

#### Multimedia Appendix 4. Detailed description of TH interventions and parallel groups.

Intervention	Summary of interventions attached with TH	Control groups
Usual care with self-management education [1-7]	Regular clinic visits for follow-ups or home care visits for follow-ups with individualized self-management education provide using specific mobile apps (i.e., EDGE), living well with COPD website, booklet or face to face education.	Receiving the self-management materials (apps, booklet, and website) without TM.
Tele-rehabilitation program [8-17]	Designed rehabilitation program packages to deliver at the patient home or the community centre. Health professional monitor, the patients, live or via video conference.	Designed rehabilitation program packages to deliver at the patient home or the community centre.
Home care [9, 14, 18, 19]	Patients receive regular home care included health professional's visits for follow-ups, education sessions, and treatment.	Patient receiving the same without TM between visits.
Virtual hospital [20, 21]	Patient transferred to home within 48 hours of admission to be remotely monitored by healthcare practitioners.	Regular hospitalization.

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