AlfredHealth

Improving operational efficiencies and staff satisfaction in Outpatient Pharmacy: Online medication ordering for ambulatory patients

Libby Dunkley[1], Belinda Theobald[1], Lorraine Xavier-Ambrosius[2]

1. Pharmacy Department, Alfred Health, Melbourne, Victoria; 2. Redesigning Care, Alfred Health, Melbourne, Victoria

Background

At Alfred Health, a major metropolitan health service in Melbourne, traditional face-to-face ambulatory care services rapidly transferred to telehealth through COVID. Patients also changed the way they accessed medication through Outpatient Pharmacy (OP), where face-to-face prescription drop-off and consultation, was largely replaced with phone consultations and increased requests for posting of medication. Necessary changes to workflows presented challenges, leading to the multidisciplinary-led, innovative development and implementation of an online medication ordering tool, relieving stresses for staff, whilst increasing flexibility and streamlining access for patients to pharmacy.

Objective

To implement an innovative online medication ordering process, with a user-friendly interface for data presentation, providing patients with improved access to pharmacy, meet changing demands through restructure, enhanced OP workflows and improve staff satisfaction and wellness.
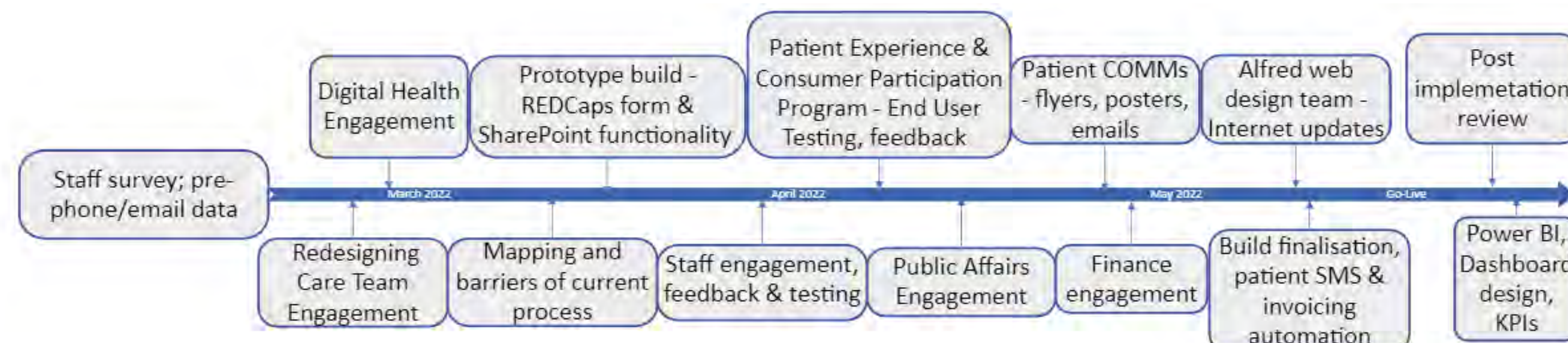
Action

Figure 1. Consultation and development process

Staff in OP were surveyed in April 2022 to assess satisfaction levels and subjective changes in workload due to COVID. OP phone call and postage data were evaluated to determine time spent on phone and changes in postage demands (Figure 1).

The organisations Redesigning Care team was engaged to analyse existing workflows and design future state using Quality Improvement methodologies. Collaboration with the Digital Health team progressed the development of a secure Online Medication Ordering Form (OMOF) utilising REDCAP for data capture (Figure 4) and SharePoint for data presentation, with staff completing training, testing and feedback on the prototype.

Partnering with the Patient Liaison team, usability and applicability was reviewed from the consumers and patients perspective. Public Affairs collaboration facilitated the improvement and updating of the hospital website, enabling publication and enhanced patient access to the OMOF. Finance reviewed functionality, with invoices saving to patient OMOF profiles, and auto-emailing. With multidisciplinary collaboration, Digital Health finalised the OMOF build, and developed an activity based, real-time Dashboard through Power BI for data analytics and Key Performance Indicator (KPI) review (Figure 1). Extensive promotion preceded 'go-live' implementation on 23rd May 2022.

