Digital pathway for Improved Assessment, Management & Optimisation of patieNts for planneD Surgery (DIAMONDS) Pilot.

K CHAUDHRI 1,2,3,4, A NGUYEN 5,6, N HAMMOND 1,2, M GROCOTT 7,8,9,10, D LEVETT 1,8,9, A SRIVASTAVA 1,11, A MARKS 1,2,4,12

¹Royal North Shore Hospital, St Leonard's, Australia. ²The George Institute for Global Health, UNSW Sydney, Australia. ³University of Notre Dame, Darlinghurst Australia. ⁴University of Sydney, Camperdown Australia. ⁵Australian Institute of Health Innovation, Macquarie University, Sydney, Australia. ⁶St Vincent's Clinical Campus, UNSW Sydney, Australia. ⁷National Institute of Health Research Biomedical Research Centre, University Hospital Southampton, United Kingdom. ⁸Southampton National Health Service Foundation Trust, Integrative Physiology and Critical Illness Group, Southampton, United Kingdom. ⁹University of Southampton, Southampton, United Kingdom. ¹⁰Department of Anesthesiology, Duke University School of Medicine, Durham, North Carolina. ¹¹Agency for Clinical Innovation, St Leonards, Australia. ¹²Northern Sydney Anaesthesia Research Institute, St Leonards, Australia.

INTRODUCTION

In our Health District, the pathway to elective surgery was largely paper based

 This made it difficult to evaluate and prepare patients

Limited time for optimisation and decision-making leads to (1):

- Longer recovery
- Increased complications
- Higher costs
- Negative psychological impacts

A digital platform, PersonifyCare®, was implemented to streamline this care

AIM

To evaluate the impact of the digitisation on clinical outcomes, staff workloads and patient usability

METHOD

A retrospective audit of patients undergoing planned surgery from June 2024 to December 2024 at an Australian public hospital

RESULTS





22% decrease in attendance

Of face-to-face preadmission clinic



Easy to use

Reported by majority



Halved duration

Of face-to-face preadmission clinic



24 patients reviewed

In the time to assess one prior

CONCLUSIONS

Overall, this pilot highlights the effectiveness of automation in engaging patients. It highlights the potential of digitisation to optimise patients

Digitisation **enabled remote evaluations and delivery of targeted interventions** of potentially at-risk patients

Future prospective studies should focus on

- Long-term clinical impacts
- Cost-effectiveness
- Experiences of staff

ACKNOWLEDGEMENTS

The ImpACT team at Royal North Shore Hospital

Staff Scientific Council Australasian Travel Fellowship

REFERENCES

 McIsaac DI, Gill M, Boland L, Hutton B, Branje K, Shaw J, et al. Prehabilitation in adult patients undergoing surgery: an umbrella review of systematic reviews. British Journal of Anaesthesia. 2022;128(2):244-57.