



Action Plans for [pro]gress™

Mar. 2017 - Sept. 2017

scenario

Most healthcare providers around the world have quality and risk teams to ensure that their services comply with mandated quality and safety standards. They conduct quality assurance and quality improvement activities on an ongoing basis and evaluate their effectiveness.

To conduct these activities, many healthcare providers use standalone or paper-based task-tracking solutions to document and monitor progress.

These approaches are ineffective. Documents take time and effort to be created, maintained, often get lost, and tracking the most current version is cumbersome.

Furthermore, tracking linkages to quality and safety standards is a hassle. This all results in increased overhead costs and a drag on effectiveness of delivery of care to patients.

Additionally, the client, Health Standards Organization, had recently completed (but not yet released), a new quality improvement tool for healthcare providers called *Audits for [pro]gress™*. Any solution we would come up with here should be integrated with Audits for [pro]gress, as both these quality improvement activities are interrelated.

project details

My role: Design Lead

Deliverable: Web application

Devices: Desktop, tablet

design activities

Concept Design

Task Analysis

User Interviews

Interaction Design

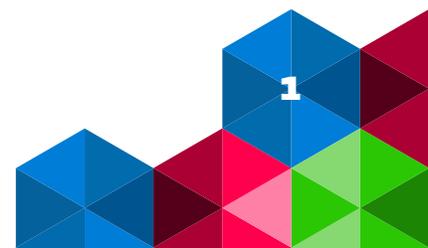
Prototyping

UI Design

Visual Design

Usability Testing

Usability Reviews



action

To conduct the work, we formed a design team with HSO's [pro]gress product manager, lead developer, and partnered with a quality and risk specialist from the Centre hospitalier de l'Université de Montréal (CHUM).

This gave us access to additional personnel at the CHUM to collaborate with us on a wide-range of design activities including:

- Workshops for needs assessments and user research*
- User interviews*
- Process analysis
- Interaction design and prototyping
- Usability tests*

* conducted on-site at the CHUM's Hôtel-Dieu Hospital in Montreal.

We then formalized interaction and visual design specifications and worked with developers in Ottawa and India to get the tool completed for trials which began in October.

result

This feature was rolled out in [pro]gress in January, 2018.

The close relationship forged with the CHUM allowed us to work quickly and efficiently to understand how acute care teams conduct quality improvement action planning and task-tracking activities.

one challenge we ran into...

Initially, we thought that healthcare providers conduct audits, identify gaps in their services and then create quality improvement initiatives (action plans) based on the results of these audits - in this specific order.

As we began to work more closely with actual users, we confirmed that this flow does indeed occur. However, what we didn't know was that another separate and more common approach for healthcare quality teams is to actually create action plans first, and then create internal audits to validate that their action plans are having a measurable impact on quality of care.

Users would need flexibility to be able to create action plans first, or audits - depending on the scenario.

Our mistake was that we didn't ask the right questions to our users when working through the task analyses and process flows of how they relate action plans to their audits - we had focused uniquely on the action planning as a standalone process.

We also could have caught this discrepancy in our understanding sooner by showing paper prototypes to our users before higher fidelity ones.

Moreover, CHUM was engaged with us through every step of the design process to make sure that designs were helpful and efficient. This allowed us to design and build a tool that is truly impactful for them and other quality improvement teams in hospital settings in Canada.

The collaboration went so well, with such positive results, that the CHUM has become an evangelist for Action Plans and Audits for [pro]gress, and is enthusiastically promoting the tools to their peers throughout Quebec.