Evaluation

Over 80% of staff survey respondents stated OP workload was "frequently/constantly excessive" (16 of 18 respondents). Through COVID, OP postage requests rose approximately five-fold: approximately 10% of prescriptions were posted pre-pandemic (average of 202/month) compared to 61% during COVID (average of 1120/month), significantly increasing prescription preparation time. OP phones were in-use for an average of 5hrs 45mins/day (average of 127 calls/day Jun 2021 to Apr 2022) with patients, hospital staff and external healthcare providers frequently complaining of lengthy on-hold periods (Figure 2). New and orientating staff starting in OP from March 2022, which saw a brief rise in phone call duration.
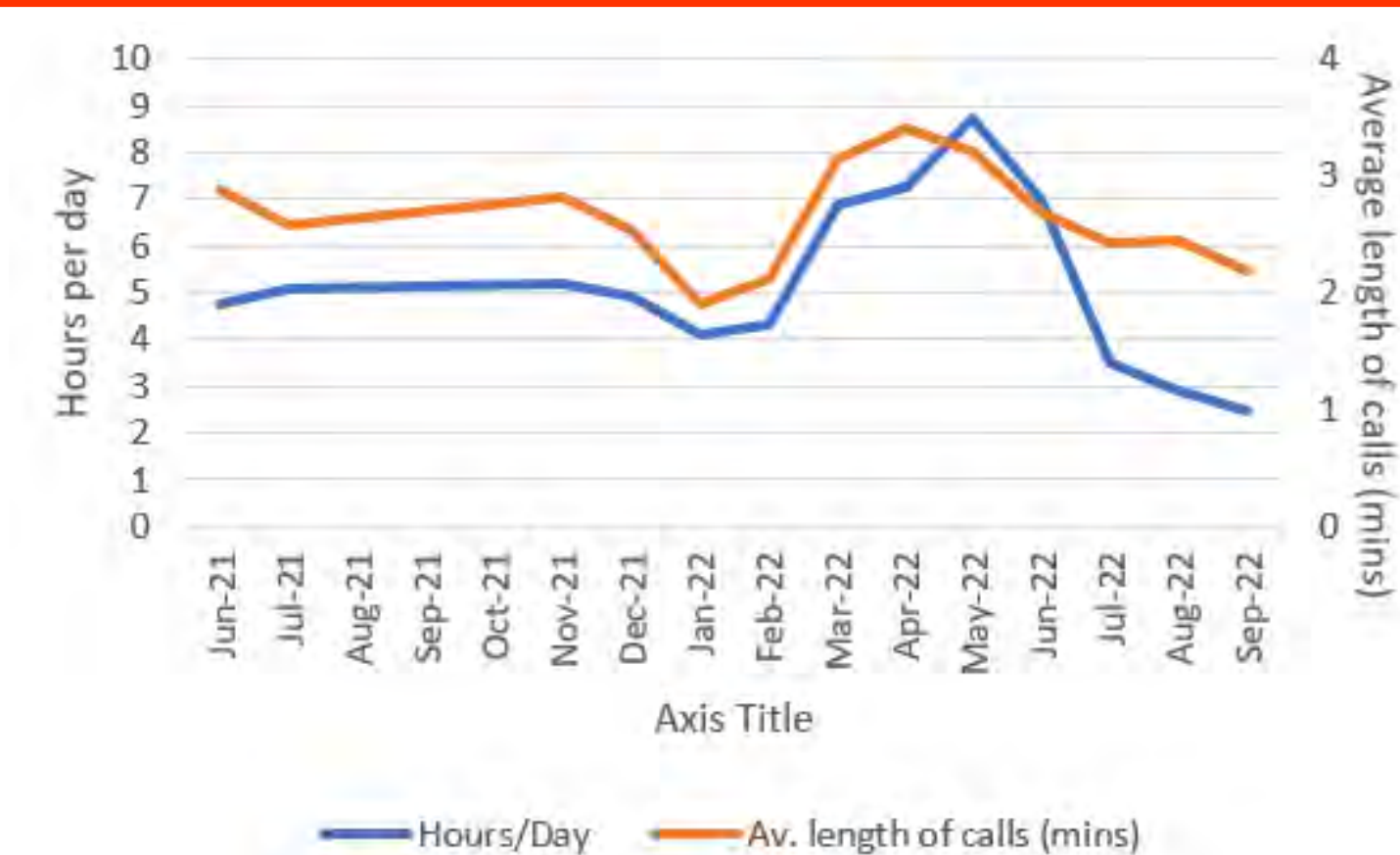
Significant improvements followed the implementation of online medication ordering, with daily phone calls reducing to an average of 75 calls (2hrs 57 min/day) from July 2022 to September 2022, with an average of 23% of prescriptions posted/month during this time (approx. 386/month).

