



Digital DIY – Improving non-formulary medication review with Microsoft Teams® and Power Automate®

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Background

Paper based systems for the management of non-formulary medicine requests for individual patients can be slow and inefficient. Introduction of commercially available digital systems to manage these requests can be cost prohibitive and lack local adaptability. Applications such as Microsoft Power Automate® allow clinicians to design simple digital solutions with limited time and resource investment.

Objective

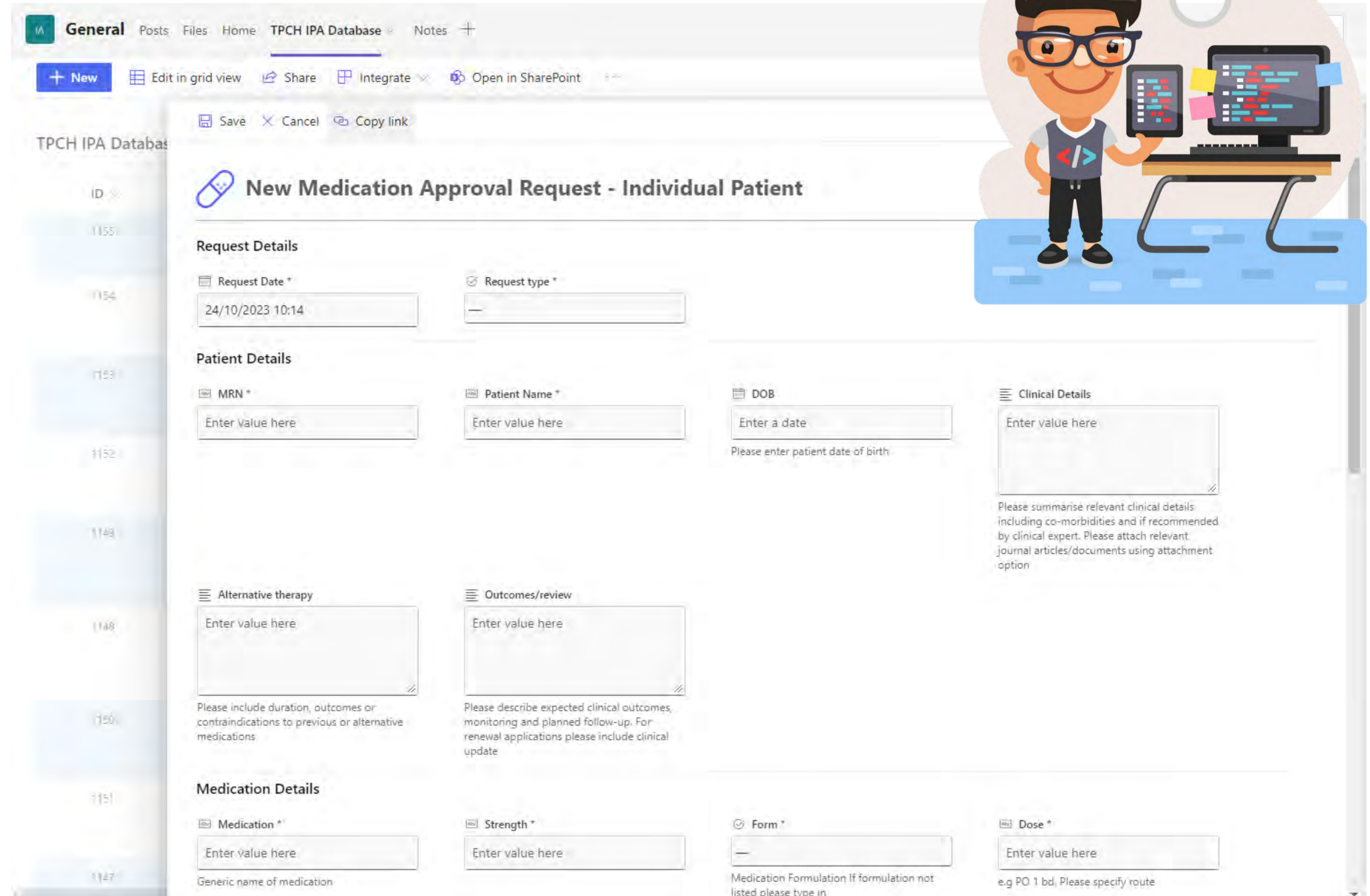
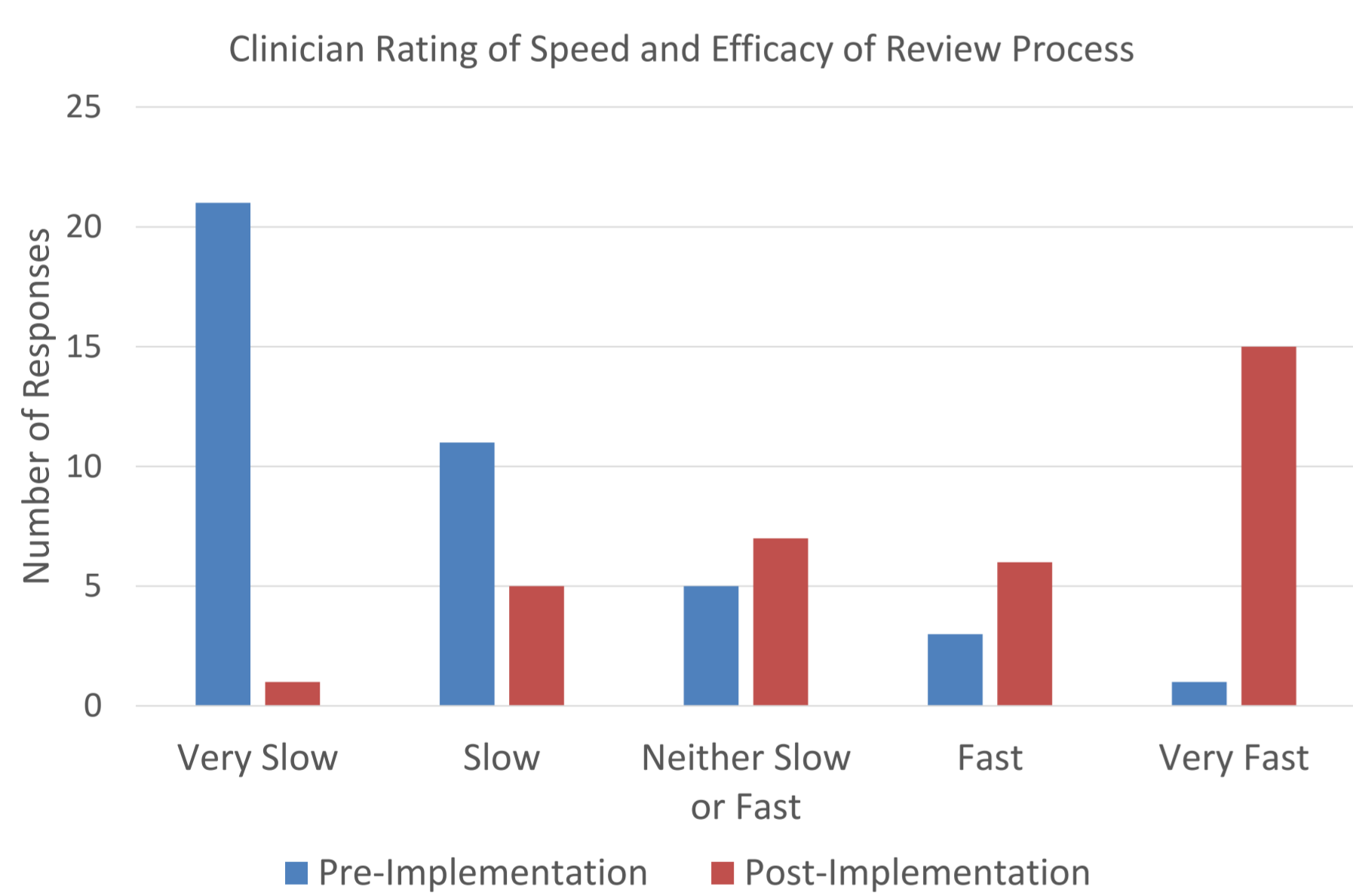
To develop and implement a simple digital solution to manage non-formulary medicine requests at a metropolitan tertiary hospital to replace the existing paper-based system.

