

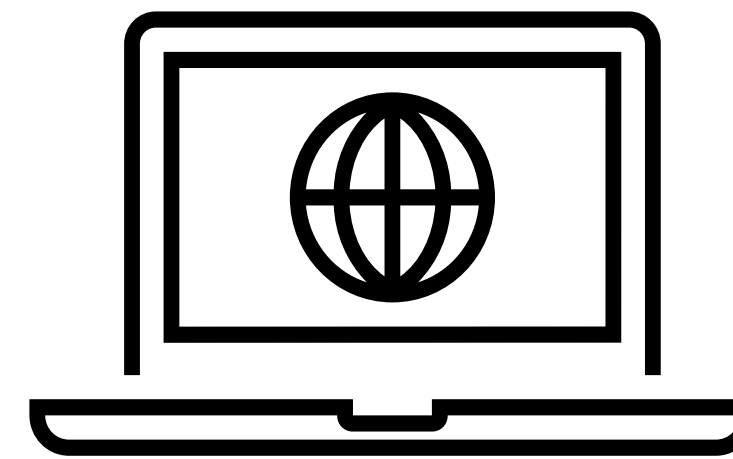
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Background

Administrative tasks are time-consuming in clinical research and can affect follow-up and data quality.

Automation and AI have shown efficiency gains in healthcare, but are still underexplored in clinical trial coordination.

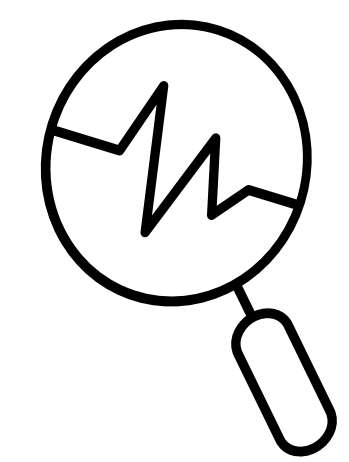
Admin tasks account for up to 15-40% of a physician's day¹



AIM: To determine whether automated research coordination using the Phelix AI platform reduces administrative time compared to standard coordination, using a Study Within A Trial (SWAT) design.

2

Methods



Multi-center prospective cohort SWAT.

Reported in accordance with the STROBE guidelines²

The Trial

Preoperative Very Low Energy Diets for Patients with Obesity Undergoing Non-Bariatric Surgery: A Randomized Pilot Trial (PREPARE Pilot).



91 patients older than 18 years of age with BMIS > 30 kg/m² undergoing elective non-bariatric surgery.

Automated Coordination Via Phelix AI: Phelix

- Patients were given profiles on the platform which automated their scheduled trial visits for the informed consent discussion, pre-intervention visit, and post-operative visit.
- All study documents were automatically sent to patients.

Outcomes

1

- Total Administrative research time per patient (in minutes)

2

- Breakdown of time spent on individual tasks
- Research coordination costs
- Number of emails, calls, and forms used.