Figure 2. Monthly outpatient pharmacy phone usage

Discussion

Figure 3. Outpatient Pharmacy issues and solutions

The development and implementation of an OMOF enabled staff resources to be redistributed from phone related roles to focus on dispensing tasks, patient counselling and liaising with healthcare professionals, contributing to an improvement in operational efficiencies. The OMOF provides patients with increased flexibility and access to request medication orders, without being limited to pharmacy opening hours, or staff availability to accept requests via phone or email. With reduced time spent on phones, resources are redirected to managing workload, reducing fatigue and stress levels.

OMOF design considerations included:

- During all stages of the design, workshops for consumers and staff were conducted using Plan-Do-Study-Act (PDSA) cycles to inform future state, whilst ensuring simplicity in design to facilitate patient uptake.
- An emphasis was placed on establishing correct patient identification points with a secure online presence, therefore maintaining confidentiality.
- Consultation with numerous high-frequency users and clinical teams to ensure appropriateness for relevant patient groups.
- Patient updates of medication request progress via an SMS text message at submission of request and completion of the dispensing process.
- Formation of patient focus groups established to workshop the design towards the final stages, establishing suitable phrasing of messages ensuring correct information provided in a concise and user-friendly manner. Feedback was used to alter aspects of the design to enhance the patient experience.
- Reflection of the organisation's strategic plan, specifically "Care Beyond the Walls" ensured the design was focused on providing an appropriate solution to service our patient's changing needs.
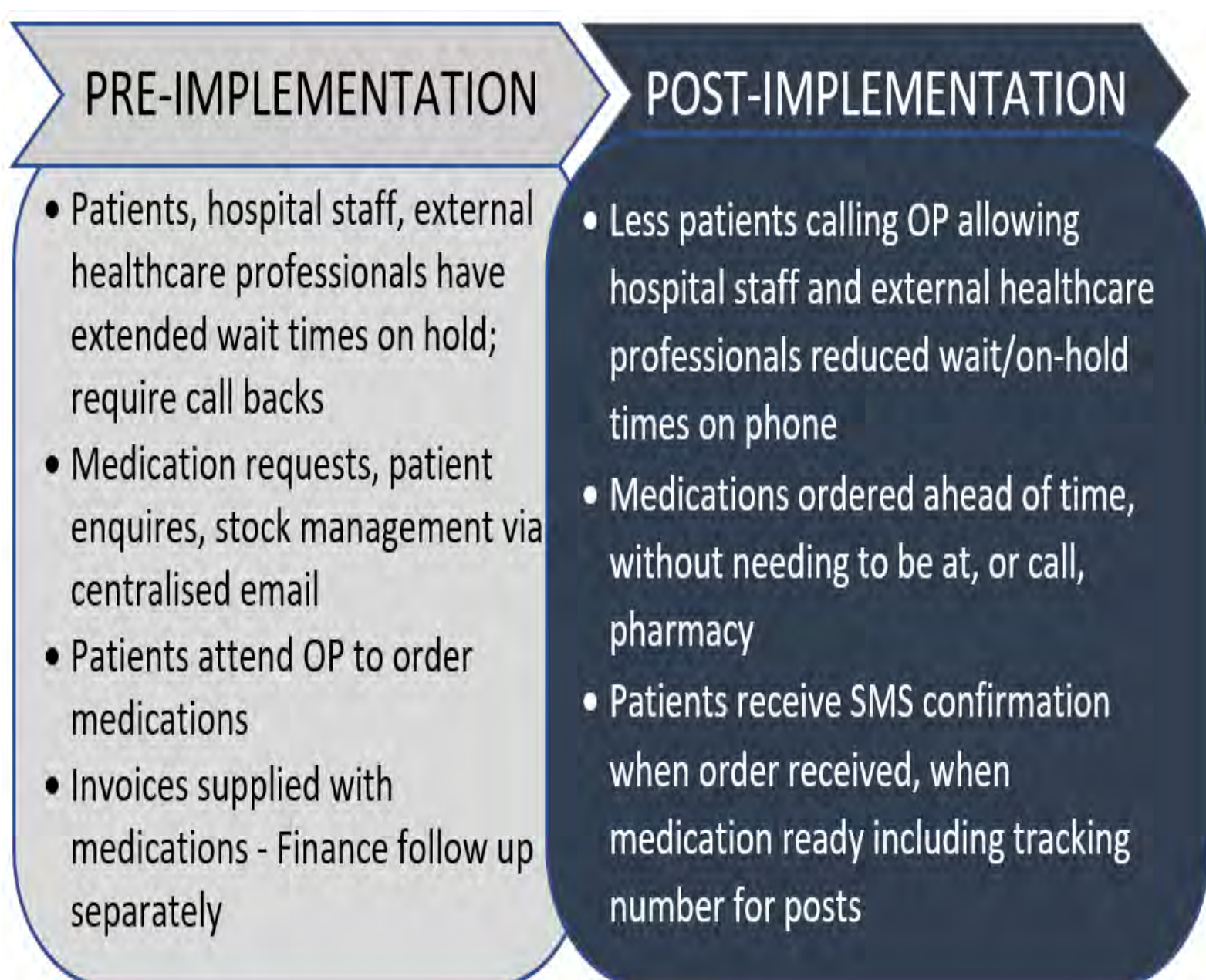
Future Direction

