Appendix 1 (as submitted by the authors): KT interventions linked to targets, barriers for change and theory

Targets of the KT intervention		Theory and suggested barriers for change (examples)	KT intervention approaches (examples)
1. Factors in health professionals			
Learn about the new knowledge		Cognitive theory on learning : learning style, use of communication channels, domain knowledge	Use various information delivery methods; adapt to different learning styles; relate to pre-existing knowledge
Increase motivation for use of knowledge		Motivational theories: stages of change, goal setting	Help to define individual goals for change; adapt activities to stage of change
Change beliefs about consequences of use of knowledge use		Social cognitive theory: outcome expectancies, attributions of behavior	Provide education and feedback on consequences; challenge beliefs on consequences of decisions and actions
Influence individual assessment of the innovation		Theory of planned behaviour, rational choice theory: attitudes, utilities, perceived risk	Provide information on value attached to innovation; improve utility and reduce risk of innovation
Influence the views of others regarding the new knowledge		Theories of planned behaviour, social comparison: perceived social norms	Involve opinion leaders or relevant others, like professional peers
Change beliefs about individual capabilities		Social cognitive theory: perceived behavioural control, self-efficacy, self-confidence	Create opportunity to build up self-confidence; allow experimentation with the innovation
Influence emotions attached to the knowledge		Theory on learning: satisfaction with performance, attractiveness of innovation	Counselling to influence individual standards; improve attractiveness of the innovation
Influence behavioural		Social cognitive theory: coping	Provide feedback and reminders to

Targets of the KT intervention	Theory and suggested barriers for change (examples)	KT intervention approaches (examples)
regulation in users of knowledge	behavior, observational learning	enable self-regulation; adapt innovation to individual needs
Improve skills	Cognitive theory on learning: demonstration, practising	Provide skills training, feedback on performance
Factors in patient care teams and networks		
Change structures and process in teams	Theory on team effectiveness, group decisions : group task orientation, group composition	Change the composition of a team, provide training to change group processes
Use leadership and key individuals	Theories on persuasion and leadership: change agents, opinion leaders	Identify and involve leaders and change agents to transfer information
Change social network structures	Theory on diffusion of information: density, centralization	Change structures for information exchange, change structures for collaboration
Factors in healthcare organizations		
Change specification (prescription of specific practices) and flexibility (room for deviation from prescribed practices)	Theory on complex adaptive systems, organizational innovativeness: presence and content of clinical guidelines and protocols	Implement clinical protocols and decision support, redesign the care delivery process, use individual treatment plans
Influence leadership in an organisation	Theory on quality management: constancy of purpose, centralisation, management tenure	Recruit and train to have specific types of leaders
Influence specialisation and technical expertise in	Theory on organizational innovativeness: differentiation,	Change the mix of professional skills in the organisation, make better use of

Targets of the KT intervention	Theory and suggested barriers for change (examples)	KT intervention approaches (examples)
an organisation	professionalism	information technology
Implement continuous improvement activities	Theories on quality management, process mindedness, concern for measurement	Create teams/collaboratives for improvement
Improve communication with actors outside the organisation	Theory on quality management: customer mindedness, reactiviness	Undertake patient and supplier satisfaction activities, provide yearly quality reports
Improve communication within an organisation	Theory on organisational learning, organisational culture : climate of openness, generative relationships, cooperation focus	Undertake care provider satisfaction activities; Make better use of information technology
Change organisational size	Theory on organizational innovativeness: learning curve, size of scale/scope advantage	Change number of health professionals (input); change volume of services delivered (output)
Factors in the healthcare system		
Enhance development of the health professions	Theory on professional development: systems for certification, continued education	Enhance professional development in health professions
Increase priority of KT issues on the societal agenda	Theory on agenda building: media influence, attention in health policy	Use media to influence decision makers, build public support
Change financial incentives and risk sharing for providers and patients	Theory on financial reimbursement: provider utility function, switching costs related to change, risk aversion	Change the provider reimbursement and patient co-payment, reimburse switching costs
Change market mechanisms in the	Theories on competition and innovation: competition intensity,	Change competition intensity, provide feedback on technical efficiency

Targets of the KT intervention		Theory and suggested barriers for change (examples)	KT intervention approaches (examples)
healthcare system		transparency on services, production efficiency	