artifacts

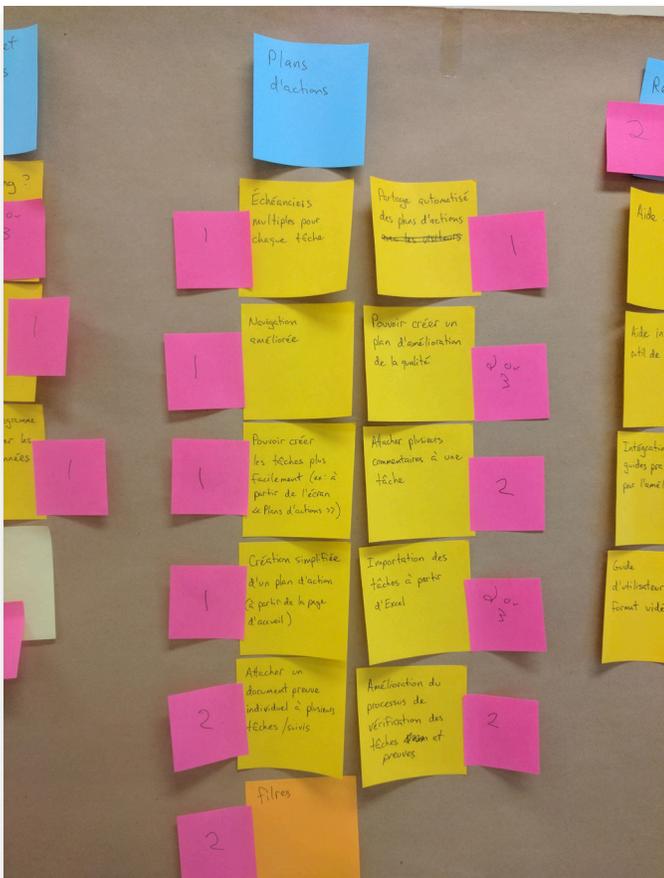


Photo of needs assessment items and prioritization preferences after interviews with users at Hôtel-Dieu Hospital in Montreal

USER STORIES
PROGRESS IQA - Action Planning

"As a Quality and Risk Manager, I need to..."

#	WHAT	WHY
1	... to create an action plan	so that I can have a bucket to put tasks in
2	... to delete an action plan	in case I put one in by mistake.
3	... to archive a completed action plan	so that I can remove it from my active list of action plans
4	... to edit an action plan title	in case the current name doesn't make sense or has a typo
5	... to create a task	So that I can keep track of Initiatives I need to perform in order to improve the quality of service in my organization.
6	... to assign a task to a team member	So that someone is accountable for making sure the task is undertaken and completed.
7	... to assign a task a priority	So that I can prioritize all the tasks I have to do.
8	... to delete a task	In case I created it by mistake
9	... to be able to update key task information (e.g. description, due dates, assignments, etc.) at any time	So that I can create a task, but change or update it later when I have more details.
10	... to view tasks by employee	So that I can see if anyone is behind on their tasks
11	... to view tasks by status	So that I can see if anything hasn't started yet, or if anything is still pending that should be finished by now. [overdue tasks!]
12	... to view tasks by priority	So that I can analyze the tasks within the organization and produce summaries of tasks by a given priority.
13	... to view tasks by Action Plan	So that I can analyze progress of the