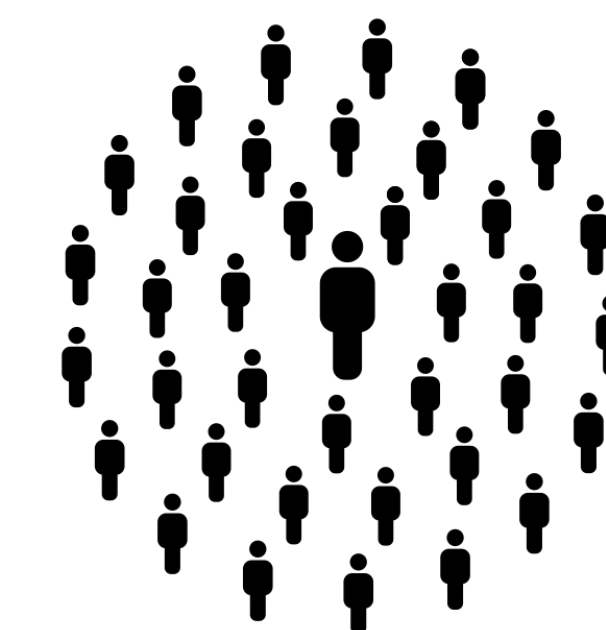


Statistical Analysis

- Chi-square tests and two-sample t-tests
- Multivariable linear regression

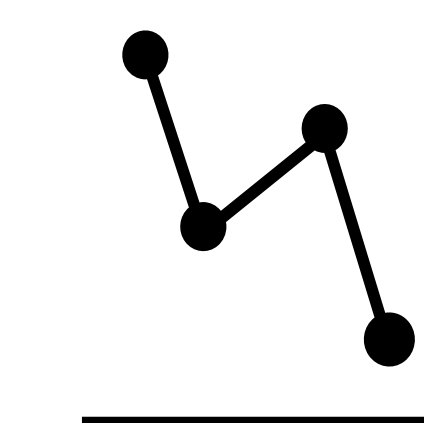
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Results



Automated Coordination (n=31):
mean age 58.7 years, 32.3% female

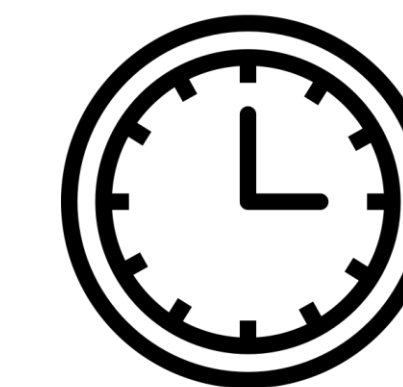
Standard Coordination (n=55):
mean age 56 years, 67.3% female



Multivariable linear regression showed that the automation of tasks was associated with decreased overall research administrative time

(MD -19.1 [95%CI -28.7 to -9.5], p<0.001)

Automated Coordination Group:

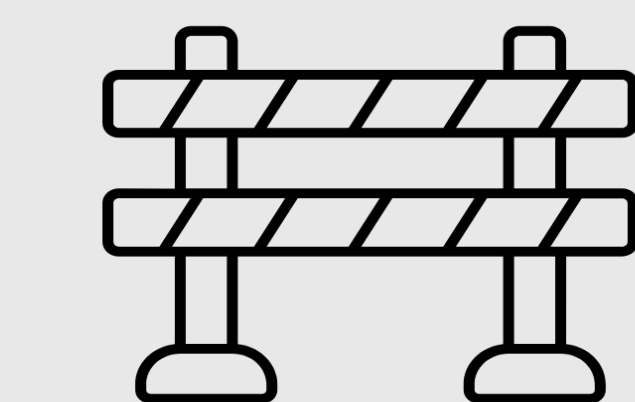


Research administrative time was 16.8 minutes less per patient in the automated research coordination group

(164.3 minutes [SD 18.6] vs. 181.1 minutes [SD 23.0], p<0.001)

∴ **24.1 total hours of time saved**

Barriers to Use:



Cost

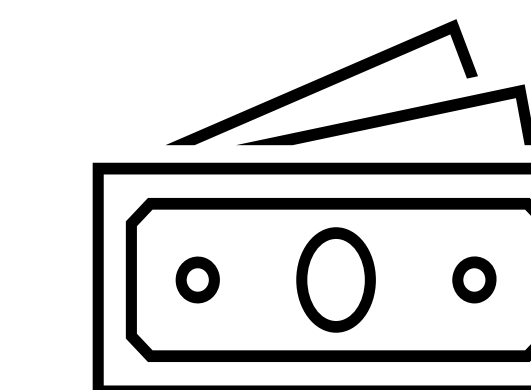
There was a per-patient increase of \$11.16

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Conclusions



The Phelix AI platform was able to significantly reduce hours of staff administrative work, for an incremental cost of nearly \$1,000.



The incremental cost of the platform is expected to decrease with more complex and larger trials, making it more suitable for studies with a sufficient sample size to maximize efficiency.

¹Department of Surgery, McMaster University, Hamilton, ON;
²Department of Surgery, St. Joseph's Healthcare, Hamilton, ON;
³Department of Health Research, McMaster University, Hamilton, ON.

1. Woolhandler S, Himmelstein DU. *International Journal of Health Services* 2014;44(4):635-642; 2. Elm E von, et al. *BMJ*. 2007;335(7624):806-808.