Online supplement

Appendix DS1	Families and design features	
Families	Indicators/design features of the ward	CATPCA-components (α)
Privacy	*Individual space and privacy* 1-person bedrooms among the types of bedrooms (%) Patients sharing bathrooms and toilets (%) Total private space per patient (m^2)**	–
	View into bedrooms from the corridor (%) Door position monitoring, elopement warning (yes *v.* no)	Observation bedrooms (α = 0.61)**
	Bedroom doors can be locked by patients (%)** Number of patients on the ward** Number of patients in the building (including other wards)**	–
Daylight, views and nature	*Contact and accessibility of outdoor space* Type of daylight access in corridors Type of view in main corridor	View outside (α = 0.70)**
	Type of view in living room** Window size in bedrooms (daylight admission)** Presence of outdoor space or garden (yes *v.* no)**	–
Comfort and control	*Personalisation opportunities and ability to control comfort levels* Presence of air conditioning in bedrooms (yes *v.* no) Presence of air conditioning on the ward (yes *v.* no) Patients have access to internet in their bedroom (yes *v.* no) Patients have television and radio in their bedroom (yes *v.* no)	Comfort (α = 0.76)**
	Personal furniture (yes *v.* no)** Type of ventilation** Patients can open the window (yes *v.* no)** Patients can control the temperature (yes *v.* no)**	–
Facility level	*Type and number of facilities for leisure or treatment* Number of common spaces (kitchen, living room, smoking area, etc.) Total common space per patient (m^2) Presence of room(s) for therapy and/or consultation (yes *v.* no)	Facility level (α = 0.59)**
	Presence of a nursing station (yes *v.* no)**	–
Safety	*Special safety measures on the ward* Problems in corridors/easy 2-way walking (yes *v.* no) Observation by camera's (yes *v.* no) Sight lines from the nursing station (yes *v.* no)	Visibility on the ward (α = 0.65)**
	Special type of window-glass (yes *v.* no) Violence proof walls (yes *v.* no) Violence proof ceilings (yes *v.* no) Violence proof doors and frames (yes *v.* no) Violence proof locking devices (yes *v.* no)	Violence-proof finishing (α = 0.68)**
	Type of communication system patient-staff Locking devices with delayed alarm and opening (yes *v.* no) Presence of stripped bedrooms (yes *v.* no) Door position monitoring, elopement warning (yes *v.* no)	Special safety measures (α = 0.71)**
	Overview living room (yes *v.* no) Locking devices in kitchen (yes *v.* no) Type of security system for staff Ward covers one floor/no stairs (yes *v.* no) Patients have flexible access, within the ward and to outdoor space/ (electronic) pass/key (yes *v.* no) Type and height of fences	–
Rooms for seclusion	*Rooms or spaces for seclusion, including alternatives* Number of seclusion rooms on the ward** Number of seclusion rooms in the building** Number of bedrooms that can be locked** Presence of time-out, isolation, or otherwise designated areas that can be locked (yes *v.* no)** Presence of spatial alternatives for seclusion (yes *v.* no)**	–

CATPCA, non-linear principal components analysis.
**Components and remaining design features (observed variables) that were included in the multilevel analyses.