User story summarization

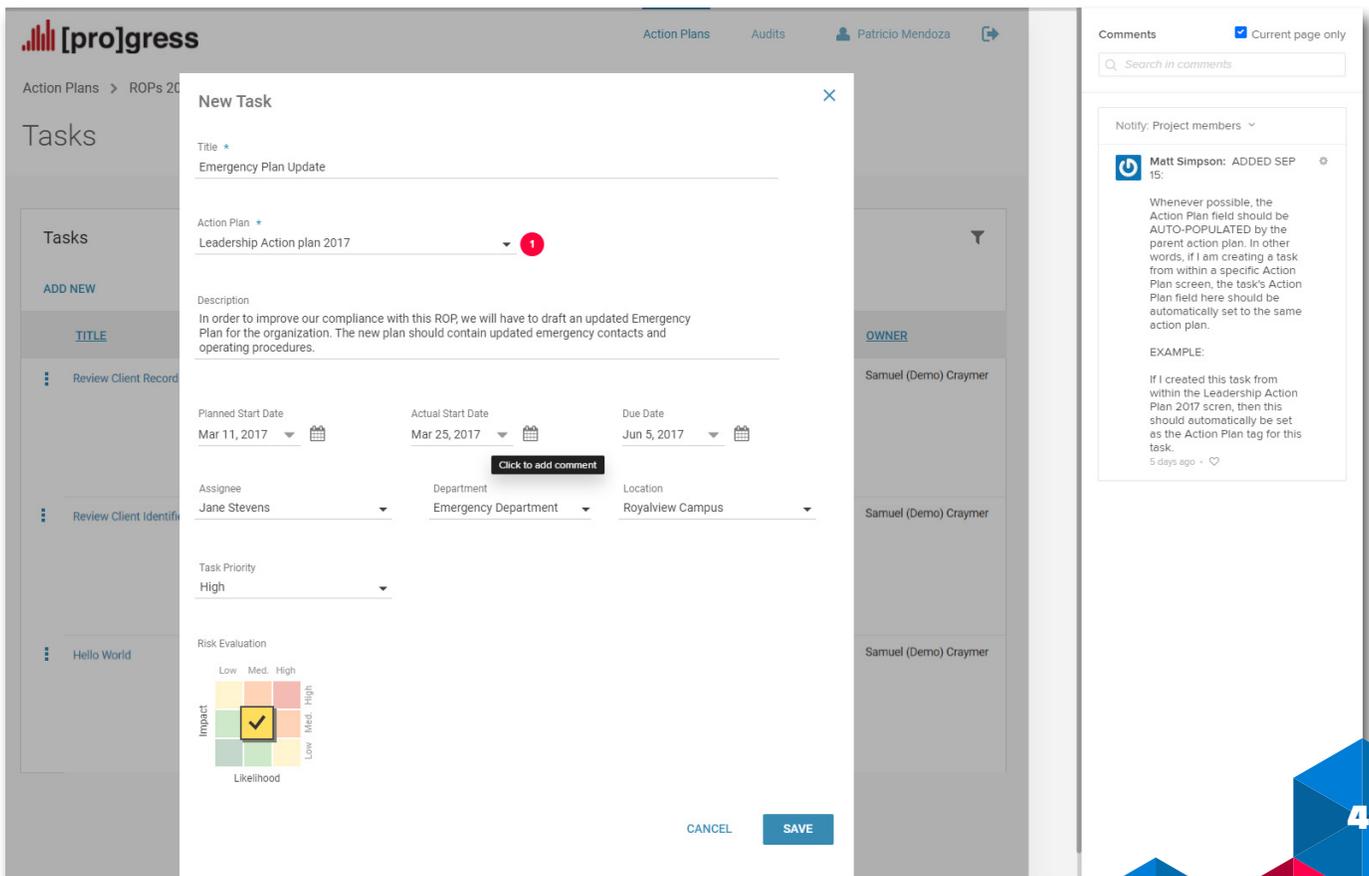
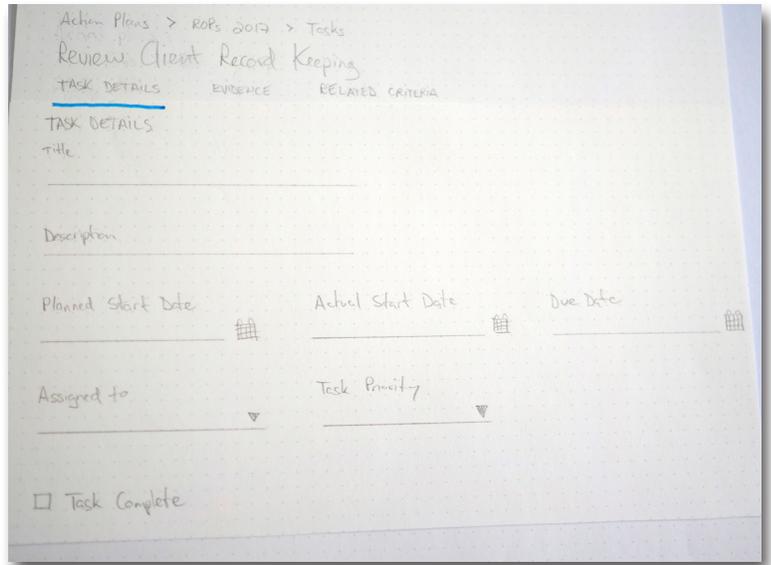
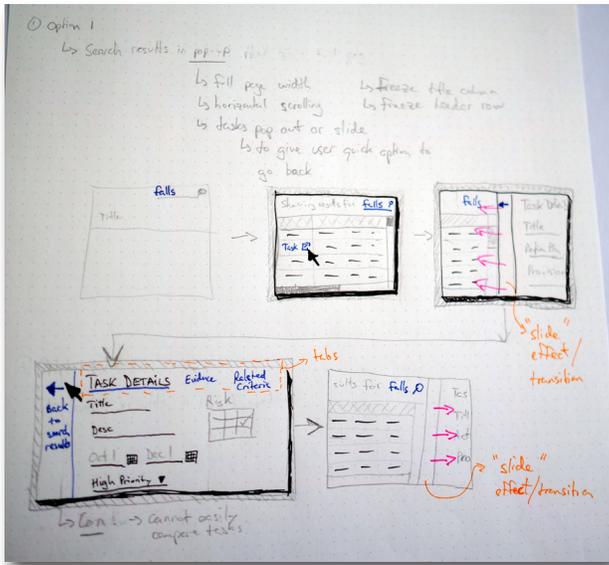