Action

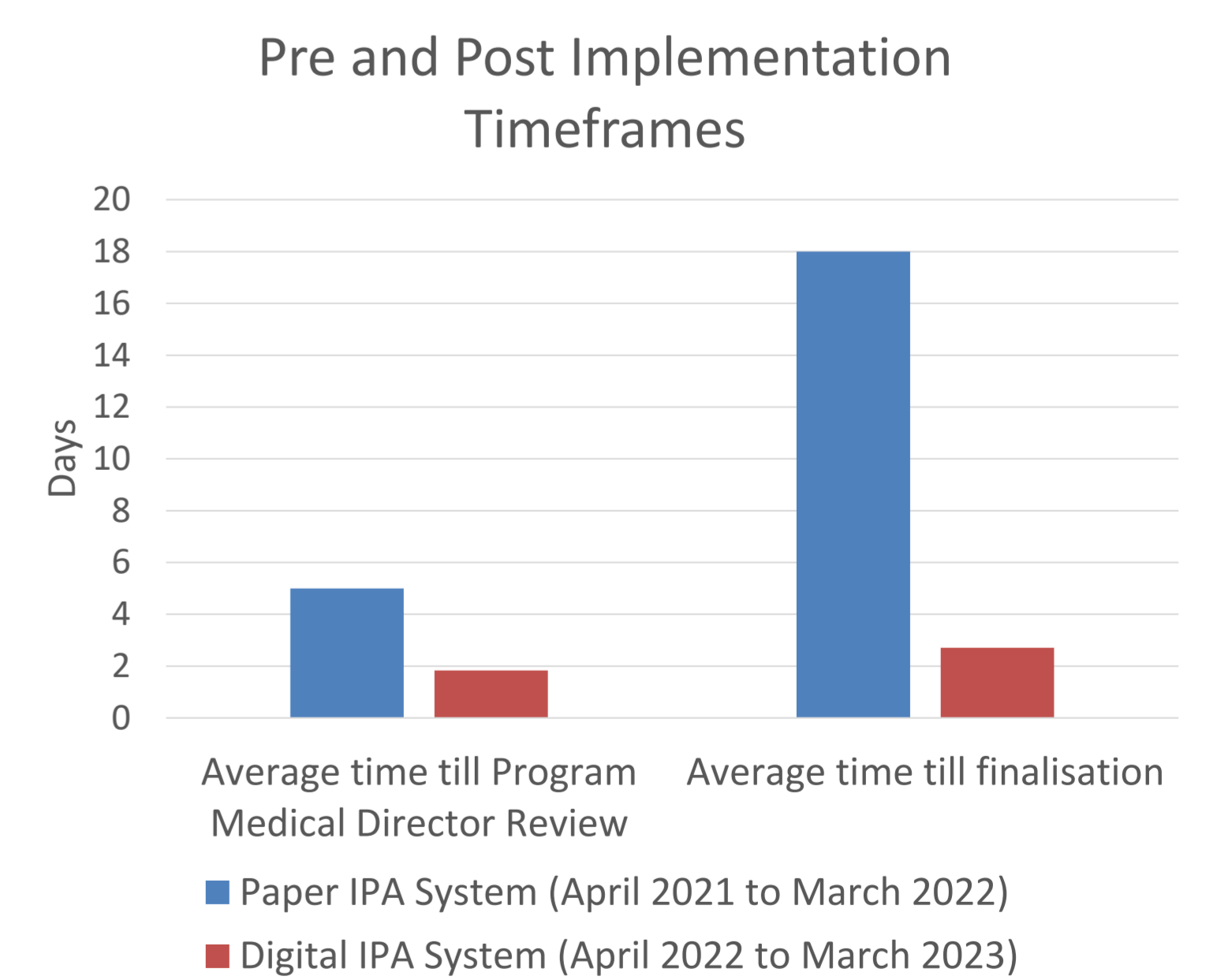
The pharmacy department developed a digital system to submit, review and communicate outcomes of non-formulary medication requests using Microsoft Teams® and Power Automate®. From April 2022 till March 2023 the system was trialed in the Internal Medicine department of the hospital. Time till review and finalisation of requests was compared to the previous 12 months. Feedback from users pre and post implementation was also collected using a 5-point Likert scale.

Evaluation

There were 87 non-formulary medicine requests for Internal Medicine in the 12-month period prior to implementation. The average time till program medical director review and finalisation of request pre-implementation was 5 days and 18 days respectively. Post implementation there were 220 requests with an average time till program medical director review of 1 day 20 hours. Time till finalisation of request decreased to 2 days 17 hours. Surveyed clinician's opinion of the speed of the review process improved from 'slow' to 'fast' post implementation.



Request ...	MRN	Patient Name	Medication	Strength	Form	Dose	Indication	Duration	Approval Status	Approval Date ...	Submitter	Consultant Requesting
13/10/2023 13:00			Denosumab	60mg	Ampoule/inje	60mg subcut 6 monthly	Osteoporosis	Stat	Pending Clinical Director Review	13/10/2023 12:17		
13/10/2023 09:00			Letermovir	240mg	Tablet/Capsul	480mg daily	CMV prophylaxis, unable to tolerate valganciclovir	Up to 3 months	Pending HCD Review	13/10/2023 09:14		
12/10/2023 15:00			Lidocaine	5%	patch	Top 1 daily	Post hepatic neuralgia	Up to 1 month	Approved	16/10/2023 14:17		
12/10/2023 15:00			Shingrex	1 vial	Ampoule/inje	1 vial	Herpes zoster prophylaxis	Up to 3 months	Not Approved	24/10/2023 12:26		



Discussion

Implementation of a digital system to manage non-formulary medicine requests decreased time till finalisation and improved clinician's opinion of the review process. Simple digital solutions can be developed with limited resources and result in significant improvements in pharmacy workflows.

Contact Us

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