

Remote versus in-person follow-up in acute concussion care: Examining recovery in Toronto Concussion Study pre- and intra-pandemic cohorts

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Background

COVID-19 shifted acute and post-acute concussion care from in-person to remote delivery.

Objective

To examine the affect that **the shift to remote care** had on **concussion outcomes and care** in the early (<8 weeks post-injury) stages of recovery.

Methods

- Patients at the Hull-Ellis Concussion and Research Clinic (17 - 85 years of age) were invited to participate in a research study collecting data including, a physical exam by a physician, demographic information, pre-injury medical history, and concussion symptom scores.¹
- Participants in this analysis were split into two groups:
 - Pre-pandemic cohort includes participants from February 2016 to March 2020;
 - The intra-pandemic cohort includes participants from June 2020 to February 2023.

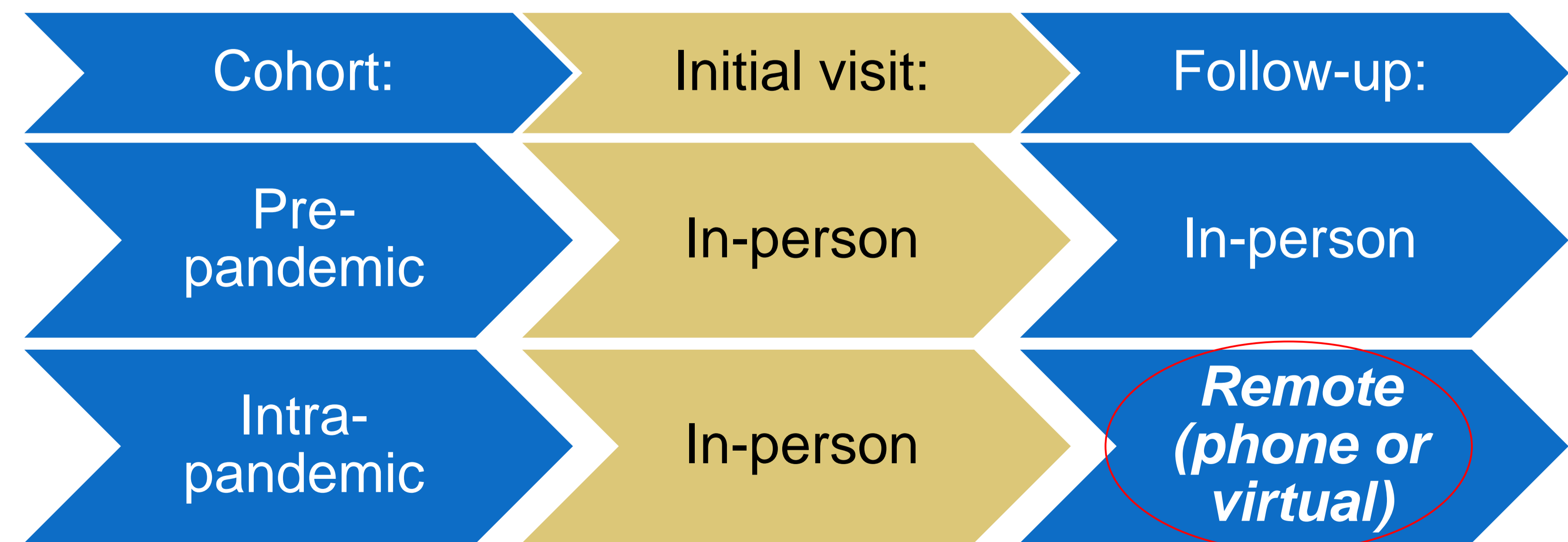


Figure 1: Physician appointment modality by cohort

- Recovery assessed by a physician at each visit.