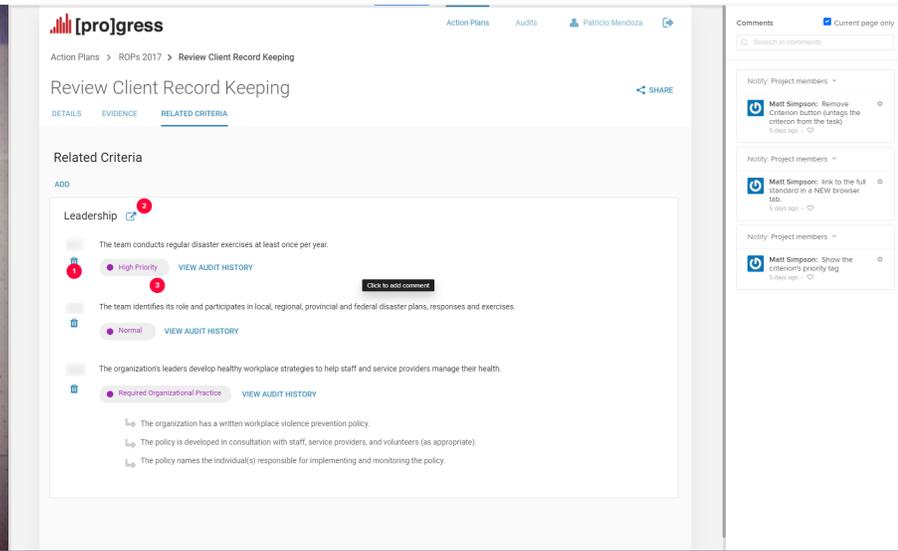
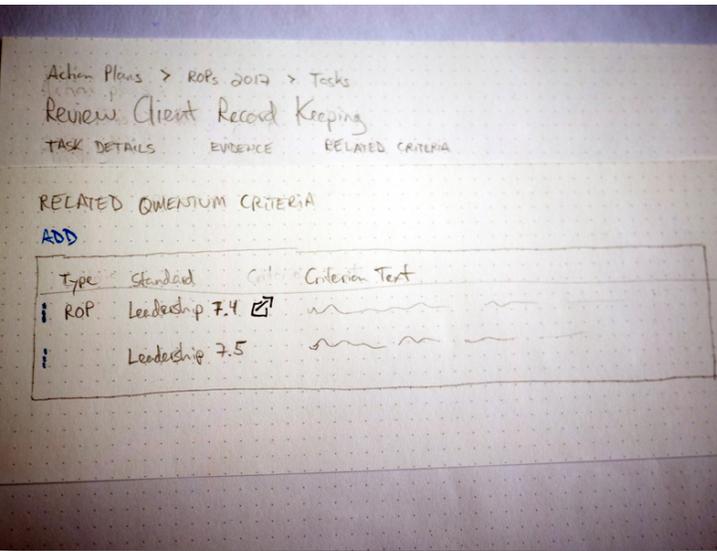
CREATION OF ACTION PLAN TASKS