Ongoing evaluation and redesign will be undertaken with a focus on patient and staff perspectives' of the impact and satisfaction with the OMOF, assessing successes, areas for improvement and future sustainability. Further development of data representation and analysis will be explored through Power BI, Dashboard and KPI presentation (Figure 5).
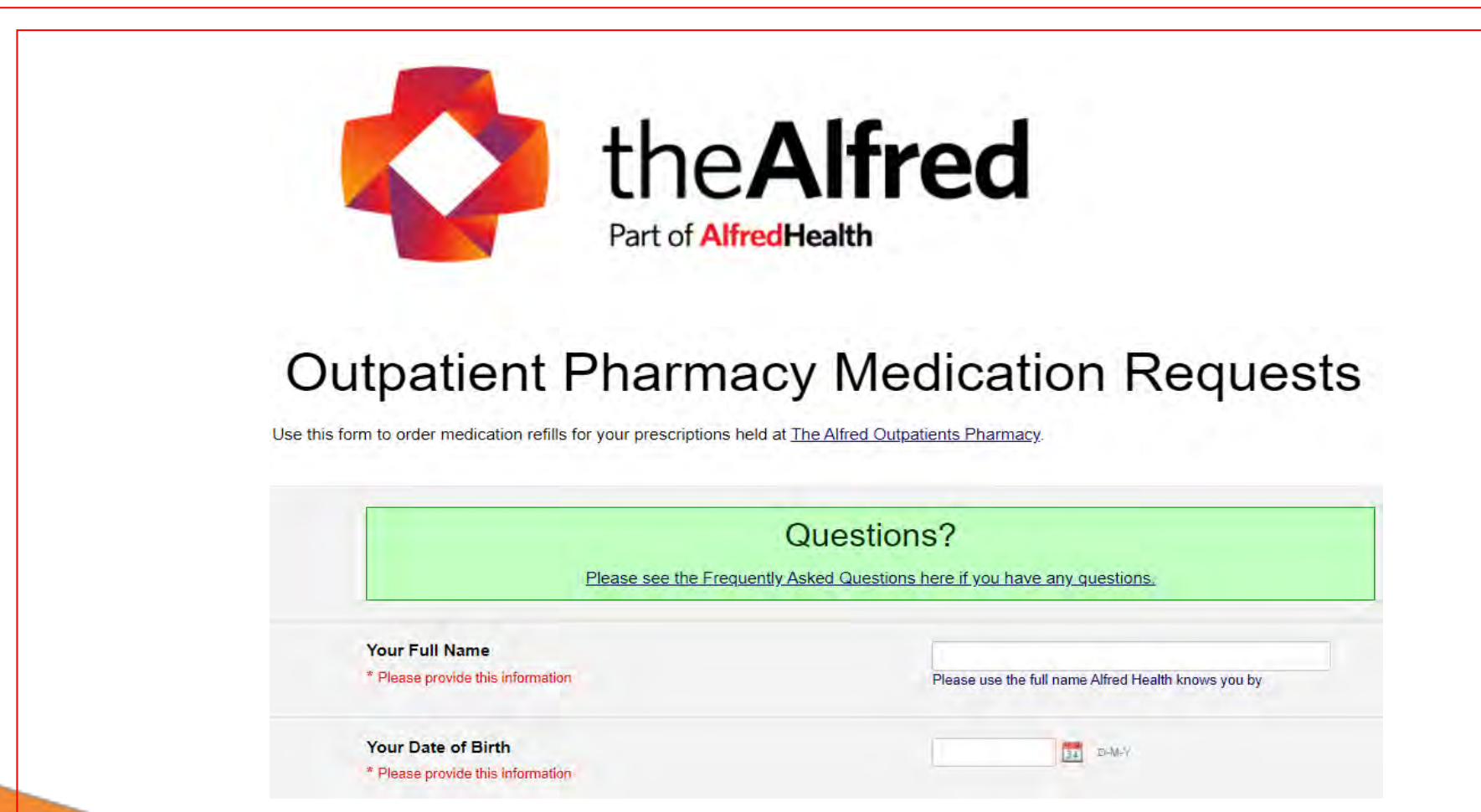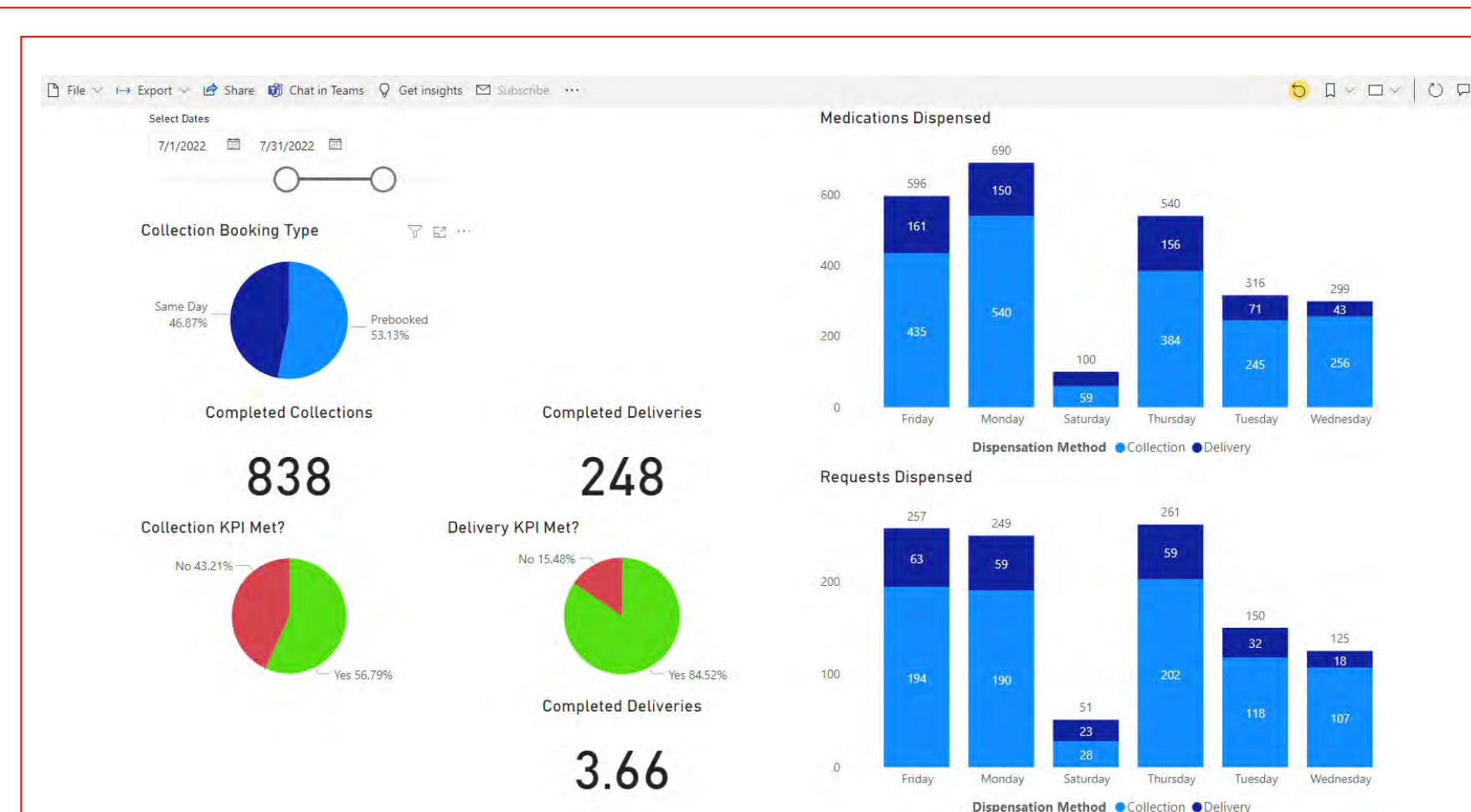

Figure 4. REDCAP Patient interface

Figure 5. Metrics available to pharmacy staff