Results

Table 1: Demographics by cohort

Category	Pre-pandemic (n=473)	Intra-pandemic (n=261)
Average age (years)	33.4 (12.7 SD)	35.0 (11.8 SD)
% Female sex	60.7%	64.4%
Most common pre-existing conditions	Anxiety (23.3%), Depression (22.8%), Migraine (13.1%)	Anxiety (30.3%), Depression (25.3%), Migraine (16.5%)
SCAT score at first visit	46.7 (28.4 SD)	40.1 (24.3 SD)
% Missing recovery data	21.1%	14.6%

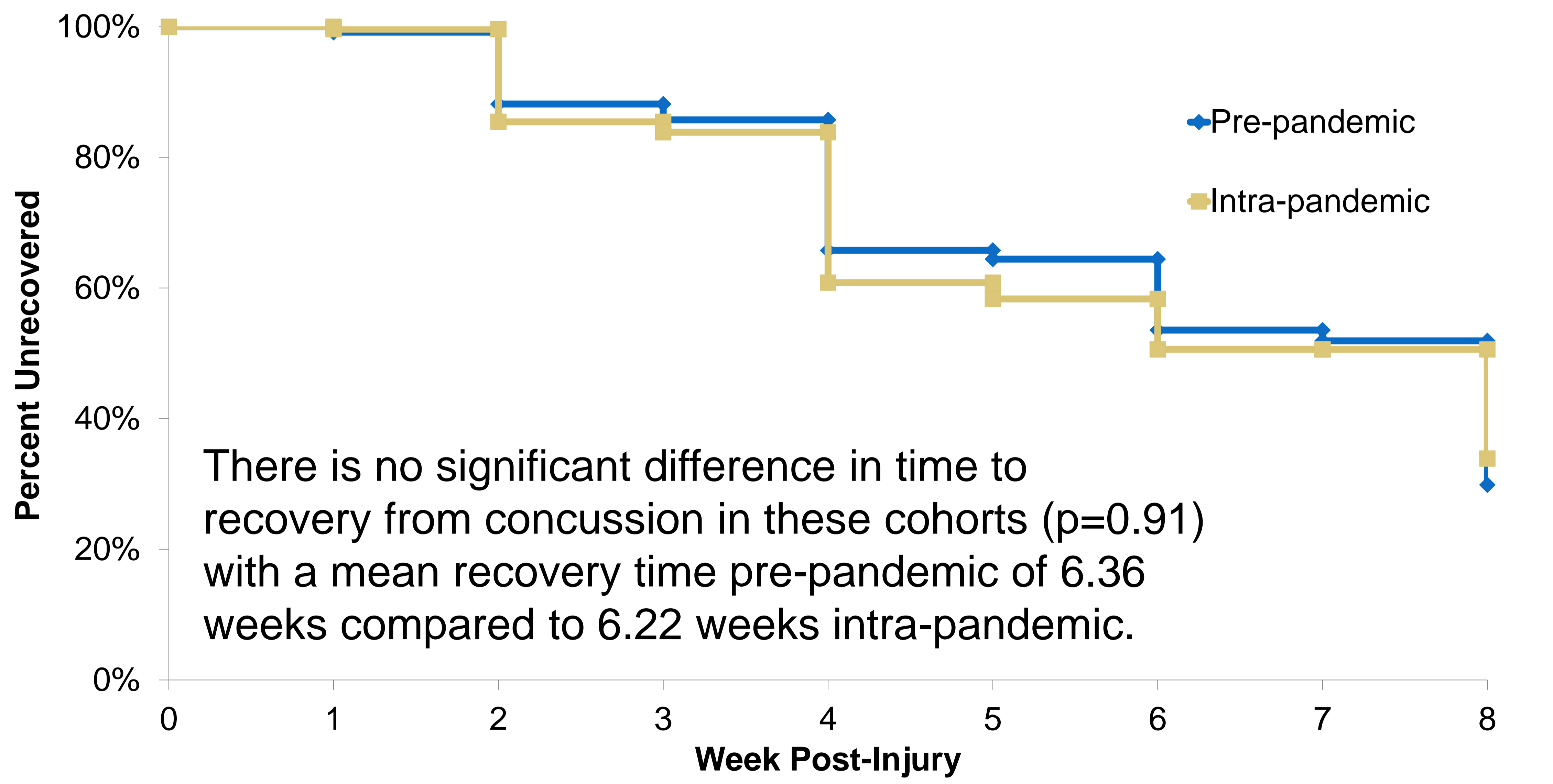


Figure 2: Kaplan-Meier survival analysis by cohort

References

1. Comper, P, et al., *Front. Neurol.* Under review.

These results support the continued use of remote follow-up concussion care by physicians.

However further research is needed to understand how different participant characteristics (i.e., age, pre-existing medical issues, etc.) may impact the success of remote care.