TOP LEFT: Sketch depicting a proposed user interaction flow

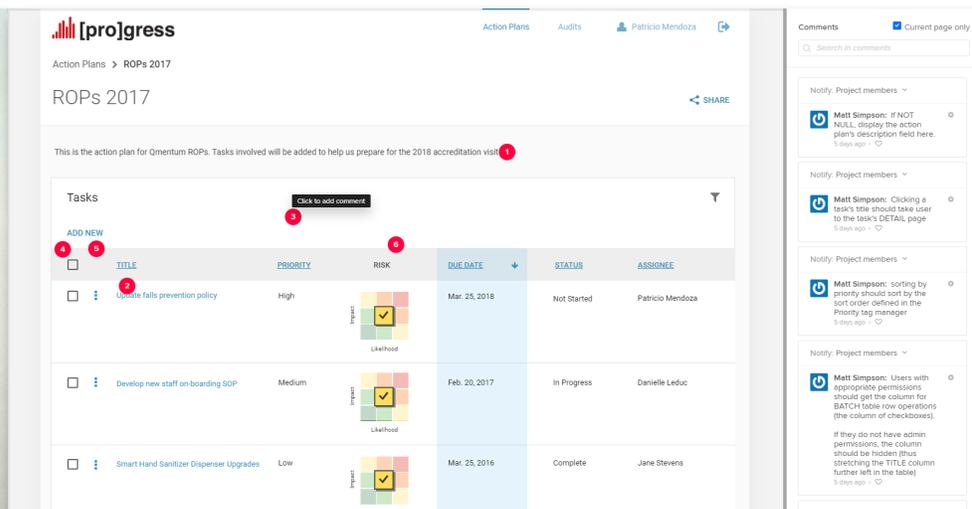
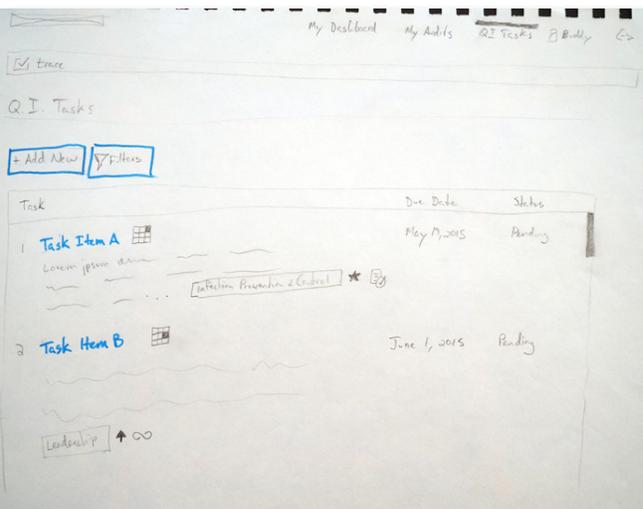
TOP RIGHT: Sketch of a more detailed NEW TASK screen

BOTTOM: Higher fidelity mock up of the NEW TASK screen





Above: A sketch and mock-up of screens we worked on for tagging action plan tasks to health standards criteria.



Above: A sketch and mock-up of screens showing users the list of tasks to be performed inside a given action plan.



TEST SUR LA FACILITÉ D'UTILISATION

PROGRESS (IQA)

août 2017

Rôle: Spécialiste de la gestion de la qualité et des risques

TÂCHES

1. Créer un plan d'action intitulé "Prévention des chutes"
2. Supprimer le plan d'action intitulé "Urgence - Hôpital des Prairies"
3. Modifier le titre du plan d'action "Prévention des chutes" à "Prévention des chutes - Urgence"
4. Choisir le plan d'action intitulé "Prévention des chutes - Urgence"
 - o ... et définir une nouvelle tâche (action amélioration):
 - "Révision de données de chutes dans l'établissement afin de cibler la clientèle la plus à risque"
 - L'assigner à Nancy Leblanc - le chef d'équipe pour l'urgence
 - Vous aimeriez que la tâche soit commencée à partir du début octobre et terminée après de deux semaines
5. En regardant les tâches dans le plan d'action **Prévention des infections**, vous constatez qu'il existe une tâche **composer un groupe de travail : prévention des infections**. Cependant, vous savez que ce groupe existe déjà depuis quelques mois. Vous aimeriez donc supprimer la tâche du plan d'action.

USABILITY TESTING

TOP: Script used to conduct one of our usability tests with users at Hotel-Dieu Hospital in Montreal.

