Supplemental Material S2. Mapping barriers to possible intervention strategies

TDF domain	Example of barrier/s	Intervention functions	Possible intervention strategies	Does the intervention function meet the APEASE criteria? (affordability, practicability, effectiveness/cost, acceptability, side-effects, safety, equity)
Reinforcement	Lack of incentives for using the ROMA COS in aphasia treatment research.	Training	Online or face to face individual/group training sessions (video, webinar).	Yes.
		Incentivisation	Provision of online training and/or a checklist. This may allow researchers to conduct a skills audit/evaluate their ability to use COSs in their research studies. This information should then be provided to researchers as constructive feedback and to identify areas for improvement. Additional resource support (e.g. time/funding to access professional development, training and/or workshops).	Yes, funding bodies.
		Coercion		Not acceptable to researchers.
		Environmental restructuring		Yes, some aspects (resources).

TDF domain	Example of barrier/s	Intervention functions	Possible intervention strategies	Does the intervention function meet the APEASE criteria? (affordability, practicability, effectiveness/cost, acceptability, side-effects, safety, equity)
Social influences	Colleagues in research team not consistently using the ROMA COS in aphasia treatment research. Lack of encouragement from colleagues (to use the ROMA COS). Need to consider that participants may be working individually thus, not applicable.	Environmental restructuring	Additional resource support (e.g. time/funding to access professional development, training and/or workshops).	Yes, some aspects (resources). May not be practical to restructure research team/if researchers are working in isolation.
		Enablement		Yes, behavioural support.
		Restriction		Not practical.
		Modelling		Yes.

Memory, attention and decision processes	Lack of automaticity.	Training	Online or face to face individual/group training sessions (video, webinar).	Yes.
	Participants had reasons for not implementing the ROMA COS in their aphasia treatment research.	Environmental restructuring	Additional resource support (e.g. time/funding to access professional development, training and/or workshops).	Yes, some aspects (resources).
		Enablement		Yes, behavioural support.
Behavioural regulation	Lack of planning and monitoring of ROMA COS use and implementation.	Education Training Modelling Enablement	Provision of online training and/or a checklist. This may allow researchers to plan for and self-monitor ROMA COS use.	Yes, some aspects (resources).
			Could also implement international reporting checklist in combination with auditing process.	May not be feasible/acceptable. Resources required to monitor.