Supplementary Materials

User-centred design for machine learning in health care: a case study from care management

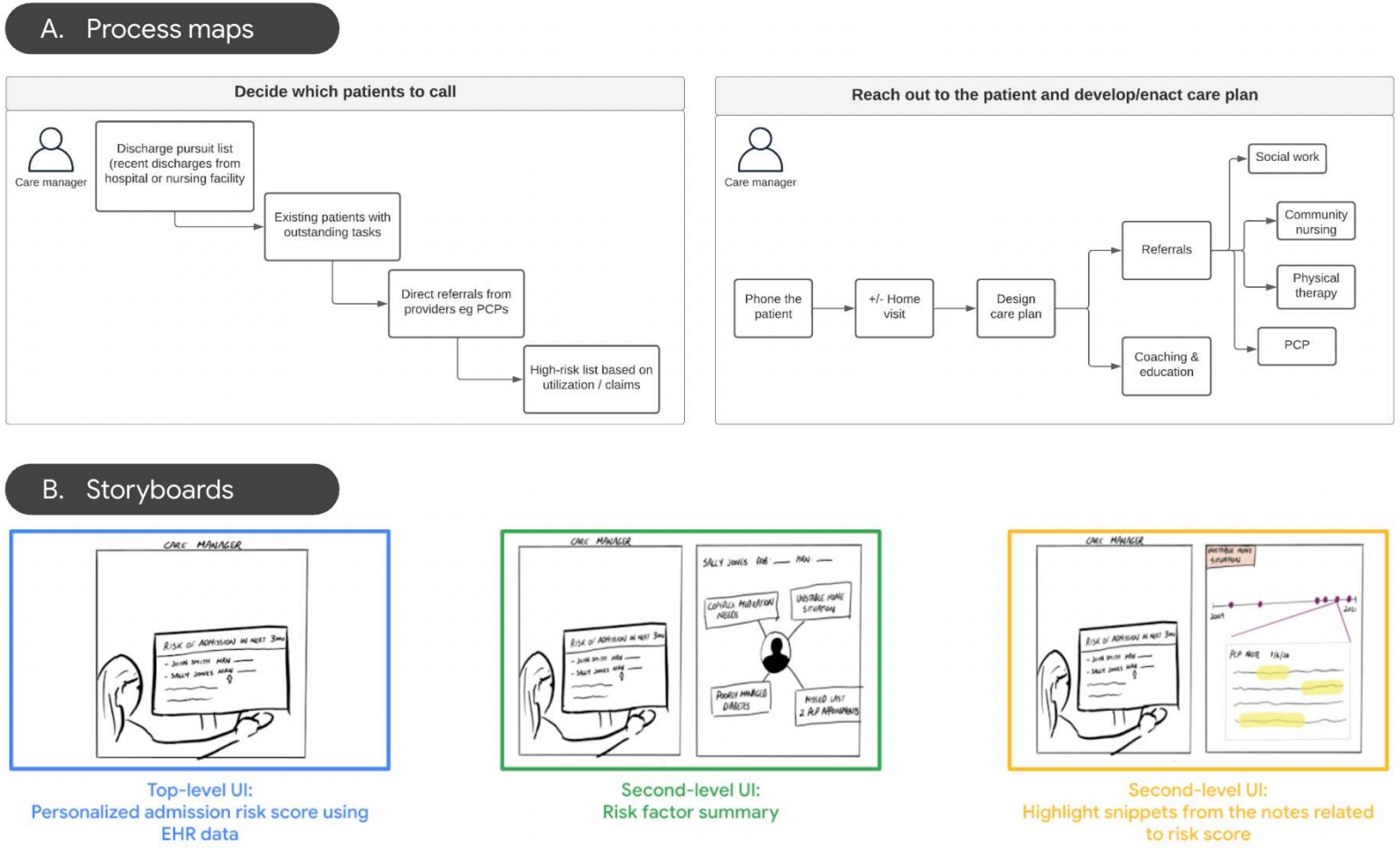

Figure S1: Example UXR artifacts for the care management use case showing the evolution through (A) critical user journeys and (B) storyboards.

Table S1: Selected pain points mapped to possible ML formulations.

Q1 ⟶ Pain point		**Q2 ⟶ Possible ML formulation(s)**	**Q3 ⟶ Actionability pathway**	**Q4 ⟶ Optimisation criteria**
Description	***Quotes***			
Identifying and prioritising the highest risk patients	*"An analytics platform that can send the quality of referrals that a physician can send would certainly orient the team's time in a more appropriate way"*	[Augmentation] Use full outpatient records (structured data and notes) to predict emergency admissions or unplanned admissions for chronic diseases.	Care manager receives a list of rising risk patients each month	Optimise for precision at c (capacity) relative to heuristic baselines
Extracting relevant risk factors from the EHR	*"If we can have a summary that skipped the part that is getting oriented to the patient research part that would be good"*	[Automation] Highlighting parts of the record representing modifiable risk factors. Summarising patient history in text snippets	Care manager reviews patient risk summary prior to outreach instead of manually sifting through EHR	Optimise for recall over precision as risk factors will still be reviewed with the patient in telephone outreach