MIDDLE: Video captured during usability testing. We recorded each user's reactions and interactions.

BOTTOM: We then summarized the results and observations made for each usability test for sharing with the product team.



Plans d'action > Prévention des infections > Installation de dispositifs de désinfectant intelligents dans l'urgence

Installation de dispositifs de désinfectant intelligents dans l'urgence

DÉTAILS PREUVES DES MESURES PRISES CRITÈRES CONNEXES

Titre*
Installation de dispositifs de désinfectant intelligents dans l'urgence

Description
Installation de dispositifs de désinfectant intelligents dans l'urgence

Évaluation du risque

	Basse	Moyen	Haute
Impact			
Probabilité			

Début provisionnel Début réel Date d'échéance 10/31/2017

Assignée à Nancy Leblanc Priorité High

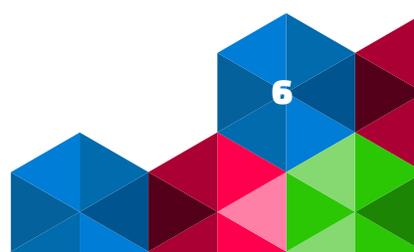
département Emplacement



USABILITY TEST - Progress - IQA - Action Planning

Aug 30, 2017
Hospital Hotel-Dieu, Montreal, QC

TASK #	TASK	OBSERVATIONS	RESULT	TIME REQUIR	SEVERITY	EMOTIONS	OBSERVATIONS	RESULT	TIME REQUIR	SEVERITY	EMOTIONS	OBSERVATIONS
1	Create an Action Plan	User drilled down into the action plan to change its name.	Success	Minimal		Neutral	She instantly recognized the Overflow menu as the spot to go modify the title	Success	Minimal		Satisfied / Confident	User in the list this action plan
2	Modify Action Plan Title	Then she realized she could not from the screen, then got lost trying to go back to the list of action plans (note: she did not look for the breadcrumb - and paid no attention to it) Then she realized she could use the top nav to go back to the list of action plans and clicked the Action Plan to be renamed (which took her to the action plan's tasks instead of letting her rename the action plan title)	Success	2 minutes		Confusion		Success	Minimal		Satisfied / Confident	She the "title" action took her to the list of action plans
3	Create new task, assign to staff member, assign start and end dates	When using the calendar control, the user clicked the chevron to the right of the month title (which zooms OUT the calendar). The user expected the days of the month for October to appear instead of having the zoomout (wasn't a huge issue, but clearly added a little cognitive load) The user then realized she made a mistake and wanted to change the end date (which she had set to Oct 3rd instead of Oct 17th). When opening the calendar control to make the fix, the calendar control did NOT was auto-scrolled PAST the Oct 3rd date, confusing the user. User input the requested start date in the PLANNED START DATE field (not ACTUAL START DATE).	Partial Success	1 minute		Neutral	When using the calendar control, the user clicked the chevron to the right of the month title (which zooms OUT the calendar). The user expected the days of the month for October to appear instead of having the zoomout (wasn't a huge issue, but clearly added a little cognitive load) User input the requested start date in the PLANNED START DATE field (not ACTUAL START DATE).	Success	20 sec		Satisfied / Confident	Upon e to the list of action plans User e that the fields v She se instead did.
4	Delete Task	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5	Modify Task (set priority - high)	The user first briefly sought to modify the task (assign it a priority) from the list screen's priority column. Then after going to the task's DETAIL screen, she could not find the PRIORITY field easily (first looked top right near the risk matrix, then started clicking the EVIDENCE and RELATED CRITERIA tasks Wanting to go back after clicking around the tabs, the	Success	1 min 30 sec		Confusion	The user looked at the overflow menu first (correctly) and began searching for a way to change the priority directly within the overflow menu (which is not possible). She then found the OPEN command in the overflow menu to open the task. Once inside the task's DETAIL screen, she immediately scanned the page quickly and found the PRIORITY field at the bottom of the screen, and made the required modification.	Success	Reasonable		Neutral, slight confusion on whether or not the update SAVED successfully	User in (corner Matrix) field in Attempt Comp action task as asked)





**design with heart.
empower people.**

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