

Multimedia Appendix 3. Step-by-step workflow comparisons between existing and proposed systems.

Home care service workflow	Existing System	Blockchain-based system
1.Home care service demand (update to matching engine)	Human workforce for case filing	Demand updates by platform clients application
2.Case matching	Matching Engine	⊙ Matching results on chain
2-1.Service notification to caregiver	Phone calls or Emails	⊙ (A) ⊙
2-2.Service notification to caregiver	Phone calls or Emails	⊙ (A)
2-3.Decision making (caregiver)	Passive	Ⓜ Dominated by caregiver
2-4.Decision making (caretaker)	Passive	Ⓜ Dominated by caretaker
2-5.Service Confirmation	Care center intermediation	(A) Smart-contract-enabled check/communication
3.Service Notification	Phone calls or Emails	⊙ (A) Facilitated via event-driven mechanism
4.Insurance application (policy)	Lack of short-term insurance products	(A) ⊙ System generation according to insurance conditions
5.Service assignment	Human workforce	(A) *
6.Service delivery	Opaque monitor; Need further check	(A) *
6-1 Way to caretaker's	Poor control on process monitoring	*
6-2 Service started		* (A)
6-3 Back to caregiver's		*
6-4 End of service		* (A)
6-5 Claims for accidents	Risks of counterfeit	⊙
7. Insurance cancellation	Human termination	(A) Ⓜ
8. End of care service case	Human termination	(A)

Note: Transparency ⊙; Traceability *;. Level of automation (A); Counterfeit/Fraud-proof ⊙; Management of insurance/welfare Ⓜ.