakdowns by demographic). When finding the breakdown by question by demographic, she thought this was the correct data and stopped there.  It's unclear whether the wording of the task was confusing in this case because it said "breakdown". So it might be task wording that was more confusing than the software itself.	FAIL	4+ minutes	Minor or moderate - I think the wording of the task was somewhat misleading, but other users understood it. It didn't seem obvious that the user understood what she was supposed to be doing though.	Confused
2	Breakdown overall results by Health Authority (single demographic) by question	User looked at the filter options and correctly selected the appropriate option.  Once the screen loaded, she scrolled through the presented data to look for options to show the data cut by Health Authority.	Success	20 seconds		Confused

ABOVE: Script (left), and results (right) from usability testing sessions held remotely with users in BC.

BELOW: Sample design specifications.





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empower people.**

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